

Butterfly Gardening

Butterflies can be a welcome addition to your home and surroundings. Not only do their bright colors add excitement to our lives, but they also help to pollinate crops and flowers, play an important role in the food chain, and are sensitive indicators of environmental quality. A variety of wildflowers & flowering shrubs are all that is needed for a butterfly garden. However, to attract the greatest number and variety of these beautiful creatures, plants that serve all the life stages of butterflies must be provided.

All of the approximately 775 butterfly species in the U. S. and Canada follow the same general life cycle. The cycle begins with eggs, laid in spring, summer or fall. Once hatched the tiny larvae (or caterpillars) molt 4 to 5 times as they grow before molting into a cocoon or chrysalis to undergoes metamorphosis into an adult butterfly. The entire process takes an average of 5 to 6 weeks with resident species undergoing a diapause during the winter. Some butterflies go through only one cycle or generation each year. Some, however, may have 2, 3, or 4 generations in a single season.

The butterfly's life cycle requires food for both the larval and adult stages. The food for the larval stage is often the most critical with some species limited to a single host plant species that the larvae can survive on. Butterflies lay their eggs on or near the plants upon which the larvae feed. Most caterpillars eat the leafy parts of their host plants, but, depending on the species, may prefer flowers, buds, or seeds.

Unlike the finicky caterpillars, adult butterflies may take nectar from many different species of flowering plants. Nectar is sipped through a long, straw-like proboscis that is normally kept coiled. The insects' feet possess a special sensing structure which can detect or "taste" sweet liquids, causing the proboscis to uncoil when in contact with nectar.



(Photo by Jack Mills)



Butterflies frequent wildflowers as well as cultivated annuals and perennials. The three most important floral characteristics that attract butterflies to a flower are a copious supply of nectar, a blossom with large petals so that the insect can perch while feeding, and flower color. Butterflies seem to investigate purple flowers first, the yellow, pink and finally white.

Butterfly Nectar Magnets include:

- **Spring:** lilacs, azaleas, violets, phlox, spring wildflowers
- **Summer:** bee balm, clovers, buttonbush, daisies, coneflowers, herbs, many vegetables, milkweeds, sunflowers, vetch, yarrow
- **Fall:** ironweed, native thistles, joe-pye-weed, asters, golden-rods, butterfly bush, mint, cardinal flowers



Commonly Used Butterfly Larvae Host Plants include:

- **Trees:** black cherry, hackberry, elms, oaks, aspen, birch, willow
- **Shrubs:** blueberry, pawpaw, spicebush, gooseberry
- **Sedges and Grasses:** sedges, bluegrass, mannagrass, bluestems, panaic grass
- **Herbaceous Flowering Plants:** asters, clovers, mallows, milkweed, nettle, rock cress, sheep sorrel, senna, stick tights, toothwort, violets, wingstem, vetch

Although their most popular food source is nectar, not all adult butterflies are nectar feeders. Some prefer to "puddle". Puddling is usually done by newly emergent males that gather to take moisture and minerals from damp sand, mud puddles or stream banks. Often a garden pool will attract butterflies to the water's edge. A number of species will also see nourishment from the moisture in animals waste, or carrion, tree sap, and rotting fruit.



To be successful in attracting butterflies to your backyard, you should learn about the local butterflies, including their life cycles, food preferences, the places they hibernate, seek cover, and pupate, and identify the plants larvae use for development. This can be accomplished with field guides and a broad variety of websites many which have downloadable pamphlets and fact sheets.

Once you have established which butterflies are likely to be in your area and the plants that will entice them, plant or seed the species, ensuring the proper growing conditions for each plant type. Pesticides, including systemic types like neonicotinoids, should be avoided – some chewed leaves and flowers are expected in a butterfly garden. A goal should be to provide nectar from spring through fall. Sun and shade relationships should be assessed, as well as moisture requirements. Even with limited space you can still create a world for butterflies. Many preferred food plants make attractive borders, can be planted in cool shady spots (such as violets) or, as in the case of vines, be trained to archways and fences, thus expanding your garden. Native plants, that butterflies evolved with, are often the most successful and are increasingly available from nurseries.



If the area you select is already a natural area, few alterations may be required. Open places such as meadows are subject to natural succession and may need to be mowed every 2 to 3 years to keep out brush. Only a section should be mowed in any one year so as not to impact life cycles of butterflies in unmowed sections. Situating your butterfly garden near a woodland may also attract more species.

Several potions may be used to attract butterflies and moths. One favorite can be made as follows: 1 bottle of beer mixed with banana, several tablespoons of brown sugar and molasses, ½ cup of raisins and several apple slices. Homogenize the mixture in a blender and store it in a loosely capped bottle for several days. Once the mixture has

fermented it is ready for use. To attract moths, liberally brush the mixture on tree trunks and view what comes in at night. To attract butterflies, place a sponge in a bowl soaked with the mixture and place it in broken sunlight or open shade. A slight breeze will broadcast the aroma.



There is no secret formula, but the more time you spend butterfly gardening and the more willing you are to experiment, the more accurately you will be able to assess your butterflies' needs. Butterfly gardening can be a new and enjoyable pastime as well as enhancing your surroundings and the quality of your environment.