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Forestry and Natural Resources

Attracting Butterflies to Your Yard

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Introduction

Butterflies are beautiful additions to any backyard. Butterflies are insects with a four-stage development: egg – larva – pupa – adult. There are about 20,000 species worldwide and over 700 in North America. Some examples of the types of butterflies include swallowtails, fritillaries, skippers, and sulphurs.

Attracting butterflies to your yard is easy but involves a little bit more than planting a few flowers in the garden, although that is certainly beneficial. Just like any wildlife species, you need to provide food, cover, and water in the proper amounts and arrangement. Wildflowers are a valuable habitat component for butterflies, but trees and shrubs are important too. Good butterfly habitat will have an interspersed of trees, shrubs, vines, wildflowers, and grasses that provide food and cover throughout the entire life



Eastern Tiger Swallowtail.

Photo by Chip Morrison

cycle of butterflies. By doing this and following some basic tips, you will be well on your way to making your yard a butterfly paradise.

Food – Adults

Almost all adult butterflies rely entirely on flower nectar for food. In general, clusters of red, orange, yellow, pink, or purple blossoms with short flower tubes are preferred. Most adult butterflies are generalists, feeding on a variety of nectar sources. Which ones do you choose? The selection of plants that meets these criteria can be overwhelming. The basic rule of thumb is to provide a diversity of flower species with overlapping blooming periods. There are a few groups of plants that provide nectar to a wide variety of butterfly species in Indiana. Mints (*Mentha* spp.) bluemist spirea (*Caryopteris* spp.), a must plant for butterflies in August, butterfly bush (*Buddleia* spp.), milkweeds (*Asclepias* spp.), Joe-Pye-weed (*Eupatorium* spp.), and some thistles (*Cirsium* spp.) (See Box 1). More species of butterflies feed on milkweed and thistle species than anything else. There are many other species listed in the resources below, but these will give you an excellent start.

Food - Caterpillars

If you want butterflies to live in your yard rather than simply pass through, you must create habitat for the adult butterflies and the larval stage – caterpillars. In most species, caterpillars feed on completely different vegetation than the adults. Important caterpillar foods in Indiana include cabbage, dill, parsley, milkweed

Box 1.

Warning! Canada thistle (*Cirsium avense*) is an invasive plant and classified as a noxious weed in Indiana. Do not plant or encourage Canada thistle. Many other thistles are listed as invasive by some resources, including tall thistle (*C. altissimum*), bull thistle (*C. vulgare*), field thistle (*C. discolor*), and nodding thistle (*Carduus nutans*). Some native thistles of Indiana, including soft thistle (*Cirsium carolinianum*) and swamp thistle (*Cirsium muticum*) are not considered invasive. For more information, visit the national plant database at <http://plants.usda.gov>.



Milkweed.

(*Asclepias* spp.), cherry (*Prunus* spp.), hackberry (*Celtis* spp.), willows (*Salix* spp.), and some thistles (see Box 1). The resources listed below have more detailed information on host plants for a variety of specific butterfly species.

Cover

Caterpillars certainly aren't the most mobile creatures. In general, most of their cover requirements are fulfilled by their host plants. For adults, trees, shrubs, and vine complexes are valuable perching sites for feeding and basking, and provide overhead cover from wind or rain. Tree cavities, crevices in bark, log and rock piles, and buildings are additional sources of cover. Intersperse different types of cover with food habitat.



Soft thistle.

Many people erect butterfly boxes for overwintering butterflies. While attractive, most experts agree they do not work. In Indiana, most of the butterfly species overwinter as caterpillars or pupas hidden in leaf litter or thick vegetation. The few that overwinter as adults do so in the cavities of trees or other shelters. Some species even spend the winter as eggs.

Tips

In addition to planting a variety of wildflowers, shrubs, and trees for adult and larval butterflies, follow these tips to convert your yard into a butterfly paradise.

- *Study the local environment.* Visit habitats in your surrounding area and identify the species of butterflies you see. Provide the caterpillar foods and nectar sources required by these species (see Resources Section).
- *Leave residual vegetation throughout the winter.* These annuals and perennials can contain overwintering butterfly pupa or larva. They also can provide seeds for many species of wildlife and spring nesting cover for some birds.
- *Full sun.* Butterflies use the sun for orientation and bask in sunlight to keep their flight muscles warm. Many of the wildflower nectar sources also require full sun. Establish your

butterfly habitat in an open area with full sun, but incorporate shrub and tree plantings adjacent to your garden.

- *Overlapping blooming seasons.* Adults require nectar throughout the warmer months. Plan your yard to include plants that have overlapping blooming seasons to ensure an available nectar source.
- *Rotten fruit is good.* Some species of butterflies utilize rotten fruit for nutrients. Place a small amount in your butterfly habitat, but preferably away from areas that your family uses.
- *Provide water puddles.* Butterflies will drink from a shallow puddle. Most experts believe they get their water requirements from nectar and this “puddling” is carried out more to gather sodium and other nutrients rather than drinking water.
- *Avoid lawn insecticides and herbicides.* Butterflies are insects. Limit use of pesticides that target insects because they will kill butterflies. Minimize use of herbicides that target “weeds” in lawn that butterflies or caterpillars utilize such as plantain, clover, and even dandelions.
- *Provide areas sheltered from the wind.* Butterflies need protection from strong winds. Establish trees and shrubs adjacent to your butterfly garden on the windward side.

- *Locate your garden where you can see it.* Enjoy the fruits of your labor. Establish your butterfly garden where you can view it from a comfortable location.

Resources

National Audubon Society. 1981. *Field Guide to North American Butterflies*. Alfred A. Knopf, New York, 928 pgs.

National Wildlife Federation – Backyard Wildlife Habitat Program
www.nwf.org/backyardwildlifehabitat/

North American Butterfly Association
www.naba.org

Shull, E. M. 2000. *Butterflies of Indiana*. Indiana University Press, Bloomington, Indiana, 262 pgs.

USDA-NRCS. 2004. *The PLANTS Database* (<http://plants.usda.gov/plants>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

USDA-NRCS and WHMI. 2000. *Butterflies*. Fish and Wildlife Habitat Management Leaflet, No.15. Wildlife Habitat Management Institute. www.whmi.nrcs.usda.gov/technical/leaflet.htm