

Butterfly Habitat

Components

Components of butterfly habitat may be found in spaces ranging from a large meadow to a sunny backyard deck. A deck might include flowering potted plants and a container of mud to which water is added periodically. The ideal area includes multiple components of butterfly habitat and is typically several acres in size. However, smaller, well-designed sites also may be successful at supporting butterflies. In addition, small efforts geared toward specific parts of the butterfly life cycle are worthwhile. Something as simple as replacing a sunny lawn area with nectar-rich flowering plants may provide valuable habitat for butterflies en route to egg-laying sites.

Two important components of butterfly habitat are food and shelter. Some forms of shelter may be incorporated into the site design (see *Site Inventory*). Butterfly boxes are not mentioned because many people have reported they fail to attract.

Caterpillars and adult butterflies need different types of food. Caterpillars chew plants while butterflies drink nectar. The caterpillars of many butterfly species feed on specific plants or groups of plants. Caterpillar *host* plants include certain



Clouded Sulphur feeding on Purple Coneflower. Note curved (non-jointed) proboscis.

native forest, meadow, and wetland plants as well as some introduced plants of meadows, roadsides, and other open areas. Caterpillar host plants are required for the next generation of butterflies to develop.

Some gardeners do not like to have caterpillar host plants in the garden because of the damage done to the plants. However, unlike moth caterpillar pests, butterfly caterpillars generally do not defoliate large areas or entire plants because the eggs are laid only a few per plant. (Black Swallowtail caterpillars are an exception.)

Adult butterflies use their long tube-like proboscis to take food in liquid form. Flower nectar is the most important food for many (but not all) butterfly species. Another source of liquid nourishment is found in puddles where evaporation has concentrated minerals.

In a garden, a hose may be used to keep puddles wet during dry periods. Puddles may be as simple as a low spot in bare soil or, adjacent to, a garden path. If cats are a problem in the garden, artificial mud puddles may be created in containers inaccessible to cats.

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If you're not sure you're ready for a butterfly garden in your yard ...

Try one of these ideas:

- Start informally and see what happens:
 - ◆ stop mowing a section of lawn for 2 years (best done where neighbors will not consider it unsightly)
 - ◆ plant nectar-producing flowers in containers in wind-protected areas of a sunny deck or back porch
 - ◆ plant a section of your vegetable garden to nectar-producing flowers
 - ◆ plant extra parsley or dill to share with Black Swallowtail caterpillars
- Get involved in the Connecticut Butterfly Atlas Project
- Visit a butterfly garden

Other Sources of Information:

- General
 - ◆ *Butterflies Through Binoculars: the East* by Jeffrey Glassberg
 - ◆ *Peterson's First Guide to Caterpillars of North America*
 - ◆ Butterflies of North America (www.npwrc.usgs.gov/resource/distr/lepid/bflyusa/ct/toc.htm)
- Connecticut-Based Organizations and Gardens
 - ◆ Connecticut Butterfly Association (www.ctbutterfly.org/)
 - ◆ Connecticut Butterfly Atlas Project (<http://george.peabody.yale.edu/cbap/>)
 - ◆ Connecticut Agricultural Experiment Station Butterfly Garden (www.acorn-online.com/hmonthly/home852c.htm)
 - ◆ Roaring Brook Nature Center Native Plant Butterfly Garden (www.sciencecenterct.org/rbncpage/events/butterfly.html)
- USDA Natural Resource Conservation Service-Connecticut (www.ct.nrcs.usda.gov)

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In Connecticut, nectar-consuming adult butterflies are most common during July and August. However, several species are found as early as May or as late as October.

Providing a source of early-blooming plants is often a good strategy to attract butterflies to a garden because there are fewer sources available in nature in early spring. Similarly, late-blooming nectar-rich flowers, such as Chrysanthemums, may attract a large number of butterflies to a garden in the fall.

Plants for Caterpillars and Butterflies

Nectar plants recommended for butterfly plantings vary depending on space available and the degree of formality desired. In general, it is desirable to plant flowers that are nectar-rich in a combination of species that provide nectar from spring to fall. Butterflies benefit from plants that provide good landing platforms because, unlike hummingbirds, they do not remain suspended in the air while sipping. *Regardless of what species planted, large numbers of the same variety, rather than a sampler of many plants, should be planted because butterflies are attracted by the massed color (which may also be created by planting a variety of species of a single color that bloom at approximately the same time).*

Some plants of open areas used by butterflies, either for nectar and/or as caterpillar host plants, are considered weeds in pastures, lawns, and elsewhere. Furthermore, many may not be desired in a formal garden because of their size, weedy form, or aggressiveness. Yet, allowing them to exist near formal gardens may be part of an overall design for managing backyard butterfly habitat. In addition, native plants that are too weedy for a formal garden may be encouraged or planted in grasslands managed for butterfly habitat.

Lists of butterfly nectar plants and caterpillar host plants are available from the NRCS-Connecticut website at www.ct.nrcs.usda.gov/butterflies.html.

Site Planning for Butterfly Gardens

Site Inventory Procedures

Before committing to a site, examine the setting to ensure it doesn't include factors that would make it an unreasonable place

- Does the surrounding area lack vegetation?
 - ◆ *Butterflies are much less attracted to areas lacking vegetation.*
- Is there frequent or widespread use of insecticides in the surrounding area?
 - ◆ *Butterflies are very sensitive to insecticides. (Note: Bt (Bacillus thuringiensis) used in organic gardening is lethal for the caterpillars of all butterflies, moths, and skippers, not just the target pest species)*
- Does the site lack sun?
 - ◆ *A butterfly garden should get at least 5-6 hours of sun per day.*

Assuming there are no major drawbacks to using the area, begin the planning process by asking whether the existing physical elements or plants may be used to help define the boundaries of the garden site. For example:

- Are there adjacent plants or buildings that serve as a windbreak from prevailing winds?
- Does the line of an existing fence seem like a good boundary?

Examine the area and its surroundings for existing components of habitat that may be included in the site design and for habitat components whose presence should be encouraged in the surrounding area. For example:

- Caterpillar food sources
- Butterfly nectar sources
- Areas where water puddles naturally
 - ◆ *If outside the garden site, consider how to provide a view from the garden to the puddled water area*
- Flat rocks that will warm in the sun (especially morning sun)
 - ◆ *In order to be used by butterflies, flat rocks also need shelter from wind*
 - ◆ *Warm, flat rocks offer opportunities to observe butterflies*
- Fences or tall shrubs close to (or within) the planting area that could serve as butterfly perching sites?
 - ◆ *Note: unsightly fences also may be transformed into support for flowering vines*
- Existing plants that provide shelter from wind in the garden
- Overwintering habitat:
 - Large trees with deep bark crevices
 - Hollow logs
 - Rocks with crevices

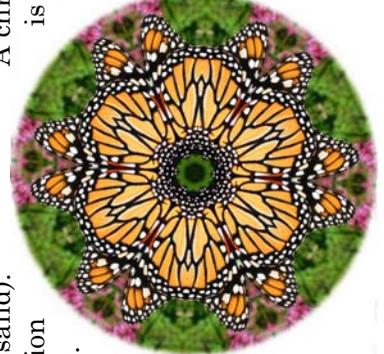
Butterfly Observations:

- Take note of what species are in the area
- Is the proposed garden site on or near a hilltop?
 - ◆ Look for congregations of males waiting on hilltops for females seeking mates
- If the caterpillar host* plants of the observed species are not already in the area, consider cultivating them in or near the garden

People find butterflies a joy to watch, their brightly colored wings catching the sunlight as they flutter purposefully, yet unpredictably, from flower to flower. Often children enjoy raising caterpillars, as well as watching butterflies. Butterfly gardens offer great rewards for a relatively small amount of effort.

Butterflies have a four-stage life cycle beginning with three non-adult forms including egg, larva (caterpillar), and chrysalis (or chrysalid).

A chrysalis is the form the caterpillar takes when it is pupating. (Pupation larval insect body into adult form). butterfly.



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