

May 6, 2023

Bringing Butterflies to the Garden

Watching butterflies float through the air is relaxing. To attract them, they need flowers as a food source. The larval stage needs plants for food too. With planning, inviting them into the landscape is easy with certain trees, shrubs, and flowers.

Planting groups of flowers with bright, contrasting colors helps to attract butterflies because they are near-sighted. Also, large, single, upright blooms provide a landing area that makes extracting the nectar easier.

Butterflies have a mouthpart shaped as a long, coiled tube. Forcing blood into the tube straightens it out, allowing butterflies to feed on liquids. All of their food comes through this tube, which limits them to nectar from flowers and standing water.

Butterflies have a well-developed sense of smell from their antennae. All butterflies' antennae are club-shaped, as compared to moths, which can be many shapes but often are feathery.

Female butterflies look for specific species of plants to lay their eggs. The eggs are attached to the leaves or stems of the plants. After the larva, which looks like a tiny caterpillar,

emerges from the egg, it begins to eat the plant. Having plants in the garden for larval food is important for the continued development of the butterfly into an adult.

The larva, also known as the caterpillar, can be very noticeable. Watch out for the hairs or forked spines, which may or may not sting, on some caterpillars. Certain swallowtail caterpillars imitate snakes or bird droppings. Other caterpillars, like sulphurs, are camouflaged and blend into their surroundings very well.

Caterpillars must crawl out of the skin, or molt, because the skin does not grow or stretch along with the expanding caterpillar. After molting, a new and larger skin or exoskeleton replaces the old one. Caterpillars may molt four to five times before changing into a pupa, also called a chrysalis.

While in the chrysalis, which looks like a sack, the caterpillar's structure is broken down and a butterfly is formed. Finally, the adult butterfly emerges, spreads its wings, and flies away.

Butterfly caterpillars can eat excessive amounts of foliage on a plant. You can physically move them to another less noticeable portion of the plant. Protect your hands by wearing gloves since some caterpillars have hairs or forked spines which may sting.

Don't use insecticides on these plants because the butterflies and caterpillars will be killed. If there is an insect pest problem, remove the pest by hand.

Butterflies gather at puddles as a source of water. Puddles for butterflies can be made by digging a small pit or trench and lining it with plastic or burying a shallow, plastic container to the rim and filling it with wet sand. Butterflies will be attracted to the puddles by pouring in

liquid such as sweet drinks or water. Overripe fruit allowed to sit for a few days is a very attractive substance.

A diversity of plants in the garden will help to attract different types of butterflies. Trees, which the butterfly larvae use for food, include willow (*Salix* spp.), wild cherry (*Prunus* spp.), birch (*Betula* spp.), and tulip poplar (*Liriodendron tulipifera*). One medium-sized shrub that butterflies use for food is spicebush (*Lindera benzoin*). These trees and shrub grow best in full sun. The spicebush will grow in partly shaded locations.

Annual plants used by butterfly larvae for food include: snapdragon (*Antirrhinum* spp.), dill (*Anethum graveolens*), sweet pea (*Lathyrus odoratus*), and parsley (*Petroselinum crispum*). Full sun is the best location for these plants.

Perennials that attract butterflies for larval food are butterfly weed (*Asclepias tuberosa*), fennel (*Foeniculum vulgare*), and violet (*Viola* spp.). Butterfly weed and fennel prefer full sun.

Flowering annual plants which grow in the sun and attract butterflies because of their nectar include: marigold (*Tagetes* spp.), zinnia (*Zinnia elegans*), gloriosa daisy (*Rudbeckia hirta*), nasturtium (*Tropaeolum majus*), flowering tobacco (*Nicotiana alata*), sweet William (*Dianthus barbatus*), bachelor's button (*Centaurea cyanus*), cosmos (*Cosmos* spp.), sunflower (*Helianthus*), and sweet Alyssum (*Lobularia maritima*). Impatiens (*Impatiens wallerana*) is an annual that grows in the shade.

Flowering perennial plants for attracting butterflies include: purple coneflower (*Echinacea purpurea*), phlox (*Phlox* spp.), butterfly weed (*Asclepias tuberosa*), daylily (*Hemerocallis* spp.), aster (*Aster* spp.), blanket flower (*Gaillardia* spp.), coreopsis (*Coreopsis*

spp.), chrysanthemum (*Dendranthema x grandiflora*, formerly *Chrysanthemum*), dahlia (*Dahlia* spp.), hollyhock (*Alcea* spp.), showy sedum (*Sedum spectabile*), hibiscus (*Hibiscus* spp.), yarrow (*Achillea* spp.), rosemary (*Rosmarinus officinalis*), and thyme (*Thymus* spp.). These flowering plants prefer to grow in full sun.

Medium-sized shrubs for attracting butterflies include lilac (*Syringa* spp.), butterfly bush (*Buddleia davidii*), and azalea (*Rhododendron* spp.). Azaleas prefer to grow in light shade. Lilac and butterfly bushes grow best in full sun.

When wanting to attract adult Monarchs specifically, plants for nectar include butterfly bush (*Buddleia*) milkweed (*Asclepia*), zinnia (*Zinnia*) before milkweeds bloom: lilac (*Syringa*), red clover (*Trifolium*), thistles (*Cirsium*) and in the fall: goldenrod (*Solidago*), ironweed (*Vernonia*), sunflower (*Helianthus*), and tickseed (*Coreopsis*). Plants for the larval food include leaves and flowers of butterfly weed and milkweed, (*Asclepias*).

For more information about attracting butterflies and for photos of butterflies common to Kentucky visit: <u>http://www.uky.edu/hort/Butterflies</u> at the University of Kentucky College of Agriculture, Food and Environment website or contact the Daviess County Cooperative Extension Service at 270-685-8480 or annette.heisdorffer@uky.edu.

Annette's Tip:

Remember that fall is the best time to fertilize most trees and shrubs.

Upcoming Event:

The DIY Vegetable Gardening Series continues May 16 with "Insect and Disease Scouting." This will be offered at 1:00 p.m. and again at 6:30 p.m. at the Daviess County Cooperative Extension Service Office.

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. UNIVERSITY OF KENTUCKY, KENTUCKY STATE UNIVERSITY, U.S. DEPARTMENT OF AGRICULTURE, AND KENTUCKY COUNTIES, COOPERATING