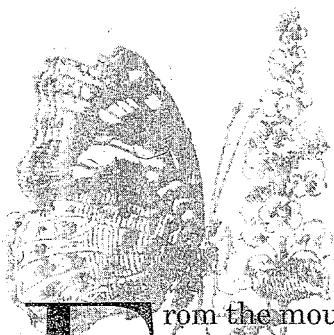


Gardening for Butterflies



From the mourning cloaks and spring azures of March and April to the cloudless sulfurs and buckeyes of September and October, our state has a rich diversity of butterflies. More than 140 species have been found here. Recently, however, there is concern over declining numbers because of habitat loss and the use of pesticides and herbicides has inspired homeowners to create gardens for butterflies. These backyard mini-sanctuaries provide our native species with the nectar, food, and shelter they need to breed and survive. In fact, many butterflies will complete their entire life cycle — from egg to caterpillar (larva) to pupa (chrysalis) and finally to flying adult — all within a single garden. Happily, creating a butterfly garden is fairly easy. Maintaining one in subsequent years is easier still. Once installed, a butterfly garden comes alive with beauty, color, and movement, dazzling both the young and old and reminding us all of the ability we have to make a positive impact on our environment.

Selecting A Site

When choosing a site for your butterfly garden, look for the sunniest spot. Adequate sunlight is essential, and most shrubs and flowers favored by butterflies are adapted to full sun. Butterflies rely on the sun's heat to warm their bodies for flight, and flowers produce nectar in relation to the amount of light they receive. The more sun in your garden, the more nectar you provide, and the more butterflies you'll accommodate.



Designing Your Garden

Once you have selected your site, you can plan the size and shape of your garden. If space allows, you'll want to include a few flowering shrubs. In addition to nectar, shrubs provide shelter from wind and rain, cover for nocturnal roosting, and places for caterpillars to attach their chrysalises. If you are installing a butterfly garden in front of a mixed shrub and tree border as part of an overall backyard sanctuary effort, plan to work the shrubs into the new and existing spaces leaving adequate room for growth.

You can visualize the number of shrubs you will need by placing flower pots on 3-4 ft. centers. To determine the garden's shape, lay a garden hose on the ground 5 ft. or more from where the shrubs' growth is likely to end. When you have the hose positioned to your liking, delineate the edge with a shovel or lawn edger. Now is a good time to estimate the number of tall, medium and short flowers you will need. Allow a diameter of approximately 2.5 feet for tall flowers (4-5 ft. H), 1.5 feet for medium flowers (2-3 ft. H), and 1 foot for short flowers.



Selecting Plants For Butterflies

Shrubs and perennials make better butterfly plants than most annuals. They come up each year and, once established, generally require less water and fertilizer than annuals. Most perennials also grow into clumps that can be divided in their second or third year to provide additional flowers. However, a few annuals are such good butterfly plants that you'll want to include them each year, despite the extra effort it entails (see list).

Try to include as many native plants as possible because they are adapted to our climate and soil conditions — and because our native butterflies are adapted to them. (Native plants are designated below.)

Butterflies are strongly attracted by fragrance and prefer tubular flowers whose petals form landing platforms. Purple coneflower, for example, with its flat petals and central cluster of tubular flowers make an excellent butterfly flower. Blazing star with its tubular flower arranged on a spike is another excellent choice.

Color is less important than shape and the amount of nectar provided. Many common garden flowers that look appealing to us have very little value to butterflies — roses, chrysanthemums, and peonies, for example.

A successful garden provides more than nectar for adult butterflies. Think of your garden as a nursery for caterpillars too. Many caterpillars have very specific food requirements and feed only on a certain family or species of plants, their host plants. Monarchs, for example, lay their eggs only on flowers in the milkweed family; pearl crescents lay their eggs only on asters; spicebush swallowtails depend on saffras in our area. Chewing damage to your garden will be minimal because most caterpillars have such particular food preferences, and many actually prefer weeds, grasses, and trees. Most butterfly field guides provide information on host plant preferences. As you refine your garden, you might include particular host plants in an effort to provide suitable food for less common species of butterflies.

Another consideration to keep in mind when selecting plants is seasonality. Since some butterflies become active in April and others are still flying or migrating through in October, selecting both early and late season bloomers will help to provide food at critical times of the year.

The Nectar and Host plant list below has been compiled with input from butterfly gardeners and naturalists throughout New Jersey. Incorporating these plants in your butterfly garden should help make it a success.

Preparing The Bed

Begin by eliminating grass and weeds from your new bed. You can do this by spraying a glyphosate-based herbicide (such as RoundUp or KleenUp) on the area. Proper application following label directions should kill the grass and weeds and not leave any harmful residual effects in the soil. An alternate, slower method is to solarize the area using clear plastic. (July is generally the best month for employing this method. For best results, cultivate and water the soil and lay down a sheet of plastic for approximately 4 weeks or until the soil temperature reaches 140 degrees.)

Once the ground cover is killed, the soil may be turned over and amended with peat moss, compost, or sterilized soil. Lime and slow-release fertilizer can be added at this time and the soil raked smooth for planting. Once your garden is established, you should refrain from using pesticides as most are toxic to butterflies.

Planting The Garden

Arrange shrubs and flowers according to your plan and the height/space requirements of each plant. Group flowers by species together in clusters of 3, 5, or 7 for visual effect and to help butterflies forage more efficiently. Wait to begin digging until you have arranged all the shrubs and flowers and re-checked the arrangements. After planting, apply a layer of a light, weed-free mulch, such as shredded bark or pine straw, around each plant. Mulch conserves water and suppresses weeds. You should also keep in mind that many butterflies nectar and feed on weeds, so a little weedy "messiness" in a butterfly garden is a good thing — and easier on us gardeners, too!

New shrubs and flowers will need to be watered well during the first growing season or two, and after that in times of drought. Your plants should receive half an inch of water twice a week. Set up several coffee cans and time how long it takes for your sprinkler to provide half an inch of water to the planting area. Base your future watering on that amount of time, adjusting for rainfall. If you are using a soaker hose or drip irrigation, water twice a week until the soil is moist 6"-8" down.

Extra Touches

Some easy additions will help make your yard a butterfly-friendly environment. A large, flat rock will draw some species to bask in the sun and warm themselves. A shallow puddle or wet area will attract others to visit and extract minerals and salts from the earth. Lastly, a plate of over-ripe fruit (bananas work well) will pull in butterflies who favor this delicacy, such as the red-spotted purple, the question mark, and the mourning cloak.

Perennials

Asters, Aster spp [Native & introduced species]
Bee Balm, Monarda spp [Native & introduced species]*
Black-eyed Susan, Rudbeckia spp [Native]
Blazing Star, Liatris spp [Native]
Butterfly-weed, Asclepias tuberosa [Native]
Milkweeds, Asclepias spp [Native]**
Catmints, Nepeta spp
Coreopsis, Coreopsis spp [Native]
Goldenrod, Solidago spp [Native]**
Joe-pye Weed, Eupatorium spp [Native]
Lobelias, Lobelias spp [Native & introduced species]*
Phlox, Phlox spp [Native]
Purple Coneflower, Echinacea spp [Native]
Salvias (sages), Salvia spp*
Sedum (stonecrops), Sedum spp

* Bee-balm, lobelias, and salvias also attract hummingbirds.

** Milkweeds and goldenrods tend to be invasive and may crowd out other plants.

Annuals

Cosmos, Cosmos spp
Flowering Tobacco, Nicotiana spp
Globe Amaranth, Gomphrena spp
Heliotrope, Heliotropium arborescens
Lantana, Lantana camara
Mexican Sunflower, Tithonia rotundifolia
Pentas, Pentas lanceolata
Verbena, Verbena x hybrids
Zinnia, Zinnia elegans

Shrubs and Trees

Alternate-leaved Butterfly Bush, Buddleia alternifolia
Blue Mist Shrub, Caryopteris x clandonensis
Butterfly Bush, Buddleia davidii
[also attracts hummingbirds]
Buttonbush, Cephalanthus occidentalis [Native]
Glossy Abelia, Abelia x grandiflora
New Jersey Tea, Ceonanthus americanus [Native]
Sweet Pepperbush, Clethra alnifolia [Native]

HOST PLANTS FOR CATERpillARS

Annuals and Perennials

Aster, Aster spp
[Native & introduced species]

Clover, Trifolium spp
Fennel, Foeniculum vulgare
Milkweeds, Asclepias spp [Native]
Nettle, Urtica spp
Parsley, Petroselinum crispum
Snapdragon, Antirrhinum majus
Vetch, Vicia spp

Shrubs and Trees

Aspens, Populus spp [Native]
Black Cherry, Wild Plum, Chokeberry,
Prunus spp [Native]
Elms, Ulmus spp [Native]
Hackberries, Celtis spp [Native]
Locust, Robinia spp [Native]
New Jersey Tea,
Ceanothus spp [Native]
Red Cedar, Juniperus spp [Native]
Sassafras, Sassafras albidum [Native]
Willows, Salix spp [Native]

Conserve
Wildlife



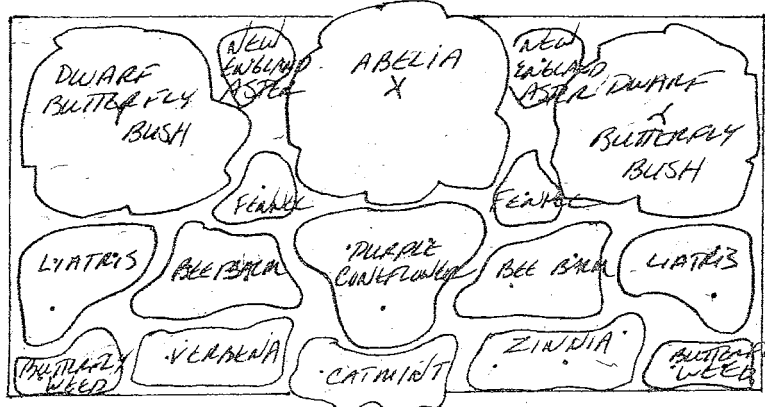
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BUTTERFLY GARDEN

12 →



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