



# FactSheet

**Extension**

## Ohio State University Extension Fact Sheet

### School of Natural Resources

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## Butterfly Gardens

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Landscaping even the smallest areas will provide habitat for many butterfly species. You can create suitable habitat for butterflies in your yard by selecting the appropriate flowering plants. Not only will you attract beautiful butterflies, but your yard also will be filled with colorful flowers throughout spring, summer, and fall. Creating butterfly gardens is easy and fun; learn how to spice up your yard to attract butterflies.

### How to create butterfly habitat

Only a small amount of space is needed to provide butterfly habitat. You can create butterfly-friendly habitat by providing food (nectar plants), cover, water, and larval plants.

- Before you start, plan ahead.
- Map your yard and determine what environmental conditions you have (i.e., soil type and amount of sun).
- Locate gardens near areas that are sheltered from wind.
- Select areas that receive at least six hours of direct sunlight each day.
- Plant flowers in large diverse groups.
- Choose plants that vary in color, season of bloom, and height to provide different foraging opportunities and maximum year-round habitat for butterflies.
- Choose flowers with different structures. Butterflies have different length proboscises (tongues) that determine which flowers they can feed from.
- Provide cover and shelter such as broad-leaved trees, shrubs, and log piles.
- Provide several landing pads or sunbathing perches in open and sunny areas throughout the garden. Butterflies rely to a large degree on thermal heating and sunbathe in these open spots.
- Provide a water source or puddle for butterflies. Bury a bucket or shallow lid in the ground and fill it with equal ratios of sand and soil, then periodically saturate the sand/soil mixture with water.
- Provide access to the water puddle by placing a few large rocks around the bucket or lid.

## Which kinds of flowers should I plant?

Choosing a diverse array of flowers and shrubs will ensure that butterflies visit your garden while creating a bright, diverse, and colorful yard throughout the seasons. Adding a variety of flowering and fruiting shrubs to your butterfly garden also will undoubtedly attract several birds (including hummingbirds) to your yard. The table below lists the plant species, which butterfly species it attracts, what environmental conditions are needed to grow it, and which season the plant produces flowers. An asterisk (\*) indicates that the plant also attracts hummingbirds.

Plant Species	Season	Description	Growth Requirements	Butterflies It Attracts
New England Aster ( <i>Aster novae-angliae</i> )	Summer-Fall	3-7', perennial, violet 1" flowers	Moist low fertile soils, full sun	Variety; red admiral, painted lady, monarch, pearl crescent, whites, sulphurs
Sky Blue Aster ( <i>Aster azureus</i> )	Summer-Fall	24-36", perennial, blue flowers	Moist or dry soils, shade tolerant	Pearl crescent, whites, sulphurs
Smooth Aster ( <i>Aster laevis</i> )	Summer-Fall	2-4', perennial, violet flowers	Well drained soils, sunny areas	Red admiral, pearl crescent, whites, sulphurs
Bee Balm ( <i>Monarda didyma</i> )*	Summer	2-5', perennial, scarlet flowers in tubular whorls	Rich to moist soils, full sun to light shade	Variety; painted lady, cabbage, milbert's tortoise shell, mourning cloak, eastern tiger swallowtail
Wild Bergamot ( <i>Monarda fistulosa</i> )*	Summer	2-4', perennial, lavender-pink flowers	Dry calcareous soils, full sun cabbage, to light shade	Variety; painted lady, milbert's tortoise shell
Black-eyed Susan ( <i>Rudbeckia hirta</i> )	Summer-Fall	18-48", perennial, yellow flowers	Moist soils, sunny areas	Whites, sulphurs, brushfoots, skippers, blues
Dense Blazing Star ( <i>Liatris spicata</i> )	Summer	1-6', perennial, purple flowers in spikes	Moist, acidic soils, full sun	Painted lady, fritillaries, skippers, sulphurs, coppers, checkerspots
Rough Blazing Star ( <i>Liatris aspera</i> )	Summer-Fall	2-4', perennial, purple flowers, broad flower head	Dry sandy soils, full sun	Painted lady, fritillaries, skippers, sulphurs, coppers, checkerspots
Butterfly Weed ( <i>Asclepias tuberosa</i> )*	Late Summer-Early Fall	1-2', perennial, various flower colors, drought tolerant	Grows well in most any area	Variety; monarch, red admiral, swallowtails, skippers, larvae
Cardinal Flower ( <i>Lobelia cardinalis</i> )*	Summer-Fall	2-5', perennial, red flower	Moist soils, partial shady areas	Best for hummingbirds, bound to attract variety of butterflies
Wild Columbine ( <i>Aquilegia canadensis</i> )*	Spring-Summer	1-3', perennial, red to pink, unique flower structure	Sunny to shady areas	Best for hummingbirds, bound to attract variety of butterflies
Common Boneset ( <i>Eupatorium</i> )	Summer-Fall	2-4', perennial, white flowers in	Moist soils, open	Variety; painted lady, red admiral, tiger swallowtail,

<i>perfoliatum</i> )		flat cluster	areas	monarch, silver-spotted skipper
Greater Coreopsis ( <i>Coreopsis major</i> )*	Summer	18-36", yellow flowers, long bloom	Dry soils, sunny areas	Variety; eastern tailed blue, spring azure, pearl crescent, viceroy, red admiral
Wild Geranium ( <i>Geranium maculatum</i> )	Spring-Summer	1-2', perennial, pink flowers	Moist well-drained soils, partial shade	Skippers, eastern tailed blue
Goat's Beard ( <i>Aruncus dioicus</i> )	Spring-Summer	3-7', white flowers in branching cluster	Rich soils, light shade, shade tolerant	Variety; spring azure
Goldenrod ( <i>Solidago</i> )	Summer-Fall	1-5' perennial, yellow flowers	Well drained soils, sunny areas	Sulphurs, whites, coppers, monarch, hairstreaks, viceroy, painted lady
Stiff Goldenrod ( <i>Solidago rigida</i> )	Summer-Fall	3-4', yellow flowers, rigid and upright	Well drained soils, full sun	Monarch, viceroy
Iron Weed ( <i>Vernonia noveboracensis</i> )	Summer-Fall	Up to 6', perennial, purple flowers	Various moist soils, full sun	Variety; tiger swallowtail, monarch, great spangled fritillary, silver-spotted skipper, spicebush swallowtail
Jerusalem Artichoke ( <i>Helianthus tuberosus</i> )	Fall	5-10', perennial, large yellow flowers	Moist fertile soils	Variety; monarch, painted lady, checkerspots
Jewelweed ( <i>Impatiens capensis</i> )*	Summer-Fall	2-5', perennial, orange and yellow flowers	Moist soils, tolerates full sun to full shade	Best for hummingbirds, bound to attract variety of butterflies
Joe Pye Weed ( <i>Lupinus perennis</i> )	Late Summer	2-6', perennial, pink to lavender flowers	Moist soils, open areas	Variety; painted lady, red admiral, monarch, silver-spotted skipper, swallowtails
Wild Lupine ( <i>Lupinus perennis</i> )	Spring	8-24", perennial, blue pea flower	Dry acidic soils	Larvae
Maximillian's sunflower ( <i>Helianthus maximiliani</i> )	Summer-Fall	3-7', perennial, large yellow flowers	Drought tolerant, full sun	Variety; monarch, painted lady, checkerspots
Hoary Mountain Mint ( <i>Pycnanthemum incanum</i> )	Summer-Fall	1-3', perennial, light purple flowers	Dry soils, full sun	Variety; red admiral, eastern tailed blue, pearl crescent, spring azure, sulphurs, whites
Ox-eye Sunflower ( <i>Heliopsis helianthoides</i> )	Summer	3-6', yellow flowers	Moist soils, full sun	Variety; atlantis fritillary, European skipper, early hairstreak

PawPaw ( <i>Asimina triloba</i> )	Spring	Small broad-leafed tree	Moist soils, sun to light shade	Larvae, swallowtails
Pearly Everlasting ( <i>Anaphalis margaritacea</i> )	Summer	12-36", perennial, flat clusters of white flowers	Dry soils, sunny areas, drought tolerant	Small butterflies, painted lady
Wild Blue Phlox ( <i>Phlox divaricata</i> )*	Spring	10-20", perennial, blue to purple showy flowers	Fertile soils, well-drained, partial shade	Larvae, swallowtails, sulphurs, painted lady, viceroy
Moss Phlox ( <i>Phlox subulata</i> )	Spring	Creeping ground cover, pink flowers	Dry acidic soils, shady areas	Small butterflies
Purple Coneflower ( <i>Echinacea purpurea</i> )	Summer-Fall	Up to 4' hardy perennial, purple flowers, heat tolerant	Rich, well drained soil sunny areas	Variety; tiger swallowtail, viceroy, great spangled fritillary, whites, hairstreaks, blues, skippers
Royal Catchfly ( <i>Silene regia</i> )*	Summer	3-4', perennial, red flowers	Sandy, dry soils, full sun	Best for hummingbirds, bound to attract variety of butterflies
Spicebush ( <i>Lindera benzoin</i> )	Spring	Fragrant shrub, white flowers, produces fruit	Moist soils, sunny areas	Variety; spring azure, larvae
Sweet White Violet ( <i>Viola blanda</i> )	Spring	3-5", perennial, white flower	Moist, fertile areas, light shade	Larvae
Common Blue Violet ( <i>Viola sororia</i> )	Spring	3-8", perennial, blue-white flowers	Moist soils, sunny or partial shady areas	Larvae
March Blue Violet ( <i>Viola cucullata</i> )	Spring	3-8", perennial, blue flowers, groundcover	Moist to wet soils, shade tolerant	Larvae
Virginia Bluebell ( <i>Mertensia virginica</i> )	Spring	1-2', purple	Rich soils, sunny nodding flowers to shady areas	Variety
Yarrow ( <i>Achillea species</i> )	Summer-Fall	12-24", small white flowers	Dry soils, full sun	Variety; coppers, hairstreaks, skippers, sulphurs

## Plant Natives! Celebrate Diversity!

**Beware** of exotic species! Exotic plant species have found their way into many gardens, and although several species do have showy flowers, care should be taken to avoid planting exotic species because they can cause local extinction of native flora. Exotic plant species may also negatively interact with wildlife species. Below is a list of common exotic species to avoid. When in doubt, check with your local Extension service.

- Bush Honeysuckle (*Lonicera species*)
- Privet (*Ligustrum vulgare*)
- Asian Bittersweet (*Celastrus orbiculatus*)
- Canada Thistle (*Cirsium arvense*)

- Japanese Honeysuckle (*Lonicera japonica*)
- Queen Anne's Lace (*Daucus carota*)
- Dames Rocket (*Hesperis matronalis*)
- Day Lily (*Emerocallis fulva*)
- Butterfly Bush (*Buddleia davidii*)
- Lantana (*Lantana camara*)

<b>20 Common Butterflies of Ohio</b>		
<b>Butterfly species</b>	<b>Nectar Plants</b>	<b>Larvae Plants</b>
Spicebush Swallowtail	Milkweed, butterfly weed, purple coneflower, joe-pye weed	Spicebush, sassafras
Eastern Black Swallowtail	Milkweed, butterfly weed, phlox	Parsley
Eastern Tiger Swallowtail	Butterfly weed, bee balm, phlox, milkweed, blazing star	Black cherry, tulip tree, ash, spicebush
Cabbage White	Mints, asters, bee balm	Cabbage, mustards
Checkered White	Mustards	Cabbage, mustards
Clouded Sulphur	Phlox, milkweed, goldenrod, asters, blazing star	Leguminous plants
Orange Sulphur	Yarrow, asters, mints, goldenrods	Alfalfa, clovers
Eastern Tailed Blue	Mints, yarrow, milkweed, wild geranium	Leguminous plants
Spring Azure	Mints, milkweed, spicebush	Dogwoods, viburnums, black cherry
Great Spangled Fritillary	Milkweed, purple coneflower, joe-pye weed, ironweed, black-eyed susan, bee balm	Violets
Pearl Crescent	Black-eyed susan, milkweed, geranium, mints, asters	Asters
Question Mark	Feeds on rotten fruits, milkweed	Elm, hackberry
Comma	Feeds on rotten fruits	Nettles, elm
Mourning Cloak	Milkweed, bee balm	Cottonwood, elm, hackberry
Red Admiral	Milkweed, mints, asters, phlox, coreopsis	Nettles
Painted Lady	Joe-pye weed, blazing star, bee balm, goldenrod, phlox, asters	Pearly everlasting
Red-spotted Purple	Feeds on rotten fruits	Black cherry, hawthorn
Viceroy	Asters, joe-pye weed, goldenrod, phlox	Willow, poplars, black cherry
Monarch	Milkweed, butterfly weed, joe-pye weed, goldenrod, asters, blazing star	Milkweed
Silver-Spotted Skipper	Milkweed, blazing star, purple coneflower, joe-pye weed	Leguminous plants

## Additional Resources

### Online Resources

- **Ohionline**—<http://ohionline.osu.edu>  
Native Plant Bulletin—<http://ohionline.osu.edu/b865/index.html>
- **Ohio Department of Natural Resources**—<http://www.dnr.state.oh.us/>  
Division of Natural Areas—<http://www.dnr.state.oh.us/odnr/dnap>  
Division of Wildlife—<http://www.dnr.state.oh.us/wildlife/resources/butterflies/index.html>  
Checklist of Ohio butterflies  
Division of Forestry—<http://www.hcs.ohio-state.edu/odnr/forestry.htm>  
Can purchase native trees and shrubs from the Division
- **National Wildlife Federation**—<http://www.nwf.org>  
Provides helpful information on creating backyard wildlife habitat and provides certification
- **North American Butterfly Association**—<http://www.naba.org/>
- **Monarch Watch**—<http://www.monarchwatch.org/>
- **National Audubon Society**—<http://www.audubon.org/>
- **The National Wildflower Research Center**—<http://www.wildflower.org/>
- **Birdsource**—<http://www.birdsource.org/>

## Books

*Attracting Butterflies and Hummingbirds to Your Backyard*—*A Rodale Organic Gardening Book* by Sally Roth  
*Butterflies Through Binoculars—The East* by Jeffrey Glassberg  
*Peterson Field Guide: Eastern Butterflies* by Paul A. Opler and Vichai Malikul  
*Newcomb's Wildflower Guide* by Lawrence Newcomb  
*Go Native—Gardening with native plants and wildflowers in the lower Midwest* by Carolyn Harstad  
*Butterfly Gardens: Luring nature's loveliest pollinators to your yard* by Alcinda Lewis

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