

## Native Butterfly Nectar and Host Plants for your Garden

The Watershed Reserve has a diverse assortment of native nectar and host plants that attract butterflies in our gardens, the Katie Gorrie Butterfly House, and meadows. Below, you can learn more about some of these plant species and perhaps you will be inspired to plant some of them in your own garden. For further information, please consult the sources that are listed at the end of the page.

By choosing plants that bloom at various different times throughout the season, you will ensure that pollinators always have good sources of food.

### Herbaceous Plants:

#### **Milkweed species** *Asclepias* sp.

perennial, nectar and host plant, summer bloom, nectar plant, 3-8', deer resistant, unique flower shape

Milkweed is a well-known host plant for Monarch butterfly caterpillars, along with a variety of other insects that specialize and depend on this plant. It gets its name from the sap, which has a milky appearance. A variety of native species can be found in New Jersey, with around 22 species in eastern North America. Milkweed is poisonous to many animals. Those that are tolerant of its toxicity become poisonous to potential predators after consuming it.

Along with milkweed's value as a host plant, its flowers are also an important source of nectar for pollinators. Flowers come in a variety of beautiful colors depending on the species, including pink, orange, and purple. The flowers often grow in whorled clusters.



Left to right: Common Milkweed, Monarch Caterpillar (Anna Stunkel), Monarch Butterfly

([https://commons.wikimedia.org/wiki/File:Monarch\\_Butterfly\\_on\\_Swamp\\_Milkweed\\_\(28780185640\).jpg](https://commons.wikimedia.org/wiki/File:Monarch_Butterfly_on_Swamp_Milkweed_(28780185640).jpg))

#### **Golden Alexander** *Zizia aurea*

perennial, host plant, early spring bloom, ground cover

These brilliant yellow flowers are a host plant for the Black Swallowtail butterfly. They are a member of the parsley family. While Black Swallowtail caterpillars enjoy feeding on carrots and their relatives, Golden Alexander provides a good alternative which may help to save any crops in your garden. While it is not a nectar source for butterflies, insects with shorter mouthparts will visit and pollinate this species. This plant has fruit capsules that may be eaten by wildlife, and the rich foliage provides shelter.



Photo credit: [https://commons.wikimedia.org/wiki/File:Zizia\\_aurea\\_7zz.jpg](https://commons.wikimedia.org/wiki/File:Zizia_aurea_7zz.jpg)

### **Bergamot/Bee Balm *Monarda* sp.**

perennial, nectar plant, summer bloom, 1-4', deer resistant, unique flower shape

These brightly colored flowers come in colors such as pink and purple, and attract pollinators such as butterflies, sphinx moths, bumblebees, hover flies, wasps, and hummingbirds. Each petal has a flattened area at the base that acts as an area where insects can land. It is a member of the mint family, and is very fragrant. It can grow in a variety of soil conditions and spreads easily by cloning from the roots. Sparrows and finches feed on the seeds.



Left to right: Bee Balm (<https://www.flickr.com/photos/126288307@N05/27104608634>), Wild Bergamot ([https://commons.wikimedia.org/wiki/File:Purple\\_Flower\\_Wild\\_Bergamot\\_DSC\\_0172.JPG](https://commons.wikimedia.org/wiki/File:Purple_Flower_Wild_Bergamot_DSC_0172.JPG))

**Aster species (New England Aster, New York Aster, Smooth Aster, etc.)**

perennial, host and nectar plant, fall bloom, 1-6'

Over 60 species of asters can be found in North America. The word “aster” has Greek origins, and means “star.” These composite flowers are a pleasant addition to any garden, and they come in a wide variety of colors. They are late-blooming, in summer and fall. These flowers generally grow best in very open, sunny areas. A wide variety of moth caterpillars use aster plants as hosts. Butterfly caterpillars that feed on asters include Silvery Checkerspots, Pearl Crescents, and Painted Ladies. Many species of butterflies will visit asters for nectar, along with various bees. Birds such as sparrows and goldfinches often feed on aster seeds.



Left to Right: New England Aster ([https://commons.wikimedia.org/wiki/File:New\\_England\\_aster.jpg](https://commons.wikimedia.org/wiki/File:New_England_aster.jpg)), New York Aster ([https://commons.wikimedia.org/wiki/File:New\\_York\\_Aster.JPG](https://commons.wikimedia.org/wiki/File:New_York_Aster.JPG)), Painted Lady (Anna Stunkel)

**Purple False Indigo *Baptisia australis***

perennial, host and nectar plant, spring bloom, 3-5', deer resistant, tall and showy flowers

This strikingly tall plant produces showy flowers, which attract a wide variety of pollinators. It is also a host plant for butterflies such as Eastern Tailed-Blues and sulphurs. If you break the stem, the sap turns blue as it oxidizes. It has a bitter taste to deer.



Photo credit: [https://commons.wikimedia.org/wiki/File:Baptisia\\_australis\\_-\\_Blue\\_False\\_Indigo.jpg](https://commons.wikimedia.org/wiki/File:Baptisia_australis_-_Blue_False_Indigo.jpg)

**Goldenrod species** *Solidago* sp.

perennial, nectar plant, fall bloom (note that some species are invasive, so research what you plant!)

This is one of the most common meadow plants in summer and early fall. There are nearly 100 species of goldenrod, with Common or Canada Goldenrod being one of the most abundant. These wildflowers naturally grow in open and disturbed areas. If you are hoping to attract spectacular and diverse butterflies to your garden, this is the wildflower for you. Sulphurs, American Copper butterflies, Monarchs, and skippers are some common visitors.

Along with its value as a nectar plant, many insects such as beetle larvae feed on goldenrod and camouflage among its flowers. If you look closely at goldenrod flowers, you may spot ambush bugs or goldenrod spiders hiding in wait for their prey.

In winter, look for galls, the large growths on goldenrod stems that are produced by species such as the Goldenrod Gall Fly. Larvae feed on the plant, which causes a chemical reaction that forces the goldenrod stem to swell. This forms a gall, providing both protection and food for the larvae. Birds such as chickadees and Downy Woodpeckers feed on the larvae inside these galls.



Left to right: Goldenrod (<https://www.flickr.com/photos/calliope/35459262>), ambush bug (<https://www.flickr.com/photos/drphotomoto/38262711015>), goldenrod gall ([https://commons.wikimedia.org/wiki/File:Goldenrod\\_Gall\\_\(22820018713\).jpg](https://commons.wikimedia.org/wiki/File:Goldenrod_Gall_(22820018713).jpg))

**Sunflower species** *Helianthus* sp., *Heliopsis* sp., *Coreopsis* sp.

annual or perennial depending on species, host and nectar plant, summer and fall bloom, 3-12', tall and showy flowers

Sunflowers are a beautiful, showy addition to any garden, and pollinators love them as well. The flower heads turn from side to side depending on the direction of the sun before they open. A vast variety of pollinator species visit sunflowers, including bees, beetles, and butterflies such as

the Eastern Tiger Swallowtail and Monarch. Sunflowers are a host plant for Silvery Checkerspot caterpillars. Many species of birds, especially goldfinches, feed on the seeds.



Tall Coreopsis ([https://commons.wikimedia.org/wiki/File:Tall\\_coreopsis.jpg](https://commons.wikimedia.org/wiki/File:Tall_coreopsis.jpg))

**Spotted Joe Pye Weed** *Eutrochium maculatum*

perennial, nectar plant, summer bloom, 2-10', tall and showy flowers

These beautiful purplish pink flowers attract many pollinators. Monarchs, Red Admirals, Red-spotted Purples, skippers, tiger swallowtails, fritillaries, and bees are among the visitors who may drop by to pollinate these flowers. Since they are very tall, this allows for a nice view of visiting insects.



Photo credit: [https://commons.wikimedia.org/wiki/File:Spotted\\_Joe-pye\\_Weed.jpg](https://commons.wikimedia.org/wiki/File:Spotted_Joe-pye_Weed.jpg)

**Violet species** *Viola* sp.

perennial, nectar and host plant, spring bloom, ground cover plant

There are many different species of violets, with lovely flowers of various colors and heart-shaped leaves. They grow best in wet areas with partial shade. Some pollinators will visit them, and they are a host plant for 30 different species of fritillary butterflies! Caterpillars of

these species are fully dependent on violets for their food. Interestingly, female Great Spangled Fritillaries seem to be able to find violets even after they have wilted, which could mean that they are able to smell the roots.



Photos 1 and 2 by Anna Stunkel; 3 (<https://www.flickr.com/photos/glaciemps/23183359724>)

### Woody Plants:

#### **Spicebush** *Lindera benzoin*

deciduous woody perennial, host plant, early spring bloom, 6-12', sexually dimorphic (females have red berries in fall/winter)

While butterflies and moths are not frequent pollinators of this species because it blooms so early, it is a very important host plant for caterpillars. Spicebush Swallowtails, Eastern Tiger Swallowtails, and Promethea Silkmoths all use this plant as a host. Birds, raccoons, and opossums will also feed on the brilliant red berries. The leaves have a pleasant, spicy scent if crushed, and they turn yellow in the fall.



Left to right: spicebush berries (<https://www.flickr.com/photos/treegrow/40728149704>), spicebush flowers ([https://commons.wikimedia.org/wiki/File:Spicebush\\_\(4506720062\).jpg](https://commons.wikimedia.org/wiki/File:Spicebush_(4506720062).jpg)), Promethea Silkmoth (Anna Stunkel)

#### **Flowering Dogwood** *Cornus florida*

deciduous woody perennial, nectar plant, spring bloom, 15-40'

This tree or shrub has lovely red, white, or pink flowers that attract pollinators, and the leaves change to a beautiful red color in the fall. It also has red fruits. Butterfly visitors to this species may include American Snouts, hairstreaks, Question Marks, and Red-spotted Purples.



Photo credit: [https://commons.wikimedia.org/wiki/File:Flowering\\_Dogwood\\_Cornus\\_florida\\_Yellow\\_Flowers\\_3008px.JPG](https://commons.wikimedia.org/wiki/File:Flowering_Dogwood_Cornus_florida_Yellow_Flowers_3008px.JPG)

**Buttonbush** *Cephalanthus occidentalis*

deciduous woody perennial, nectar and host plant, summer and early fall bloom, 6-12', unique flowers

This shrub has very interestingly shaped flowers, and it attracts many different pollinators such as skippers, Monarchs, and other butterflies. It is also a host plant for several species, including sphinx moths and the Royal Walnut Moth. The seed heads turn red in the fall and winter, and appear button-like, hence its name. Its red and yellow fall foliage makes this a pleasant year-round addition to your garden.



Photo credit: [https://commons.wikimedia.org/wiki/File:Buttonbush\\_-\\_Cephalanthus\\_occidentalis.jpg](https://commons.wikimedia.org/wiki/File:Buttonbush_-_Cephalanthus_occidentalis.jpg)

Trees:

**Oak species** *Quercus* sp.

deciduous woody perennial, host plant, spring bloom, up to about 100'

A variety of oaks are native to New Jersey, including the Northern Red Oak, Pin Oak, and White Oak. Oaks are one of the most important host plants for butterflies, including a variety of hairstreaks, Mourning Cloaks, and Horace's Duskywings. They also provide shelter for many kinds of wildlife among their branches and in tree cavities, while acorns are an important food source for squirrels, Blue Jays, and more.



Left to right: White Oak ([https://commons.wikimedia.org/wiki/File:White\\_Oak\\_Tree,\\_West\\_Hartford,\\_CT\\_-\\_June\\_17,\\_2013.jpg](https://commons.wikimedia.org/wiki/File:White_Oak_Tree,_West_Hartford,_CT_-_June_17,_2013.jpg)), Northern Red Oak leaves (<https://www.flickr.com/photos/treegrow/30801570630/>)

**Elm species** *Ulmus* sp.

deciduous woody perennial, host plant, spring bloom, up to about 80'

Elms are another important host tree for many different butterflies, including Question Marks, Eastern Commas, Hackberry and Tawny Emperors, and Mourning Cloaks. Wildlife such as songbirds and squirrels also feed on the seeds.



Left to right: American Elm ([https://en.m.wikipedia.org/wiki/File:American\\_Elm\\_at\\_the\\_Hill-Stead\\_Museum,\\_Farmington,\\_CT\\_-\\_July\\_2019.jpg](https://en.m.wikipedia.org/wiki/File:American_Elm_at_the_Hill-Stead_Museum,_Farmington,_CT_-_July_2019.jpg)), Eastern Comma (Anna Stunkel)

### Plants to avoid:

While beautiful and attractive to pollinators, Butterfly Bush and Purple Loosestrife are both invasive species that are capable of spreading rapidly and crowding out native plants. Do not plant these in your garden; native plants, pollinators, and other wildlife will thank you!



Left to right: Butterfly Bush (<https://www.pxfuel.com/en/free-photo-onppa>), Purple Loosestrife ([https://commons.wikimedia.org/wiki/File:Lythrum\\_salicaria,\\_purple\\_loosestrife\\_4.jpg](https://commons.wikimedia.org/wiki/File:Lythrum_salicaria,_purple_loosestrife_4.jpg))

### **Sources**

34 Host Plants for Butterflies & Caterpillars (New Guide)

<https://birdwatchinghq.com/butterfly-host-plants/#:~:text=Sunflowers%20not%20only%20make%20great,season%20nectar%20source%20for%20butterflies.>

Butterfly Garden Plants: Golden Alexander

<http://nababutterfly.com/golden-alexander/>

Eastman, J. (2003).

*The Book of Field and Roadside: Open-Country Weeds, Trees, and Wildflowers of Eastern North America*. Mechanicsburg, PA: Stackpole Books.

Garden Trees that Attract Butterflies

[https://www.thespruce.com/eleven-trees-that-attract-butterflies-3269684#:~:text=Flowering%20dogwood%2C%20with%20its%20spreading,American%20snout%20\(Libytheana%20carinenta\)](https://www.thespruce.com/eleven-trees-that-attract-butterflies-3269684#:~:text=Flowering%20dogwood%2C%20with%20its%20spreading,American%20snout%20(Libytheana%20carinenta))

Plant Profile: Blue False Indigo

<https://www.regenerativedesigngroup.com/blue-false-indigo/#:~:text=Baptisia%20is%20a%20native%20host,first%20food%20for%20the%20caterpillars.>

Planting for Pollinators: Button Bush

<https://www.xerces.org/blog/planting-for-pollinators-button-bush>

Plants for Pollinators: Violets

<https://xerces.org/blog/plants-for-pollinators-violets>

Spicebush – A Valuable Native Shrub for Pollinators and Other Wildlife

<https://shannontrimboli.com/spicebush-a-valuable-native-shrub-for-pollinators-and-other-wildlife/>

Spotted Joe Pye Weed- 'Gateway' to Butterflies: Late Season Nectar Flower for Pollinators

<https://monarchbutterflygarden.net/butterfly-plants/spotted-joe-pye-weed-gateway/>

Top Trees for Attracting Butterflies

<https://www.saveourmonarchs.org/blog/best-trees-for-supporting-butterflies>