

DESIGN A POLLINATOR PARADISE

Time needed: 30 minutes

Since you know how important pollinators are to our food supply (one in every three bites of food we eat is the result of pollinators), it's important to protect our dear pollinating pals! Some challenges, like loss of pollinator habitat, lead to reduced pollinator populations. We know that native pollinators and domesticated honeybees are in decline, but you can help! Understanding biodiversity - and even starting your own pollinator gardens - help our pollinator friends to have access to nesting sites, habitats, and food.

LET'S DO IT!

- 1. Print copies of the "Native Plants for Bees" handouts (there are specific handouts for the Mountains, Piedmont, and Coastal Plain regions). Also, print the handout "Seasonal Blooming Native Plants for Bees." These are on pages 3-21.
- First, let's try planning a garden based 2. on the region you live in. Then, when you become a pro at that, we can try designing gardens in other parts of the state! If you're not from North Carolina, no problem, friends! Start with the seasonal blooming plant handout, and this will help you get off to a fantastic start.
- 3. Start to brainstorm how you would like to layout your pollinator paradise. Using the handouts as guides, you can start to research suggested plants using key resources on this site (Honey Bee Friendly Plants list) and the Internet. You may even want to call up a local beekeeper or two and inquire about their favorite plants!
- 4. Cut out the plants included on your handouts and start to arrange them on paper/poster board. Here are some things to keep in mind as you plan and sketch out your garden:

- Nectar sources and pollen producing plants are so, so important! Consider growing trees, shrubs, annual and perennial flowers, fruits, and vegetables to provide food for the hives and native bee populations as well. Choose plants in a variety of colors and shapes that will attract a variety of pollinators throughout the growing season!
- Plant long blooming flowers and a variety of plants that will bloom at different times throughout the spring, summer, and fall. Honey bees and many native bees need to forage until they shelter in their hives for the winter.
- Try to cluster some of the same plants together in a grouping. Planting in clumps/groups rather than single plants is better for attracting pollinators. Some bees tend to focus on one kind of flower at a time, which means it is more likely that pollen from one flower will be transferred to another flower of the same species by a particular bee. Many plants require this kind of pollen distribution, known as cross-pollination, in order to produce viable seeds and increase genetic variation within the species. Pretty cool, right?!

Native Plants for Bees - handout copy (print by region: Coastal Plain, Piedmont or Mountains)

Seasonal Blooming Native Plants for Bees (spring, summer, fallblooming) - handout copy

Pencil, markers, or crayons

Paper or poster board

Scissors

Tape or glue



FIGURE 1. When you plant for pollinators, you get the joy of seeing so many cool insects!



Pollinator
EARN YOUR BUZZ BADGE Complete at least three of the Bug's life activities and earn your Pollinator ower badge!



FIGURE 2. Milkweed is a host plant for monarch butterflies as well as a rich source of nectar and pollen for many other pollinators.



FIGURE 3. Stoke's Aster is a beautiful flower that attracts bees, butterflies and other pollinator friends.

- Just like humans, bees need water!
 Provide a pond, a fountain, or some other fresh water source in your design.
- Many native bees nest in the soil (and about 30% of them nest in cavities), so be sure to create some nesting areas.
 As a suggestion, you can leave a space in your garden un-mulched for bees to gain access to the soil and set up housekeeping. A pile of undisturbed sand will work as well.
- 5. After you have crafted your special garden design, please be sure to share! <u>Upload your design to work</u> towards your Bug's Life Badge. Also, don't let the fun stop there! Since you know how important pollinators are to us, you can use your new-found knowledge to teach school administration, community members, neighbors, and others that constructing a pollinator garden near where you live can benefit us all.

ACTIVITY EXTENSION

Since you are now pros at planning plantings for bees, take a minute to <u>watch</u> <u>Ms. Debbie's video</u> on suggested plantings for a variety of pollinator friends including native bees, butterflies, and maybe a hummingbird or two! Ms. Debbie has created a very special <u>Pollinator Paradise</u> <u>Garden</u> in Pittsboro (Chatham County, NC), so check out her website for <u>monthly</u> <u>slideshows of plants and pollinators</u>, see <u>what's blooming right now</u> in the garden, and her suggested planting list of the top <u>25 pollinator plants for North Carolina</u>. So many cool resources there, so geek out all you'd like – you'll make us proud!

TALK IT OVER

- 1. What are some nectar sources in your region/area?
- 2. How are pollinators significant for agriculture?
- Do you have plants in your yard or near your home or school on which you have seen pollinators?
- 4. What do you think you can do to support a healthy habitat for pollinators?



FIGURE 4. When designing for pollinators, think about layers of plantings.



Coastal Plain Region: Native Bee Plants



















Coastal Plain Region: Native Bee Plants

American Holly llex opaca

Blooms: Spring Height: 30-50 ft. Width: 18-35 ft. Sunlight: Sun/Partial Shade

This plant is a host for the Henry's Elfin butterfly and provides nectar for adult butterflies and other insects, including honey bees and

the native Colletes banksi. Its fruits are eaten by songbirds and many other wildlife.



Virginia Sweetspire Itea virginica

Blooms: Summer Height: 3-4 ft. Width: 3-4 ft. Sunlight: Sun/Partial Shade

This plant is moderately resistant to damage from deer. Flowers attract butterflies and other insects. Seeds are eaten by songbirds.



Red Maple Acer rubrum

Blooms: Spring Height: 40-60 ft. Width: 25-45 ft. Sunlight: Sun/Partial Shade

A larval host plant for caterpillars. Flower nectar attracts bees and other pollinators. Seeds are enjoyed by birds. White-tailed deer browse

twigs and leaves, but this tree is moderately resistant to damage.



Huckleberry

Gaylussacia frondosa

Blooms: Spring

Height: 4-6 ft. Width: 4-5 ft.

Sunlight: Sun/Partial Shade

This plant is moderately resistant to damage from deer. Pollinators are attracted to its blooms. Its thickets provide cover for wildlife, while

birds including grouse, bobwhite, scarlet tanagers and wild turkeys eat the berries.



Narrow Leaf Sunflower Helianthus angustifolius

Blooms: Fall Height: 6-10 ft. Width: 2-3 ft.

Sunlight: Sun/Partial Shade

It is a late-season nectar plant for butterflies. It is a host plant for the silvery checkerspot butterfly. Leave standing dead flowers into the

winter as natural bird feeders. Many native bees forage on this plant.



Inkberry llex glabra

Blooms: Summer Height: 6-8 ft. Width: 6-8 ft. Sunlight: Sun/Partial Shade

Butterflies and bees are attracted to the blooms. Its fruits are eaten by birds and small mammals. Gallberry honey is a highly rated honey that results from

bees feeding on inkberry flowers.



Blackberry Rubus spp.

Blooms: Summer

Height: 4-8 ft. Width: 4-10 ft. Sunlight: Full Sun

The nectar and pollen of the flowers attract many kinds of insects, especially long-tongued and short-tongued bees. The fruits are relished by songbirds, ⊡?/?) small mammals. foxes. raccoons, and black bears.



Tulip Poplar Liriodendrum tulipifera

Blooms: Summer

Height: 40-150 ft. Width: 20-40 ft. Sunlight: Sun/Partial Shade

It is larval host plant for the Eastern tiger swallowtail butterfly. Hummingbirds, butterflies, bees, and birds like cedar waxwings feed on the nectar from **11299697** flowers.



Pepperbush Clethra alnifolia

Blooms: Summer

Height: 3-8 ft. Width: 4-6 ft. Sunlight:Sun/Partial Shade

The flowers of the sweet pepperbush attract bees, butterflies, and hummingbirds. Its fruit attracts birds. This plant is resistant to damage by deer.



Coastal Plain Region : Native Bee Plants



















Coastal Plain Region: Native Bee Plants

Staghorn Sumac Rhus typhina

Blooms: Spring Height: 15-25 ft. Width: 18-35 ft. Sunlight: Sun/Partial Shade

Flowers provide a nectar source for native bees. Fruits are enjoyed by birds.



Tupelo Gum Nyssa aquatica

Blooms: Spring Height: 35-50 ft. Width: 20-30 ft. Sunlight: Sun/Partial Shade

Considered a good honey tree, meaning many flowers for bees in the spring. Large and small mammals eat the fruit. Additionally,

provides cavity and nesting sites for a variety of birds and mammals.



Black Gum Nyssa sylvatica

Blooms: Spring Height: 40-60 ft. Width: 20-30 ft. Sunlight: Sun/Partial Shade

The spring flowers are a nectar source for bees. The berries are enjoyed by songbirds, wild turkeys, black bears, foxes, and opossums.

The tree's natural hollows are a refuge for reptiles, tree frogs, bats, and other wildlife.



Beautyberry

Callicarpa americana

Blooms: Summer

Height: 3-6 ft. Width: 3-6 ft. Sunlight: Sun/Partial Shade

Offers summer flowers for bees. Its fruits are eaten by catbirds and other songbirds, small mammals, white-tailed deer and black bears.

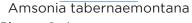
It is a very important fall food for migrant songbirds.



Aster Aster spp.

Blooms: Summer/Fall Height: 1-3 ft. Width: 1-3 ft. Sunlight: Full Sun

One of the last wildflowers to bloom, asters are pollinated by long-tongued bees, short-tongued bees, and visited by butterflies and skippers. Asters are host to silvery checkerspot butterfly larvae.



Blooms: Spring

Height: 2-3 ft. Width: 2-3 ft.

Sunlight: Sun/Partial Shade

Butterflies and bees feed on the nectar from the blooms. This plant is highly deer resistant. Beautiful native plant from the coast to the mountains.

Bluestar

Groundsel Bush Baccharis halimifolia

Blooms: Fall

Height: 5-12 ft. Width: 5-7 ft.

Sunlight: Sun/Partial Shade

Native to the coastal areas of the eastern U.S. It is tolerant to heat, drought, wet sites, and salt spray. It can be weedy but provides an abundance of fall flowers for bees.



Coastal Joe Pye Weed Eutrochium dubium

Blooms: Summer/Fall Height: 3-5 ft. Width: 3-5 ft. Sunlight: Sun/Partial Shade

Butterflies and bees are attracted to the flowers, and songbirds eat the seeds.



Possumhaw Viburnum Viburnum nudum

Blooms: Spring

Height: 60-75 ft. Width: 45-60 ft. Sunlight: Full Sun

The flowers are pollinated by many small insects, including hoverflies and sweat bees. It can be a host plant for the spring azure butterfly.

Its fruits are eaten by songbirds, grouse, wild turkeys, and squirrel.





















American Holly Ilex opaca

Blooms: Spring Height: 30-50 ft. Width: 18-35 ft.

Sunlight: Sun/Partial Shade

This plant is a host for the Henry's Elfin butterfly and provides nectar for adult butterflies and other insects, including honey bees and

the native Colletes banksi. Its fruits are eaten by songbirds and many other wildlife.

Witch Alder Fothergilla major

Blooms: Spring Height: 6-12 ft. Width: 6-10 ft. Sunlight: Sun/Partial Shade

Native butterflies and insects flock to the blooms while birds enjoy the cover of its blue-green foliage.



Red Maple Acer rubrum

Blooms: Spring Height: 40-60 ft. Width: 25-45 ft. Sunlight: Sun/Partial Shade

A larval host plant for caterpillars. Flower nectar attracts bees and other pollinators. Seeds are enjoyed by birds. White-tailed deer browse

twigs and leaves, but this tree is moderately resistant to damage.



Redbud

Cercis canadensis Blooms: Spring Height: 15-30 ft. Width: 15-25 ft. Sunlight: Full Sun

The bright flowers of redbud attract a variety of bee visitors, including the southeastern blueberry bee. Redbuds are one of the favorite plants for leafcutter bee to use to line their nests.



Maypop Passiflora incarnata

Blooms: Summer

Height: 8-10 ft. Width: 6-8 ft. Sunlight: Full Sun

Bumble bees and carpenter bees, as well as hummingbirds and butterflies are regular visitors to the flowers. It is a host plant for the gulf fritillary, varigated 同時代時期 fritillary and zebra swallowtail butterflies.



Black Locust

Robinia pseudoacacia Blooms: Spring

Height: 30-50 ft. Width: 25-35 ft. Sunlight: Full Sun

It is a host plant for the Eastern tiger swallowtail, mourning cloak, Eastern comma, red-spotted purple, and viceroy butterflies. The buds

and catkins are eaten by birds. Bees are attracted to its flowers.



Blackberry Rubus spp.

Blooms: Summer

Height: 4-8 ft. Width: 4-10 ft. Sunlight: Full Sun

The nectar and pollen of the flowers attract many kinds of insects. especially long-tongued and short-tongued bees. The fruits are relished by songbirds, **1**15/ small mammals, foxes, raccoons, and black bears.



Tulip Poplar Liriodendrum tulipifera

Blooms: Summer Height: 40-150 ft. Width: 20-40 ft. Sunlight: Sun/Partial Shade

It is larval host plant for the Eastern tiger swallowtail butterfly. Hummingbirds, butterflies, bees, and birds like cedar waxwings feed on the nectar from flowers.



Bluestar

Amsonia tabernaemontana Blooms: Spring Height: 2-3 ft. Width: 2-3 ft. Sunlight: Sun/Partial Shade

Butterflies and bees feed on the nectar from the blooms. This plant is highly deer resistant. Beautiful native plant from the

coast to the mountains.





















Staghorn Sumac Rhus typhina

Blooms: Spring Height: 15-25 ft. Width: 18-35 ft. Sunlight: Sun/Partial Shade

Flowers provide a nectar source to native bees. Fruits are enjoyed by birds.



Smartweed

Polygonum pennsylvanicum

Blooms: Summer

Height: 2 ft. Width: 2-3 ft. Sunlight: Sun/Partial Shade

This plant is an excellent wildlife food plant, especially for waterfowl. Twenty species of ducks, geese, bobwhites, ring-necked pheasants,

and many others eat the seeds. Great flowering plant for bees.



Black Gum Nyssa sylvatica

Blooms: Spring Height: 40-60 ft. Width: 20-30 ft. Sunlight: Sun/Partial Shade

The spring flowers are a nectar source for bees. The berries are enjoyed by songbirds, wild turkeys, black bear, foxes, and opossums.

The tree's natural hollows are a refuge for reptiles, tree frogs, bats, and other wildlife.



Persimmon Diospyros virginiana

Blooms: Spring

Height: 30-60 ft. Width: 20-35 ft. Sunlight: Sun/Partial Shade

Birds, small mammals, white-tailed deer, and black bears eat the fruit of the persimmon. The nectar and pollen help to build up honey bee

colonies. It provides an early honey crop that is amber colored and mild.



Aster Aster spp.

Blooms: Summer/Fall Height: 1-3 ft. Width: 1-3 ft. Sunlight: Full Sun

One of the last wildflowers to bloom, asters are pollinated by long-tongued bees, short-tongued bees, and visited by butterflies and skippers. Asters are host to silvery checkerspot butterfly larvae.



Fringe Tree Chionanthus virginicus

Blooms: Spring Height: 12-20 ft. Width: 12-20 ft. Sunlight: Sun/Partial Shade

Its fruits are eaten by songbirds and small mammals. This plant is moderately resistant to damage from deer.



Threadleaf Coreopsis

Coreopsis verticillata

Blooms: Summer Height: 1-3 ft. Width: 1-2 ft. Sunlight: Sun/Partial Shade

Its flowers are attractive to bees, butterflies, and other pollinators. Its seeds are eaten by songbirds. This plant is highly resistant to damage bv deer.



Joe Pye Weed Eutrochium fistulosum

Blooms: Late Summer/Fall Height: 8 ft. Width: 4-6 ft.

Sunlight: Sun/Partial Shade

Flowers are attractive to butterflies, especially smaller species, bees. and other pollinators. Songbirds eat the seeds. Commonly found along roadsides.



Fragrant Sumac Rhus aromatica

Blooms: Spring Height: 4-6 ft. Width: 4-6 ft. Sunlight: Sun/Partial Shade

The nectar and pollen of the flowers attract small bees (especially sweat and mining bees), hover flies, and a variety of other flies.

Small carpenter bees create tunnel-nests in the pith of sumac stems.





















American Holly llex opaca

Blooms: Spring Height: 30-50 ft. Width: 18-35 ft. Sunlight: Sun/Partial Shade

This plant is a host for the Henry's Elfin butterfly and provides nectar for adult butterflies and other insects, including honey bees and

the native Colletes banksi. Its fruits are eaten by songbirds and many other wildlife.



Basswood

Tilia americana Blooms: Summer Height: 60-75 ft. Width: 45-60 ft. Sunlight: Full Sun

Larval plant for red spotted purple and mourning cloak butterflies. Its flowers are attractive to honey bees, and the nectar makes an excellent tasting honey. Its seeds are eaten by birds and squirrels.

Red Maple

Blooms: Spring Height: 40-60 ft. Width: 25-45 ft. Sunlight: Sun/Partial Shade

A larval host plant for caterpillars. Flower nectar attracts bees and other pollinators. Seeds are enjoyed by birds. White-tailed deer browse

twigs and leaves, but this tree is moderately resistant to damage.



Yellow Buckeye Aesculus Flava

Blooms: Spring Height: 60-75 ft. Width: 40-50 ft.

Sunlight: Sun/Shade

Hummingbirds and bees drink nectar from the flowers; the nuts are eaten by squirrels. Safety note: HIGHLY TOXIC; MAY BE FATAL IF EATEN!



Sourwood

Oxydendrum arboreum Blooms: Summer Height: 20-30 ft. Width: 10-15 ft.

Sunlight: Sun/Partial Shade

The flowers are attractive to bees. butterflies, and other insects. Sourwood honey is a treasured food of the Appalachians. Natural hollows are refuge for climbing reptiles

amphibians, bats, and other small wildlife.



Black Locust

Robinia pseudoacacia Blooms: Spring Height: 30-50 ft. Width: 25-35 ft. Sunlight: Full Sun

It is a host plant for the Eastern tiger swallowtail, mourning cloak, Eastern comma, red-spotted purple, and viceroy butterflies. The buds

and catkins are eaten by birds. Bees are attracted to its flowers.



Persimmon Diospyros virginiana

Blooms: Spring Height: 30-60 ft. Width: 20-35 ft.

Sunlight: Sun/Partial Shade

Birds, small mammals, white-tailed deer, and black bears eat the fruit of the persimmon. The nectar and pollen help to build up honey bee

colonies. It provides an early honey crop that is amber colored and mild.



Tulip Poplar Liriodendrum tulipifera

Blooms: Summer

Height: 40-150 ft. Width: 20-40 ft.

Sunlight: Sun/Partial Shade

It is larval host plant for the Eastern tiger swallowtail butterfly. Hummingbirds, butterflies, bees, and birds like cedar waxwings feed on the nectar from E12:29-122 flowers.



Height: 15-25 ft. Width: 15-30 ft. Sunlight: Full Sun

Fruits are attractive to birds, and plants provide nesting sites. Members of the genus Cornus support native mining bees in the genus Andrena.





















Southern Arrowwood Viburnum dentatum

Blooms: Spring

Height: 6-10 ft. Width: 6-10 ft.

Sunlight: Sun/Partial Shade

Bees enjoy the spring flowers. It is a potential host for the Spring Azure butterfly. Its fruits are eaten by songbirds, grouse, wild turkeys and

squirrels. Its twigs and leaves are browsed by white-tailed deer.

Carolina Silverbell

Halesia tetraptera Blooms: Spring Height: 20-40 ft. Width: 15-35 ft. Sunlight: Partial Shade/Shade

A host plant for the Eastern tiger swallowtail, mourning cloak, Eastern comma, red-spotted purple, and viceroy butterflies. Honey bees, bumble bees, and other long-tongued bees enjoy nectar from the blooms.

Tag Alder Alnus serrulata

Blooms: Spring Height: 15-20 ft. Width: 8-15 ft. Sunlight: Sun/Partial Shade

Bees, birds, and small mammals eat the pollen-rich male flower clusters in the spring. Harvester butterflies eat the aphids commonly found on

alder. White-tailed deer browse the foilage.



Flowering Raspberry Rubus odoratus

Blooms: Summer

Height: 4-6 ft. Width: 6-12 ft. Sunlight: Sun/Partial Shade

material for bees.

This plant is beneficial for songbirds, game birds, butterflies, bees, large, and small mammals. Also used for nesting

Aster Aster spp.

Blooms: Summer/Fall Height: 1-3 ft. Width: 1-3 ft. Sunlight: Full Sun

One of the last wildflowers to bloom, asters are pollinated by long-tongued bees, short-tongued bees, and visited by butterflies and skippers. Asters are host to silvery checkerspot butterfly larvae.



Mountain Camellia

Stewartia ovata

Blooms: Summer Height: 10-15 ft. Width: 10-12 ft. Sunlight: Sun/Partial Shade

The stunning, large white blossoms have a dense cluster of filaments supporting bright yellow anthers. They attract solitary native bees, beetles, and flies.



Joe Pye Weed Eutrochium fistulosum

Blooms: Late Summer/Fall

Height: 8 ft. Width: 4-6 ft.

Sunlight: Sun/Partial Shade

Flowers are attractive to butterflies, especially smaller species, bees, and other pollinators. Songbirds eat the seeds. Commonly

found along roadsides.



Galax Galax urceolata

Blooms: Summer Height: 4-6 in. Width: 4-6 in. Sunlight: Sun/Partial Shade

Native to the Appalachian region of the southeast, when this evergreen plant blooms, it attract bees and flies.





Spring-Blooming Native Bee Plants



















Spring-Blooming Native Bee Plants

Purple Coneflower Echinacea purpurea

Blooms: Late Spring/Summer Height: 1-2 ft. Width: 1.5-2ft.

Sunlight: Full Sun

Its flowers are attractive to bees, butterflies, and other pollinators. Songbirds, especially American goldfinches, eat the seeds.



Virginia Spiderwort

Tradescantia virginiana Blooms: Spring Height: 1-2 ft. Width: 1-3 ft. Sunlight: Sun/Partial Shade

Purple flowers attract honey bees, bumble bees, and hover flies. A native plant that does well in moist or well soil, but can also tolerate dry soil.



Wild Indigo

Baptisia spp.

Blooms: Spring Height: 3-4 ft. Width: 2-3 ft. **Sunlight:** Sun/Partial Shade

It is a host plant for the Wild Indigo Duskywing butterfly. Its flowers are attractive to butterflies and other insects.



Bee Balm Monarda spp.

Blooms: Spring/Summer Height: 2-5 ft. Width: 2-3 ft. Sunlight: Sun/Partial Shade

Attracts bees, butterflies, and hummingbirds. Members of the genus Monarda support certain species of mining bees and sweat bees.



Lanceleaf Blanketflower

Gaillardia aestivalis Blooms: Spring Height: 1-1.5 ft. Width: 1 ft. Sunlight: Full Sun

Easy-to-grow native blanketflower that attracts bees and butterflies to its bright yellow and brownishpurple blooms.



Stoke's Aster Stokesia laevis

Blooms: Spring/Summer

Height: 1-2 ft. Width: 1 ft.

Sunlight: Full Sun

Butterflies and bumblebees are attracted by the nectar in the blooms. Also visited by many native bees and honey bees.



Golden Alexander

Zizia aurea Blooms: Spring Height: 1-2 ft. Width: 1-2 ft.

Sunlight: Full Sun

The flowers are attractive to many kinds of butterflies and many other insects. It is an excellent

source of accessible pollen and nectar to many beneficial insects



Beardtongue

Penstemon digitalis

Blooms: Spring

Height: 2-4 ft. Width: 1 ft.

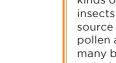
Sunlight: Full Sun

Attracts hummingbirds and many species of native bees. Members of the genus Penstemon

support the native mason bee, Osmia.







with short mouthparts.

Summer-Blooming Native Bee Plants



















Summer-Blooming Native Bee Plants

St. John's Wort Hypericum frondosum

Blooms: Summer Height: 3-5 ft. Width: 3-5 ft.

Sunlight: Full Sun

The bright yellow blooms of this southeast native plant attracts many different species of native bees, including the bumble bee.



New Jersey Tea

Tilia americana Blooms: Summer Height: 3-4 ft. Width: 3-5 ft.

Sunlight: Sun/Partial Shade

It is a host plant mottled duskywing butterfly. Flowers are highly attractive to butterflies, bees (especially mining bees), and other insects. Its seeds are eaten by songbirds.



Milkweed

Asclepias tuberosa, A. incarnata Blooms: Summer Height: 1-3 ft. Width: 1-3 ft. Sunlight: Full Sun

A larval host plant for caterpillars. Flower nectar attracts bees and other pollinators. Seeds are enjoyed by birds. White-tailed deer browse

twigs and leaves, but this tree is moderately resistant to damage.



Rattlesnake Master

Eryngium yuccifolium

Blooms: Summer

Height: 2-5 ft. Width: 2-3 ft. Sunlight: Full Sun

The nectar-rich flowers attract many kinds of insects, including long-tongued bees, short-tongued bees, wasps, flies, butterflies,

skippers, moths, and beetles. Bees may collect pollen for their brood nests.



Blazing Star Liatris spicata

Blooms: Summer Height: 1-3 ft. Width: 1 ft. Sunlight: Full Sun

Its flowers are attractive to butterflies and bees, in particular bumble bees and other pollinators. Goldfinches eat the seeds with relish.



Great Blue Lobelia Lobelia siphilitica

Blooms: Summer Height: 1-3 ft. Width: 1-1.5 ft. Sunlight: Part Shade/Full Shade

The nectar and pollen of the flowers attract primarily bumble bees and other long-tongued bees. Less common visitors include the ruby throated hummingbird,

large butterflies, and sweet bees collecting pollen.



Blue Vervain Verbena hastata

Blooms: Summer Height: 2-5 ft. Width: 1-2.5 ft.

Sunlight: Full Sun

Larval host plant for verbena moth and the common buckeye butterfly. Long- and short-tongued bees collect the nectar and sometimes

the pollen. Other bee pollinators include cuckoo bees, miner bees, halictid bees, and the verbena bee.



Buttonbush

Cephalanthus occidentalis Blooms: Summer

Height: 5-12 ft. Width: 4-8 ft. Sunlight: Full Sun

Flowers attract hummingbirds. butterflies, and bees. Songbirds and waterfowl eat the seeds.



Mountain Mint

Pycnanthemum incanum

Blooms: Summer

Height: 3-6 ft. Width: 3-5 ft.

Sunlight: Sun/Partial Shade

Flowers are attractive to bees and butterflies, especially smaller butterflies like hairstreaks, blues, common buckeyes (pictured), painted and American **T** ladies, and smaller fritillaries.



Fall-Blooming Native Bee Plants

















Fall-Blooming Native Bee Plants

Climbing Aster

Ampelaster carolinianus

Blooms: Fall

Height: 10-12 ft. Width: 5-6 ft. Sunlight: Sun/Partial Shade

It is the host plant for the pearl crescent butterfly. Its flowers are attractive to bees and butterflies. Songbirds and small mammals eat the seeds.



Aster Aster spp.

Blooms: Summer/Fall Height: 1-3 ft. Width: 1-3 ft. Sunlight: Full Sun

One of the last wildflowers to bloom, asters are pollinated by long-tongued bees, short-tongued bees, and visited by butterflies and skippers. Asters are host to silvery checkerspot butterfly larvae.



Spotted Horsemint

Monarda punctata

Blooms: Spring Height: 2-3 ft. Width: 1 ft. Sunlight: Sun/Partial Shade

Attracts bees (especially mining bees), butterflies, and hummingbirds. Ruby-throated hummingbirds and butterflies drink nectar from the blooms.



Goldenrod Solidago spp.

Blooms: Fall Height: 1.5-6 ft. Width: 1.5-2 ft. Sunlight: Full Sun

Attractive to bees and butterflies, including species of mining bees, long-horned bees, and plasterer bees.



Boneset

Eupatorium perfoliatum Blooms: Fall

Height: 2-4 ft. Width: 3-4 ft. Sunlight: Sun/Partial Shade

The nectar or pollen of the flowers attracts bees, flies, wasps, butterflies, and beetles. In particular, many kinds flies and wasps are attracted to the flowers because of the easy access to the nectar.



Joe Pye Weed Eutrochium dubium

Blooms: Summer/Fall Height: 3-5 ft. Width: 3-5 ft. Sunlight: Sun/Partial Shade

Butterflies and bees are attracted to the flowers, and songbirds eat the seeds.



New York Ironweed Vernonia noveboracensis

Blooms: Fall Height: 8-10 ft. Width: 3-4 ft. Sunlight: Sun/Partial Shade

Flowers are attractive to butterflies, bees (especially long-horned bees),and other pollinators. Songbirds eat the seeds.



