

# Pollinator GUIDE







# Working Together To Protect Our Environment

Program funded by the Bureau of Indian Affairs & the Great Lakes Restoration Initiative.

For more information, please contact the Environmental team at 989-775-4014

# Working Together to Protect Our Environment

The mission of the Saginaw Chippewa Indian Tribe's Environmental Team is to support Tribal Council's relations with governmental and non-governmental organizations, to ensure Tribal representation in environmental issues, protect Tribal natural resources, and facilitate sustainable development. Our guiding principle is to follow our cultural teachings that tell us, "As human beings, our original responsibility is to care for our Mother Earth in the same way she cares for us." By working together to protect Mother Earth, we keep her beautiful and healthy. In turn, she keeps us all healthy, both for our generation and the next seven generations to come.



For more information, contact the Environmental team at 2451 Nish-Na-Be-Anong Road
Mt. Pleasant, Michigan 48858
or by phone (989)775-4014.

# **Pesticide Program**

Pesticide use around the reservations is not well understood, but there are many settings where pests and pesticide use may occur.

About 60% of the land use in and around the reservation is commercial agriculture, primarily for corn, soybeans, and sugar beets. Pesticide spraying for mosquito control occurs in the area occasionally. With extensive agriculture and the spraying of roadside ditches for woody vegetation, the SCIT is concerned about potential impacts of pesticides on water quality. The SCIT is developing a pesticide program to provide local support about integrated pest management to limit the use of pesticides, general pesticide use, and applicator certification to better understand the potential impacts of pesticides on Reservation lands. The SCIT will now serve as the point of contact for members and non-tribal residents on reservation land who are pesticide users, including tribal staff, community members, and other applicators.







For more information, contact SCIT's
Environmental Resource Technician, Alexis Bruce
by phone at (989)775-4016
or by email at ABruce@sagchip.org



Scientific Name: *Agapanthus* **Common Name: African Lily** 

Life Cycle: Perennial

Wildlife Value: Attracts bees, hummingbirds, and other pollinators.

Plant Type: Herbaceous, Poisonous

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Loam/Silt, Sand

Soil Drainage: Good Drainage, Moist

Flower Color: Blue, Pink, White, Purple

**Blooms: Summer** 

Attracts: Bees, Pollinators, Hummingbirds

Resistance to Challenges: Deer

Reference: <a href="https://plants.ces.ncsu.edu/plants/agapanthus/">https://plants.ces.ncsu.edu/plants/agapanthus/</a>





Scientific Name: *Acer ginnala* **Common Name: Amur Maple** 

Life Cycle: Woody

Wildlife Value: Supports larval moth species while attracting birds and butterflies.

Plant Type: Tree, Shrub, Deciduous

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Tolerates a variety of soil types

Soil Drainage: Good Drainage, Moist

Flower Color: Gold/Yellow

**Blooms: Spring** 

Attracts: Moths, Birds, Butterflies, Pollinators

Resistance to Challenges: Drought, Dry Soil, Insect Pests, Wind

Reference: <a href="https://plants.ces.ncsu.edu/plants/acer-ginnala/">https://plants.ces.ncsu.edu/plants/acer-ginnala/</a>

INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?">https://www.misin.msu.edu/facts/detail/?</a>

project=&id=343&cname=Amur+maple





Scientific Name: Malus domestica

# **Common Name: Apple Tree**

Life Cycle: Woody

Wildlife Value: Apples are eaten by a variety of birds and mammals while also attracting bees, butterflies, and other polinators.

Plant Type: Tree, Deciduous

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Sand

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Pink, White

**Blooms: Spring** 

Attracts: Bees, Pollinator, Butterflies, Birds, Mammals

Reference: https://plants.ces.ncsu.edu/plants/malus-domestica/





Scientific Name: *Salix purpurea* **Common Name: Basket Willow** 

Life Cycle: Woody

Wildlife Value: This plant supports larval and adult butterfly species while attracting bees, pollinators, and specialized bees.

Plant Type: Shrub, Tree, Weed, Deciduous Light: Full Sun (Direct sunlight for 6 or more hours a day)

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Soil Texture: Tolerates a variety of soil types

Soil Drainage: Moist, Occasional Flooding, Occasionally Wet

Attracts: Bees, Butterflies, Pollinators, Specialized Bees

Resistance to Challenges: Wet Soil, Prevents Erosion

Reference: <a href="https://plants.ces.ncsu.edu/plants/salix-purpurea/">https://plants.ces.ncsu.edu/plants/salix-purpurea/</a>





Scientific Name: Lotus corniculatus

**Common Name: Bird's-foot Trefoil** 

Life Cycle: Perennial

Wildlife Value: Choice food for Canada goose, deer, and elk. This plant

also helps support butterfly larva

Plant Type: Wildfower

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Tolerates all soil types

Soil Drainage: Tolerates all types of soil drainage

Flower Color: Yellow

**Blooms: Summer** 

Attracts: Bees, Butterflies, Pollinators

Resistance to Challenges: Wet Soil, Poor Soil

Reference: <a href="https://www.wildlifetrusts.org/wildlife-">https://www.wildlifetrusts.org/wildlife-</a>

explorer/wildflowers/common-birds-foot-trefoil

INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?project=misin&id=53">https://www.misin.msu.edu/facts/detail/?project=misin&id=53</a>





Scientific Name: Rudbeckia fulgida

Common Name: Black-eyed Susan

Life Cycle: Perennial

Wildlife Value: This plant provides nectar for pollinators and for songbirds, especially American Goldfinches, to eat seeds in the fall.

Plant Type: Herb, Native, Wildflower

Light: Full sun (6 or more hours of direct sunlight a day)

Soil Texture: Clay, Shallow Rocky

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Black, Gold/Yellow, Orange

Blooms: Fall, Summer

Attracts: Butterflies, Pollinators, Songbirds

Resistance to Challenges: Deer, Drought, Dry Soil, Pollution

Reference: <a href="https://plants.ces.ncsu.edu/plants/rudbeckia-fulgida/">https://plants.ces.ncsu.edu/plants/rudbeckia-fulgida/</a>





Scientific Name: Acer negundo

#### **Common Name: Boxelder**

Life Cycle: Woody

Wildlife Value: Supports larval moth species while attracting birds and butterflies. The young plants are food sources for deer. Birds and small mammals eat the seeds.

Plant Type: Tree, Deciduous

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay

Soil Drainage: Frequent Standing Water, Good Drainage, Occasionally Wet, Occasionally Dry

Flower Color: Cream/Tan, Gold/Yellow, Green

**Blooms: Spring** 

Attracts: Butterflies, Moths, Pollinators, Small Mammals, Songbirds

Resistance to Challenges: Drought, Pollution

Reference: <a href="https://plants.ces.ncsu.edu/plants/acer-negundo/">https://plants.ces.ncsu.edu/plants/acer-negundo/</a>





Scientific Name: Cirsium horridulum

#### **Common Name: Bull Thistle**

Life Cycle: Annual, Biennial, Perennial

Wildlife Value: Food of choice for birds and the tufts of the seeds are often used for their nests. It is the host plant for some species of butterflies and the flowers are also attractive to hummingbirds.

Plant Type: Herb, Native, Weed, Wildflower, Deciduous Light: Full Sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Sand

Soil Drainage: Good Drainage, Moist, Occasionally Dry Flower Color: Cream/Tan, Gold/Yellow, Pink, Purple/Lavender,

Red/Burgundy, White

Blooms: Spring, Summer

Attracts: Butterflies, Hummingbirds, Pollinators, Songbirds, Birds, Specialized Bees

Resistance to Challenges: Salt, Wet Soil

Reference: <a href="https://plants.ces.ncsu.edu/plants/cirsium-horridulum/">https://plants.ces.ncsu.edu/plants/cirsium-horridulum/</a>

INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?">https://www.misin.msu.edu/facts/detail/?</a>
<a href="project=&id=51&cname=Bull+thistle">project=&id=51&cname=Bull+thistle</a>





Scientific Name: *Asclepias tuberosa*Common Name: Butterfly Milkweed

Life Cycle: Perennial

Wildlife Value: The flowers are a nectar source for many butterflies and insect pollinators. This plant is a larval host for monarchs and other butterfly and moth species.

Plant Type: Herb, Native, Poisonous, Wildflower
Light: Full sun (6 or more hours of direct sunlight), Partial Shade
(direct sunlight only part of the day, 2-6 hours)
Soil Texture: Clay, Loam/Silt, Sand, Shallow Rocky

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Gold/Yellow, Orange, Red/Burgundy

Blooms: Spring, Summer

Attracts: Bees, Butterflies, Hummingbirds, Moths, Pollinators, Specialized Bees

Resistance to Challenges: Deer, Drought, Erosion, Rabbits, Salt Harmful to: Cats, Dogs, and Horses. Low poison severity to humans. Reference: <a href="https://plants.ces.ncsu.edu/plants/asclepias-tuberosa/">https://plants.ces.ncsu.edu/plants/asclepias-tuberosa/</a>





Scientific Name: Cichorium intybus

**Common Name: Chicory** 

Life Cycle: Biennial, Perennial

Wildlife Value: Bees and butterflies are attracted to the nectar.

Plant Type: Herbaceous, Vegetable, Weed, Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day)

Soil Texture: Clay, High Organic Matter, Loam/Silt, Sand, Shallow

Rocky

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Blue

Blooms: Fall, Summer

Attracts: Bees, Butterflies

Resistance to Challenges: Drought

Reference: <a href="https://plants.ces.ncsu.edu/plants/cichorium-intybus/">https://plants.ces.ncsu.edu/plants/cichorium-intybus/</a>

INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?">https://www.misin.msu.edu/facts/detail/?</a>

project=&id=431&cname=Chicory





Scientific Name: Aquilegia canadensis

# **Common Name: Red or Wild Columbine**

Life Cycle: Perennial

Wildlife Value: Provides nectar for bees, butterflies, hummingbirds, and other pollinators. The seeds may be eaten by songbirds.

Plant Type: Herbaceous, Native, Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Sand

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Gold/Yellow, Pink, Red/Burgundy

**Blooms: Spring** 

Attracts: Butterflies, Hummingbirds, Moths, Pollinators, and Songbirds

Resistance to Challenges: Deer

Reference: <a href="https://plants.ces.ncsu.edu/plants/aquilegia-canadensis/">https://plants.ces.ncsu.edu/plants/aquilegia-canadensis/</a>





Scientific Name: Erigeron

#### **Common Name: Common Fleabane**

Life Cycle: Annual, Biennial, Perennial

Wildlife Value: Flowers attract pollinators, bees, butterflies, and hummingbirds

Plant Type: Broadleaf Evergreen

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Sand

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Orange, Pink, Purple/Lavender, White

Blooms: Spring, Summer

Attracts: Bees, Butterflies, Hummingbirds, Pollinators

Resistance to Challenges: Deer, Drought, Dry Soil, Pool Soil, Rabbits,

Salt, Wet Soil

Reference: <a href="https://plants.ces.ncsu.edu/plants/erigeron/">https://plants.ces.ncsu.edu/plants/erigeron/</a>





Scientific Name: Asclepias syriaca

#### **Common Name: Common Milkweed**

Life Cycle: Perennial

Wildlife Value: Flowers provide a nectar source for butterflies, bees, and other pollinators. It is a larval plant for the monarch butterfly and other butterfly and moth species. Also fed upon by the milkweed weevil and milkweed longhorn.

Plant Type: Herb, Native, Poisonous, Wildflower
Light: Full sun (6 or more hours of direct sunlight a day)
Soil Texture: Clay, Loam/Silt, Sand, Shallow Rocky

Soil Drainage: Good Drainage, Occasionally Dry

Flower Color: Green, Pink, Purple/Lavender, White

**Blooms: Summer** 

Attracts: Bees, Butterflies, Pollinators, Songbirds, Specialized Bees Resistance to Challenges: Deer, Drought, Dry Soil, Erosion, Poor Soil Harmful to: Cats, Dogs, and Horses.

Medium poison severity rate to humans.

Reference: <a href="https://plants.ces.ncsu.edu/plants/asclepias-syriaca/">https://plants.ces.ncsu.edu/plants/asclepias-syriaca/</a>





Scientific Name: *Verbascum thapsus*Common Name: Common Mullein

Life Cycle: Biennial

Wildlife Value: Bees, butterflies, flies, and other pollinators.

Plant Type: Herbaceous, Weed, Wildflower, Broadleaf Evergreen

Light: Full Sun (6 or more hours of direct sunlight a day)

Soil Texture: Clay, High Organic Matter, Loam/Silt, Sand, Shallow Rocky

Soil Drainage: Good Drainage, Occasionally Dry

Flower Color: Gold/Yellow

Blooms: Fall, Summer

Attracts: Bees, Butterflies

Resistance to Challenges: Deer, Drought, Dry Soil, Pollution, Poor Soil,

Rabbits, Urban Conditions

Reference: <a href="https://plants.ces.ncsu.edu/plants/verbascum-thapsus/">https://plants.ces.ncsu.edu/plants/verbascum-thapsus/</a>

INVASIVE https://www.misin.msu.edu/facts/detail/?project=misin&id=69





Scientific Name: Ambrosia artemisiifolia

# **Common Name: Common Ragweed**

Life Cycle: Annual

Wildlife Value: Food of choice for birds.

Plant Type: Weed

Light: Full Sun (6 or more hours of direct sunlight a day)

Soil Texture: Clay, Sand, Shallow Rocky

Soil Drainage: Good Drainage, Occasionally Dry, Very Dry

Flower Color: Brown/Copper, Gold/Yellow, Green

Blooms: Fall, Summer

Attracts: Birds, Songbirds

Resistance to Challenges: Drought, Dry Soil, Poor Soil

Reference: <a href="https://plants.ces.ncsu.edu/plants/ambrosia-">https://plants.ces.ncsu.edu/plants/ambrosia-</a>

artemisiifolia/

INVASIVE <a href="http://www.misin.msu.edu/facts/detail/?project=&id=72">http://www.misin.msu.edu/facts/detail/?project=&id=72</a>





Scientific Name: Prunella vulgaris

# **Common Name: Common Self-heal, Heal All**

Life Cycle: Perennial

Wildlife Value: Attracts bumblebees and butterflies.

Plant Type: Ground Cover, Native, Weed, Wildflower

Light: Full sun (6 or more hours of direct sunlight), Partial Shade

(direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Sand

Soil Drainage: Good Drainage, Moist

Flower Color: Blue, Green, Purple/Lavender, White

Blooms: Fall, Spring, Summer

Attracts: Bees, Butterflies

Resistance to Challenges: Adaptive plant and can grow under most

soil, light, and pH conditions.

Reference: <a href="https://plants.ces.ncsu.edu/plants/prunella-vulgaris/">https://plants.ces.ncsu.edu/plants/prunella-vulgaris/</a>

INVASIVE <a href="https://www.misin.msu.edu/webapp/facts/detail/?">https://www.misin.msu.edu/webapp/facts/detail/?</a>
<a href="project=misin&id=490&cname=Common%20self-heal">project=misin&id=490&cname=Common%20self-heal</a>





Scientific Name: Hypericum perforatum

Common Name: Common St. John's-wort

Life Cycle: Perennial

Wildlife Value: Attracts bees and other pollinators while providing a source of food for birds and small mammals.

Plant Type: Ground Cover, Wildflower, Deciduous

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Sand

Soil Drainage: Good Drainage, Moist

Flower Color: Gold/Yellow

Blooms: Spring, Summer

Attracts: Bees, Pollinators

Resistance to Challenges: Drought, Poor Soil

Reference: <a href="https://plants.ces.ncsu.edu/plants/hypericum-">https://plants.ces.ncsu.edu/plants/hypericum-</a>

perforatum/

INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?">https://www.misin.msu.edu/facts/detail/?</a>
<a href="project=&id=74&cname=Common+St.+Johnswort">project=&id=74&cname=Common+St.+Johnswort</a>





Scientific Name: Helianthus annuus

# **Common Name: Common Sunflower**

Life Cycle: Annual

Wildlife Value: It is a great late-nectar plant for butterflies including monarch's and other pollinators. Birds are attracted to seeds so leave standing dead flowers into the winter as natural bird feeders.

Plant Type: Herb

Light: Full Sun (6 or more hours of direct sunlight a day)

Soil Texture: Clay, Loam/Silt, Sand

Soil Drainage: Good Drainage

Flower Color: Brown/Copper, Gold/Yellow, Orange

Blooms: Fall, Summer

Attracts: Butterflies, Pollinators, Songbirds, Specialized Bees

Resistance to Challenges: Deer, Drought, Dry Soil, Poor Soil

Reference: <a href="https://plants.ces.ncsu.edu/plants/helianthus-annuus/">https://plants.ces.ncsu.edu/plants/helianthus-annuus/</a>





Scientific Name: *Achillea millefolium* **Common Name: Common Yarrow** 

Life Cycle: Perennial

Wildlife Value: Attracts bees, butterflies, and other pollinators.

Plant Type: Herbaceous, Poisonous, Wildflower, Deciduous

Light: Full Sun (6 or more hours of direct sunlight a day)

Soil Texture: High Organic Matter, Loam/Silt, Sand

Soil Drainage: Good Drainage, Occasionally Dry, Occasionally Wet

Flower Color: Cream/Tan, Gold/Yellow, Orange, Pink,

Purple/Lavender, Red/Burgundy, White

**Blooms: Summer** 

Attracts: Bees, Butterflies, Pollinators

Resistance to Challenges: Deer, Drought, Dry Soil, Heat, Humidity,

Pollution, Salt

Low poison severity to humans

Reference: https://plants.ces.ncsu.edu/plants/achillea-millefolium/

INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?">https://www.misin.msu.edu/facts/detail/?</a>

project=&id=463&cname=Common+yarrow





Scientific Name: Echinacea purpurea

# **Common Name: Coneflower, All Species**

Life Cycle: Perennial

Wildlife Value: Its flowers attract bees, butterflies, and other pollinators.

This plant supports Checkerspot and Wavy-lined Emerald larvae.

Songbirds, especially American Goldfinches, eat the seeds.

Plant Type: Herb, Native, Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Share (Direct sunlight only part of the day, 2-6 hours)
Soil Texture: CLay, High Organic Matter, Loam/Silt, Sand, Shallow

Rocky

Soil Drainage: Good Drainage, Moist, Occasionally Dry Flower Color: Brown/Copper, Gold/Yellow, Orange, Pink, Purple/Lavender, Red/Burgundy, White

**Blooms: Summer** 

Attracts: Bees, Butterflies, Pollinators, Songbirds
Resistance to Challenges: Deer, Drought, Dry Soil, Heat, Humidity,
Poor Soil, Salt

Reference: <a href="https://plants.ces.ncsu.edu/find\_a\_plant/?q=coneflower">https://plants.ces.ncsu.edu/find\_a\_plant/?q=coneflower</a>





Scientific Name: Silphium perfoliatum

**Common Name: Cup Plant** 

Life Cycle: Perennial

Wildlife Value: The flowers attract hummingbirds and butterflies. Birds water on the small cup that is created by the foilage.

Plant Type: Native, Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Loam/Silt

Soil Drainage: Good Drainage, Moist, Occasional Flooding,

Occassionally Dry, Occasionally Wet

Flower Color: Gold/Yellow

**Blooms: Summer** 

Attracts: Bees, Butterflies, Hummingbirds, Pollinators, Songbirds Resistance to Challenges: Diseases, Drought, Dry Soil, Insect Pests Reference: <a href="https://plants.ces.ncsu.edu/plants/silphium-perfoliatum/">https://plants.ces.ncsu.edu/plants/silphium-perfoliatum/</a>





Scientific Name: Rumex crispus

**Common Name: Curly Dock** 

Life Cycle: Perennial

Wildlife Value: Rodents and a variety of birds eat the fruits; however, since the plant is cross-pollinated by the wind it attracts few pollinators.

Plant Type: Weed, Deciduous

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Sand, Shallow Rocky

Soil Drainage: Moist, Occasional Flooding, Occasional Dry

Flower Color: Brown/Copper, Gold/Yellow, Green

**Blooms: Summer** 

Attracts: Small mammals, Birds

Resistance to Challenges: Drought, Wet Soil

Low poison severity to humans

Reference: <a href="https://plants.ces.ncsu.edu/plants/rumex-crispus/">https://plants.ces.ncsu.edu/plants/rumex-crispus/</a>

INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?">https://www.misin.msu.edu/facts/detail/?</a>
<a href="project=misin&id=330">project=misin&id=330</a>





Scientific Name: Taraxacum officinale

**Common Name: Dandelion** 

Life Cycle: Perennial

Wildlife Value: Flowers provide nectar to bees and pollinators.

Plant Type: Weed, Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day)

Soil Texture: Tolerates most soil types

Soil Drainage: Well Drained, Moist

Flower Color: Gold/Yellow

**Blooms: Spring** 

Attracts: Bees, Pollinators

Resistance to Challenges: Compaction

Low poison severity to humans

Reference: <a href="https://plants.ces.ncsu.edu/plants/taraxacum-officinale/">https://plants.ces.ncsu.edu/plants/taraxacum-officinale/</a>





Scientific Name: Liatris spicata

# **Common Name: Dense Blazing Star**

Life Cycle: Perennial

Wildlife Value: Its flowers attract butterflies, bees, and other pollinators. Some larval moth species feed on the flowers, seeds, and some adult moths eat the stems. Songbirds, especially Goldfinches, eat the seeds.

Plant Type: Bulb, Herb, Native, Wildflower

Light: Full sun (6 or more hours of direct sunlight a day)

Soil Texture: Clay, High Organic Matter, Loam/Silt, Sand

Soil Drainage: Good Drainage, Moist, Occasionally Dry, Occasionally

Wet

Flower Color: Pink, Purple/Lavender, White

**Blooms: Summer** 

Attracts: Bees, Butterflies, Hummingbirds, Moths, Songbirds,

**Specialized Bees** 

Resistance to Challenges: Heat, Humidity, Poor Soil

Reference: <a href="https://plants.ces.ncsu.edu/plants/liatris-spicata/">https://plants.ces.ncsu.edu/plants/liatris-spicata/</a>





Scientific Name: *Dianthus armeria* 

**Common Name: Deptford Pink** 

Life Cycle: Annual, Biennial

Wildlife Value: Nectar attracts small butterflies, skippers, and bees.

Plant Type: Annual, Herb, Poisonous, Wildflower

Light: Full sun (6 or more hours of direct sunlight), Partial Shade

(direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Shallow Rocky

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Pink, Purple/Lavender, White

Blooms: Fall, Spring, Summer

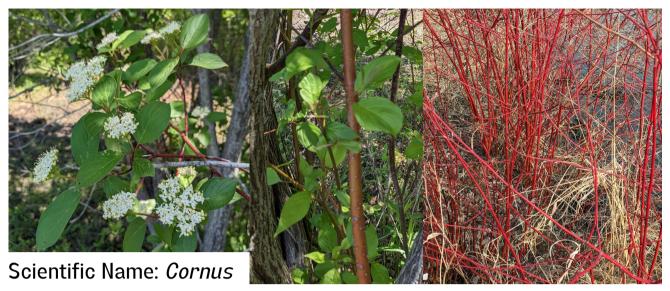
Attracts: Bees, Butterflies

Resistance to Challenges: Compaction, Drought, Dry Soil, Poor Soil Harmful to: Cats, Dogs, and Horses. Low poison severity to humans.

Reference: <a href="https://plants.ces.ncsu.edu/plants/dianthus-armeria/">https://plants.ces.ncsu.edu/plants/dianthus-armeria/</a>

INVASIVE <a href="https://www.misin.msu.edu/webapp/facts/detail/?">https://www.misin.msu.edu/webapp/facts/detail/?</a>
<a href="project=misin&id=345&cname=Deptford%20pink">project=misin&id=345&cname=Deptford%20pink</a>





Common Name: Red Osier Dogwood, Silky Dogwood, & Grey Dogwood

Life Cycle: Woody

Wildlife Value: Fruits attract small birds and mammals to eat while plants provide nesting sites. It is a larval host plant of the Spring Azure butterfly while also attracting other bees, butterflies, pollinators, and specialized bees.

Plant Type: Native, Shrub

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Share (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, High Organic Matter, Loam/Silt, Sand

Soil Drainage: Good Drainage, Moist, Occasional Flooding, Occasionally

Dry, Occasionally Wet

Flower Color: Blue, White

Blooms: Summer

Attracts: Butterflies, Pollinators, Bees, Small Mammals, Songbirds,

**Specialized Bees** 

Resistance to Challenges: Deer, Dry Soil, Erosion, Wet Soil, Wind

Reference: <a href="https://plants.ces.ncsu.edu/plants/cornus-sericea/">https://plants.ces.ncsu.edu/plants/cornus-sericea/</a>

https://plants.ces.ncsu.edu/plants/cornus-amomum/ https://plants.ces.ncsu.edu/plants/cornus-racemosa/





Scientific Name: Solidago

## **Common Name: Goldenrod, All Species**

Life Cycle: Perennial

Wildlife Value: Flowers attract butterflies, bees, and other pollinators.

Songbirds eat the seeds. This plant is a host plant for Wavy-lined

Emerald larvae and supports specialized bees.

Plant Type: Native, Wildflower

Light: Full sun (6 or more hours of direct sunlight), Partial Shade (direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Shallow Rocky

Soil Drainage: Good Drainage, Occasionally Dry

Flower Color: Gold/Yellow

Blooms: Fall, Summer

Attracts: Butterflies, Pollinators, Songbirds, Specialized Bees.

Resistance to Challenges: Deer, Drought, Poor Soil

Reference: <a href="https://plants.ces.ncsu.edu/find\_a\_plant/?q=goldenrod">https://plants.ces.ncsu.edu/find\_a\_plant/?q=goldenrod</a>





Scientific Name: Spiraea japonica

Common Name: Japanese Spiraea

Life Cycle: Perennial

Wildlife Value: Attracts bees, butterflies, and other pollinators.

Plant Type: Shrub, Deciduous

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, High Organic Matter, Loam/Silt, Shallow Rocky

Soil Drainage: Good Drainage

Flower Color: Pink

Blooms: Spring, Summer

Attracts: Bees, Butterflies, Pollinators

Resistance to Challenges: Drought, Erosion

Reference: <a href="https://plants.ces.ncsu.edu/plants/spiraea-japonica/">https://plants.ces.ncsu.edu/plants/spiraea-japonica/</a>

INVASIVE <a href="https://www.misin.msu.edu/webapp/facts/detail/?">https://www.misin.msu.edu/webapp/facts/detail/?</a>

project=misin&id=476&cname=Japanese%20spiraea





Scientific Name: Hydrangea macrophylla

**Common Name: Mophead Hydrangea** 

Life Cycle: Perennial

Wildlife Value: Flowers attract bees, butterflies, and other pollinators.

Plant Type: Poisonous, Shrub, Deciduous

Light: Dappled Sunlight (Shade through upper canopy all day), Deep Shade (Less than 2 hours to no direct sunlight), Partial Shade (Direct

sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, High Organic Matter, Loam/Silt, Sand

Soil Drainage: Good Drainage, Occasionally Wet

Flower Color: Blue, Pink, Purple/Lavender, White

**Blooms: Summer** 

Attracts: Bees, Butterflies, Pollinators

Resistance to Challenges: Salt

Reference: https://plants.ces.ncsu.edu/plants/hydrangea-

macrophylla/





Scientific Name: Diervilla Ionicera

# **Common Name: Northern Bush Honeysuckle**

Life Cycle: Woody

Wildlife Value: Attracts bees, butterflies, specialized bees, other pollinators, birds, gamebirds, and hummingbirds. This plant also hosts larval moths and butterflies.

Plant Type: Shrub, Deciduous

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Sand, Shallow Rocky

Soil Drainage: Good Drainage, Moist, Occasionally Wet, Occasionally Dry

Flower Color: Yellow, Orange

Blooms: Spring, Summer

Attracts: Bees, Butterflies, Specialized Bees, Pollinators, Birds

Resistance to Challenges: Drought Tolerant

Reference: <a href="https://www.thespruce.com/northern-bush-honeysuckle-">https://www.thespruce.com/northern-bush-honeysuckle-</a>

plant-profile-5069115





Scientific Name: Thuja occidentalis

#### **Common Name: Northern White Cedar**

Life Cycle: Woody

Wildlife Value: Provides nesting sites for songbirds, as well as cover, especially in the winter, for white-tailed deer, which both feed on branches and use them for shelter from the cold.

Plant Type: Native, Tree

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Attracts: Small Mammals, Songbirds

Resistance to Challenges: Black Walnut, Pollution, Wet Soil Reference: <a href="https://plants.ces.ncsu.edu/plants/thuja-occidentalis/">https://plants.ces.ncsu.edu/plants/thuja-occidentalis/</a>





Scientific Name: Leucanthemum vulgare

**Common Name: Oxeye Daisy** 

Life Cycle: Perennial

Wildlife Value: Attracts butterflies and pollinators.

Plant Type: Herb, Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Share (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Suited to all soil types, invasive when not cultivated

Soil Drainage: Good Drainage

Flower Color: Gold/Yellow, White

Blooms: Spring, Summer

Attracts: Butterflies, Pollinators

Resistance to Challenges: Deer, Diseases, Dry Soil, Rabbits

Harmful to: Cats, Dogs, and Horses. Low poison severity to humans.

Reference: <a href="https://plants.ces.ncsu.edu/plants/leucanthemum-vulgare/">https://plants.ces.ncsu.edu/plants/leucanthemum-vulgare/</a>

INVASIVE http://www.misin.msu.edu/facts/detail/?project=misin&id=115





Scientific Name: Phlox pilosa

# **Common Name: Prairie Phlox**

Life Cycle: Perennial

Wildlife Value: Flowers attract bees, butterflies, and specialized bees.

Rabbits, deer, and groundhogs will eat the foilage.

Plant Type: Native, Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Sand, Shallow Rocky

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Pink, Purple/Lavender, White

Blooms: Spring, Summer

Attracts: Bees, Butterflies, Hummingbirds, Small Mammals,

**Specialized Bees** 

Resistance to Challenges: Drought, Dry Soil, Fire

Reference: <a href="https://plants.ces.ncsu.edu/plants/phlox-pilosa/">https://plants.ces.ncsu.edu/plants/phlox-pilosa/</a>





Scientific Name: Eragrostis spectabilis

# **Common Name: Purple Lovegrass**

Life Cycle: Perennial

Wildlife Value: Attracts mammals and songbirds.

Plant Type: Native, Ornamental Grasses and Sedges

Light: Full Sun (6 or more hours of direct sunlight a day)

Soil Texture: Clay, Loam/Silt, Sand

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Brown/Copper, Pink, Purple/Lavender, Red/Burgundy

Blooms: Fall, Summer

Attracts: Small Mammals, Songbirds

Resistance to Challenges: Black Walnut, Drought, Foot Traffic, Heat,

Pollution, Poor Soil, Salt

Reference: <a href="https://plants.ces.ncsu.edu/plants/eragrostis-">https://plants.ces.ncsu.edu/plants/eragrostis-</a>

spectabilis/





Scientific Name: Daucus carota

**Common Name: Queen Anne's Lace** 

Life Cycle: Annual, Biennial

Plant Type: Weed, Wildflower, Poisonous, Deciduous Light: Full Sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours) Soil Texture: Clay, High Organic Matter, Loam/Silt, Sand, Shallow

Rocky

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Purple/Lavender, White

Blooms: Fall, Summer

Attracts: Bees, Butterflies, Pollinators

Low poison severity to humans.

Reference: <a href="https://plants.ces.ncsu.edu/plants/daucus-carota/">https://plants.ces.ncsu.edu/plants/daucus-carota/</a>

INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?">https://www.misin.msu.edu/facts/detail/?</a>
<a href="project=misin&id=122">project=misin&id=122</a>





Scientific Name: Eryngium yuccifolium

**Common Name: Rattlesnake Master** 

Life Cycle: Perennial

Wildlife Value: Attracts bees, butterflies, moths, predatory insects, and other pollinators. Soilder beetles eat the pollen and is a larval host to some moth species. This plant is a food source for birds and small mammals.

Plant Type: Native, Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day)
Soil Texture: Clay, Loam/Silt, Sand, Shallow Rocky

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Blue, Green, White

**Blooms: Summer** 

Attracts: Bees, Butterflies, Moths, Pollinators, Predatory Insects

Resistance to Challenges: Deer, Drought, Rabbits, Wet Soil Reference: <a href="https://plants.ces.ncsu.edu/plants/eryngium-">https://plants.ces.ncsu.edu/plants/eryngium-</a>

yuccifolium/





Scientific Name: Trifolium pratense

## **Common Name: Red Clover**

Life Cycle: Biennial, Perennial

Wildlife Value: Supports larval butterfly species while attracting bees,

butterflies, and some moths. Plant Type: Weed, Wildflower

Light: Full Sun (6 hours or more of direct sunlight a day)

Soil Texture: Clay, Loam/Silt

Soil Drainage: Good Drainage, Occasionally Dry

Flower Color: Pink

Blooms: Spring, Summer

Attracts: Bees, Butterflies, Moths, Pollinators

Resistance to Challenges: Drought, Dry Soil, Erosion

Reference: <a href="https://plants.ces.ncsu.edu/plants/trifolium-pratense/">https://plants.ces.ncsu.edu/plants/trifolium-pratense/</a>

INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?">https://www.misin.msu.edu/facts/detail/?</a>

project=&id=125&cname=Red+clover





Scientific Name: Vitis riparia

# **Common Name: Riverbank Grape**

Life Cycle: Perennial, Woody

Wildlife Value: Food sources support insects, songbirds, game birds, waterfowl, and mammals.

Plant Type: Native, Vine, Deciduous

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Share (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Loam/Silt, Sand, Shallow Rocky

Soil Drainage: Good Drainage, Moist, Occassionally Dry

Flower Color: Gold/Yellow, Green

Blooms: Spring, Summer

Attracts: Bees, Butterflies, Pollinators, Small Mammals, Songbirds,

Gamebirds, Waterfowl

Reference: <a href="https://plants.ces.ncsu.edu/plants/vitis-riparia/">https://plants.ces.ncsu.edu/plants/vitis-riparia/</a>





Scientific Name: Silphium asteriscus

### **Common Name: Rosinweed**

Life Cycle: Perennial

Wildlife Value: Flowers are attractive to butterflies and songbirds eat the seeds.

Plant Type: Herb, Native, Wildflower

Light: Tolerates all light preferences

Soil Texture: Tolerates all soil types

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Gold/Yellow

**Blooms: Summer** 

Attracts: Bees, Butterflies, Pollinators, Songbirds

Resistance to Challenges: Deer, Drought

Reference: <a href="https://plants.ces.ncsu.edu/plants/silphium-asteriscus/">https://plants.ces.ncsu.edu/plants/silphium-asteriscus/</a>





Scientific Name: Eutrochium maculatum

**Common Name: Spotted Joe-Pye Weed** 

Life Cycle: Perennial

Wildlife Value: Attracts bees, butterflies, honeybees, pollinators, and

songbirds.

Plant Type: Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Share (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, High Organic Matter, Loam/Silt

Soil Drainage: Moist, Occasionally Wet

Flower Color: Pink, Purple/Lavender

Blooms: Fall, Summer

Attracts: Bees, Butterflies, Pollinators, Songbirds

Resistance to Challenges: Deer, Rabbits, Wet Soil

Reference: <a href="https://plants.ces.ncsu.edu/plants/eutrochium-">https://plants.ces.ncsu.edu/plants/eutrochium-</a>

maculatum/





Scientific Name: *Centaurea maculosa* **Common Name: Spotted Knapweed** 

Life Cycle: Biennial, Perennial

Wildlife Value: Attracts bees, butterflies, and other pollinators while seed heads feed birds.

Plant Type: Weed, Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day)

Soil Texture: Sand, Shallow Rocky

Soil Drainage: Occasionally Dry, Very Dry

Flower Color: Black, Gold/Yellow, Pink, Purple/Lavender

Blooms: Fall

Attracts: Bees, Pollinators, Butterflies, Birds, Songbirds

Reference: <a href="https://plants.ces.ncsu.edu/plants/centaurea-maculosa/">https://plants.ces.ncsu.edu/plants/centaurea-maculosa/</a>

INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?">https://www.misin.msu.edu/facts/detail/?</a>
<a href="project=&id=35&cname=Spotted+knapweed">project=&id=35&cname=Spotted+knapweed</a>





Scientific Name: Acer saccharum

**Common Name: Sugar Maple** 

Life Cycle: Woody

Wildlife Value: Supports larval moth species while attracting butterflies and pollinating insects to its nectar. The seeds are eaten by birds and small mammals. The cavities are used for cavity-nesting birds.

Porcupines consume the bark.

Plant Type: Native, Tree, Deciduous

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, High Organic Matter, Loam/Silt, Sand

Soil Drainage: Good Drainage, Moist

Flower Color: Gold/Yellow, Green

Blooms: Spring, Summer

Attracts: Butterflies, Moths, Pollinators, Small Mammals, Songbirds,

Cavity-nesting Birds

Reference: <a href="https://plants.ces.ncsu.edu/plants/acer-saccharum/">https://plants.ces.ncsu.edu/plants/acer-saccharum/</a>





Scientific Name: Potentilla recta

# **Common Name: Sulphur Cinquefoil**

Life Cycle: Perennial

Wildlife Value: This plant supports a variety of bee, specialized bees, wasps, moths, and sawflies. Some grasshoppers also feed on the plant. It is not eaten due to its bitter taste though white-tailed deer and rabbits occasionally consume the foilage.

Plant Type: Herb, Weed, Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Sand

Soil Drainage: Good Drainage, Occasionally Dry

Flower Color: Gold/Yellow

Blooms: Spring, Summer

Attracts: Bees, Moths, Specialized Bees, Pollinators

Reference: <a href="https://plants.ces.ncsu.edu/plants/potentilla-recta/">https://plants.ces.ncsu.edu/plants/potentilla-recta/</a>

INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?">https://www.misin.msu.edu/facts/detail/?</a>
<a href="project=misin&id=136">project=misin&id=136</a>





Scientific Name: *Rosa palustris* **Common Name: Swamp Rose** 

Life Cycle: Perennial

Wildlife Value: It provides excellent cover year-round. Its hips are eaten by songbirds and gamebirds. Flowers attract bees, butterflies, and other pollinators.

Plant Type: Native, Shrub

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: High Organic Matter

Soil Drainage: Good Drainage, Moist, Occasionally Wet

Flower Color: Pink Blooms: Summer

Attracts: Bees, Pollinators, Butterflies, Small Mammals, Songbirds

Resistance to Challenges: Diseases, Insect Pests

Reference: <a href="https://plants.ces.ncsu.edu/plants/rosa-palustris/">https://plants.ces.ncsu.edu/plants/rosa-palustris/</a>





Scientific Name: Melilotus

### **Common Name: White Sweet Clover & Yellow Sweet Clover**

Life Cycle: Annual, Biennial, Perrenial

Plant Type: Herbaceous

Light: Full Sun (6 or more hours of direct sunlight a day), Partial

Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Sand, Loam/Silt, High Organic Matter

Soil Drainage: Moist, Well Drained

Flower Color: White, Yellow

**Blooms: Summer** 

Attracts: Bees, Butterflies, Specialized Bees, Pollinators

Resistance to Challenges: Poor Soil, Drought Resistant

Reference: INVASIVE <a href="https://www.misin.msu.edu/facts/detail/?">https://www.misin.msu.edu/facts/detail/?</a>

project=&id=41&cname=White+sweet+clover

INVASIVE http://www.misin.msu.edu/facts/detail/?id=42





Common Name: Blue Vervain & Hoary Vervain

Life Cycle: Perennial

Wildlife Value: Birds eat the seeds. Cottontail Rabbits eat the foliage; however, most mammals avoid the bitter taste. Larval plant for the

Common Buckeye Butterfly. Bees collect the nectar and sometimes pollen.

Plant Type: Herb, Native, Wildflower

Light: Full sun (6 or more hours of direct sunlight), Partial Shade

(direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam/Silt, Sand

Soil Drainage: Moist, Occasionally Wet Flower Color: Blue, Purple/Lavender

**Blooms: Summer** 

Attracts: Butterflies, Pollinators, Songbirds, Specialized Bees

Resistance to Challenges: Wet Soil

Reference: <a href="https://plants.ces.ncsu.edu/plants/verbena-hastata/">https://plants.ces.ncsu.edu/plants/verbena-hastata/</a>





Scientific Name: Monarda fistulosa

**Common Name: Wild Bergamot** 

Life Cycle: Perennial

Wildlife Value: Attracts bees, butterflies, specialized bees, and hummingbirds.

Plant Type: Herb, Native, Wildflower

Light: Full Sun (6 or more hours of direct sunlight a day), Partial Share (Direct sunlight only part of the day, 2-6 hours)

Call Taratana Olar Challers Daylar

Soil Texture: Clay, Shallow Rocky

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Flower Color: Pink, Purple/Lavender

Blooms: Fall, Summer

Attracts: Bees, Butterflies, Hummingbirds, Moths, Pollinators,

**Specialized Bees** 

Resistance to Challenges: Black Walnut, Deer, Drought, Dry Soil,

**Rabbits** 

Reference: <a href="https://plants.ces.ncsu.edu/plants/monarda-fistulosa/">https://plants.ces.ncsu.edu/plants/monarda-fistulosa/</a>



## **Glossary**

**Annual:** Completing the life cycle in one growing season or single year.

**Bee:** Bees are the most numerous, effective, and important pollinators. There are roughly 4,000 species of native bees (some of which are endangered) that perform critically important ecological service of pollinating wild plants across all North American ecosystems.

**Biennial:** (of a plant) growing vegetatively during the first year and fruiting and dying during the second year.

**Bumblebee:** Any of numerous large robust hairy social bees (genus *Bombus*)

**Deciduous:** Falling off or shed seasonally or at a certain stage of development in the life cycle.

**Evergreen:** Having foliage that remains green and functional through more than one growing season.

**Foliage:** The aggregate of leaves of one or more plants.

**Perennial:** Present at all seasons of the year; persisting for several years usually with new growth.

**Pollinators:** An agent that pollinates flowers, such as bees, birds, butterflies, moths, bats. Other pollinating insects include flies, ants, wasps, and beetles.

**Predatory Insect:** Insects that feed on other insects and pests such as spiders, mites, ladybugs, robber flies, ground beetles, pill bugs, wasps, and hover flies.

**Specialized Bee:** A bee that is a specialized pollinator requires specific host plants to survive.

#### **References:**

North Carolina Extension Gardener Plant Toolbox: https://plants.ces.ncsu.edu/

Midwest Invasive Species Information Network: https://www.misin.msu.edu/



The National Wildlife Federation, Pollinators: https://nwf.org/Educational-Resources/Wildlife-Guide/Pollinators

**National Pesticide Information Center:** http://npic.orst.edu/

MSU Extension, Integrated Pest Management Academy: https://www.canr.msu.edu/courses/integrated-pest-managementacademy

U.S. EPA, Basic Tips and Educational Resources for Pollinator Protection: https://www.epa.gov/pollinator-protection/basic-tips-and-educationalresources-pollinator-protection

U.S. EPA, Pesticide Environmental Stewardship Program (PESP): https://www.epa.gov/pesp

MSU Extension, Pollinator Champions: https://pollinators.msu.edu/programs/pollinator-champions/index.aspx

U.S. EPA, Join Our Pest Patrol - A Backyard Activity Book for Kids IPM: https://www.epa.gov/safepestcontrol/join-our-pest-patrol-backyardactivity-book-kids-integrated-pest-management

Merriam-Webster Dictionary: https://www.merriam-webster.com/

> Guide created & photos taken by Katie Hager, Environmental Outreach Coordinator.

