

Partnering With Pollinators

[Note: Many Tried & True Fact Sheets have accompanying videos of pollinators]

Pollinators

Beetles

Prefer open white, cream, or green-colored flowers with fruity or fetid fragrance

- [Sweetbay Magnolia \(*Magnolia virginiana*\)](#)
- [Sweet-shrub \(*Calycanthus floridus*\)](#)
- [Jack-in-the-Pulpit \(*Arisaema triphyllum*\)](#) [NC State Extension]

Bees

Prefer white, yellow, blue, or purple shallow or tubular flowers

- [Native Onions \(*Allium* species\)](#) [NC State Extension]
- [Rough-stemmed Goldenrod \(*Solidago rugosa*\)](#)
- [Anise Hyssop \(*Agastache foeniculum*\)](#) [NC State Extension, T&T Fact Sheet 8/12/22]

Flies

Prefer dark brown, purple, or pale flowers

- [Red Trillium \(*Trillium erectum*\)](#) [NC State Extension]
- [Pawpaw \(*Asimina triloba*\)](#)
- [Wild Ginger \(*Asarum canadense*\)](#)

Wasps

Prefer white or yellow flowers with shallow corollas

- [Common Boneset \(*Eupatorium perfoliatum*\)](#) [NC State Extension]
- [Virgin's-bower \(*Clematis virginiana*\)](#)
- [Rattlesnake Master \(*Eryngium yuccifolium*\)](#) [NC State Extension]

Butterflies

Prefer flat, composite flowers in bright colors

- [Purple Coneflower \(*Echinacea purpurea*\)](#)
- [Blue Mistflower \(*Conoclinium coelestinum*\)](#) [NC State Extension]
- [Purple Joe-pye-weed \(*Eutrochium purpureum*\)](#) [NC State Extension]

Butterfly host plants

- [Common Milkweed \(*Asclepias syriaca*\)](#) [NC State Extension]
- [Swamp Milkweed \(*Asclepias incarnata*\)](#) } all for Monarchs
- [Butterfly-weed \(*Asclepias tuberosa*\)](#)





- [Plantain-leaved Pussytoes \(*Antennaria plantaginifolia*\)](#) for Painted Lady [NC State Extension]
- [White Turtlehead \(*Chelone glabra*\)](#) for Baltimore Checkerspot
- [Tulip Poplar \(*Liriodendron tulipifera*\)](#) for Eastern Tiger Swallowtail
- [Spicebush \(*Lindera benzoin*\)](#) for Spicebush Swallowtail
- [Golden Alexanders \(*Zizia aurea*\)](#) for Black Swallowtail [NC State Extension]

Skipper host plants

- [Little Bluestem \(*Schizachyrium scoparium*\)](#)
- [Switchgrass \(*Panicum virgatum*\)](#)
- [Indian Grass \(*Sorghastrum nutans*\)](#)

Fritillary host plants

- [Violets \(*Viola spp.*\)](#) [NC State Extension]

Moths

Prefer pale or white, night-scented tubular flowers

- [Garden Phlox \(*Phlox paniculata*\)](#)
- [Evening Primrose \(*Oenothera biennis*\)](#) [NC State Extension]
- [Common Yucca \(*Yucca filamentosa*\)](#) [NC State Extension]

Moth host plants

- [River Birch \(*Betula nigra*\)](#)
- [Arrowwood Viburnum \(*Viburnum dentatum*\)](#) [NC State Extension]
- [Virginia Creeper \(*Parthenocissus quinquefolia*\)](#)

Hummingbirds

Prefer bright-colored tubular flowers

- [Trumpet-creeper \(*Campsis radicans*\)](#) [NC State Extension]
- [Spotted Jewelweed \(*Impatiens capensis*\)](#)
- [Scarlet Beebalm \(*Monarda didyma*\)](#)

Native Plants That Support Pollinators

Early Spring Ephemerals

- [Bloodroot \(*Sanguinaria canadensis*\)](#) [NC State Extension]
- [Spring Beauty \(*Claytonia virginica*\)](#)
- [Dutchman's Breeches \(*Dicentra cucullaria*\)](#)



Early Spring Trees

- Red Maple (*Acer rubrum*)
- Downy Serviceberry (*Amelanchier arborea*)
- Eastern Redbud (*Cercis canadensis*)

Later Spring Trees

- White Oak (*Quercus alba*)
- River Birch (*Betula nigra*)
- American Hornbeam (*Carpinus caroliniana*)

Mid-Spring Wildflowers

- Wild Geranium (*Geranium maculatum*)
- Woodland Phlox (*Phlox divaricata*)
- Wild Bleeding Heart (*Dicentra eximia*) [NC State Extension]

Later Spring Blooms

- Violets (*Viola spp.*) [NC State Extension]
- Blue Wild Indigo (*Baptisia australis*)
- Beardtongue (*Penstemon digitalis*) [NC State Extension]

Spring-blooming Shrubs

- Black Chokeberry (*Aronia melanocarpa*)
- Pinxterbloom Azalea (*Rhododendron periclymenoides*)
- Black Haw (*Viburnum prunifolium*)

Summer-blooming Shrubs & Vine

- Wild Hydrangea (*Hydrangea arborescens*)
- Buttonbush (*Cephalanthus occidentalis*)
- New Jersey Tea (*Ceanothus americanus*)
- Sweet Pepperbush (*Clethra alnifolia*)
- Shrubby St. John's-wort (*Hypericum prolificum*) [NC State Extension]
- Trumpet Honeysuckle (*Lonicera sempervirens*)

Mid-Summer Blooms

- Wild Bergamot (*Monarda fistulosa*)
- Purple Coneflower (*Echinacea purpurea*)
- Coastal Plain Joe-pye-weed (*Eutrochium dubium*)
- Great Blue Lobelia (*Lobelia siphilitica*)
- Swamp Milkweed (*Asclepias incarnata*)
- Blazing Star (*Liatris spicata*)



- Oxeye (*Heliopsis helianthoides*)
- Turk's Cap Lily (*Lilium superbum*)
- Orange Coneflower (*Rudbeckia fulgida*)

Late Summer Blooms

- Threadleaf Coreopsis (*Coreopsis verticillata*)
- Short-toothed Mountain-Mint (*Pycnanthemum muticum*)
- New York Ironweed (*Vernonia noveboracensis*)

Fall Blooms (Keystone Species – Larval Host Support)

- Goldenrods #1
 - Blue-stemmed Goldenrod (*Solidago caesia*)
 - Rough-stemmed Goldenrod (*Solidago rugosa*)
 - Gray Goldenrod (*Solidago nemoralis*)
- Asters #2
 - Aromatic Aster (*Symphyotrichum oblongifolium*) [NC State, T&T fact sheet 11/11/22]
 - New England Aster (*Symphyotrichum novae-angliae*)
 - Blue Wood Aster (*Symphyotrichum cordifolium*)
- Sunflowers #3:
 - Woodland Sunflower (*Helianthus divaricatus*) [NC State Extension]
 - Hairy Alumroot (*Heuchera villosa* 'Autumn Bride')
 - Spotted Beebalm (*Monarda punctata*)

Best Gardening Practices For Pollinators

Plant Selection

- Select plants native to the region
- Use a diversity of native plants with different flower forms and resources
- Include butterfly and moth larval host plants
- Provide a continuous succession of flowering plants from spring through fall
- Be careful of cultivars, especially change in color, shape, or double-flower forms
- Remove/do not buy invasive plants

Garden Design

- Reduce lawns as appropriate and replace them with forage plants
- Plant in an open, sunny location
- Plant in masses and drifts to create better visual attracts and efficient foraging
- Prevent soil disturbance and compaction
- Work to connect existing native plants community fragments and corridors



Habitat

- Leave puddling areas for Lepidoptera access to minerals and salts
- Provide containers with landing spots and water for Lepidoptera
- Leave areas of bare soil for ground-nesting bees who use slopes or banks
- Leave standing dead trees (snags) and downed logs as nesting sites
- Retain leaf litter for overwintering insects in all stages of development
- Delay spring clean-up to allow overwintering insects to emerge
- Retain 12-24 inches of cut perennial stems standing for cavity-nesters
- Broken stems may be bundled and placed in a protected area for nesting

Avoid the use of pesticides & herbicides

- Beneficial insects are affected as well as targeted species
- Buy from a reputable nursery that does not use systemic insecticides
- Strive for non-chemical methods to control pests (including mosquito spray)
- Employ good cultural practices to maintain the health of plants
- Restrict rare but necessary use to times when forage plants are not flowering

Resources

Pollinators

- *Attracting Native Pollinators*, Xerxes Society
- *Pollinator Victory Garden*, Kim Eierman
- *Pollinators of Native Plants*, Heather Holm
- [Pollinators](#) (Playlist on MGNV YouTube Channel)

Bees

- *Bees, An Identification and Native Plant Forage Guide*, Heather Holm
- [Pollen Specialist Bees of the Eastern United States](#)
- [U.S. Geological Survey Bee Inventory](#) (Incredible macro bee photos)

Butterflies & Moths

- [About Butterflies & Moths – Part 1 \(Life Cycle\)](#), MGNV
- [About Butterflies & Moths – Part 2 \(Morphology\)](#), MGNV
- [Butterflies of Northern Virginia Index](#), Prince William Conservation Alliance
- [Butterflies, Moths, & Skippers](#) (State by state listings and photos)



- *Butterfly Gardening*, Jane Hurwitz

Wasps

- *Wasps: Their Biology, Diversity, and Role as Beneficial Insects and Pollinators of Native Plants*, Heather Holm

Plants

Native Plants

- [Best Bets to Attract Pollinators](#) (MGNV.ORG/Plants)
- [Keystone Species of Native Plants](#) (MGNV Recorded Presentation)
- [Mid-Atlantic Planting and Wasp Observation Guide](#), Resources from Heather Holm
- [Mid-Atlantic Pollinator Plant List](#), Lady Bird Johnson Wildflower Center (photos)
- [Pollinator Plants, Mid-Atlantic Region](#), Xerces Society

Invasive Plants

- [Are Butterfly Bush Cultivars Labeled as “Sterile” Environmentally Safer?](#)
- [Fact Sheet on Invasive Butterfly Bush & Native Alternatives](#)
- [Tropical Milkweed – A No-Grow](#), Xerces Society

Best Practices for Pollinators

- [“Creating Inviting Habitats”](#) (Virginia Tech Online Publications)
- [“Small Space Gardening for Pollinators”](#) (MGNV Recorded Presentation)
- [“The Hospitable Gardener: Welcoming Beautiful Butterflies, Moths, and Other Critters”](#) (MGNV Recorded Presentation)

Garden Plans & Container Gardening with Native Plants

- [Pollinator Garden Plan](#) (MGNV)
- [Small Space Garden Plan](#) (MGNV)
- [Container Gardening for Earth Renewal](#) (Plant NoVA Natives)
- [Container Gardening with Native Plants](#) (Missouri Botanical Garden)
- [Nine Native Perennials to Brighten Your Balcony](#) (MGNV)
- [Wildlife Waystations: Captivating Containers with Native Plants](#) (Audubon at Home)

Master Gardener Demonstration Gardens

- [Pollinator Garden & Monarch Waystation at Glencarlyn Library Community Garden](#)
- [Pollinator Garden & Butterfly Soak at Simpson Park Garden](#)
- [Small Space Garden at Fairlington Community Center](#)

