

Native Plants and Their Pollinators

by Betsy Washington



Smooth Aster and American Lady



Bumble bee buzz pollinating Wild Columbine



Pure Green Sweat Bee

Many specialist solitary bees live only 2 – 6 weeks.

Emergence is timed precisely to coincide with their host plant.

These are pollen specialists that feed their larvae only specific native plants.

“Many of these specialists are among our most threatened bees”
Doug Tallamy.



Southeastern Blueberry Bee

Other Pollinators



Flies: Calligrapher Flower Fly & Golden Ragwort



Butterflies: Monarch on Wingstem



Moths: Snowberry Clearwing Moth on Lyre-leaf Sage



Beetles: Bee Mimic Scarab Beetle



Wasps: Four Banded Stink Bug Hunter Wasp



Hummingbird on Beebalm

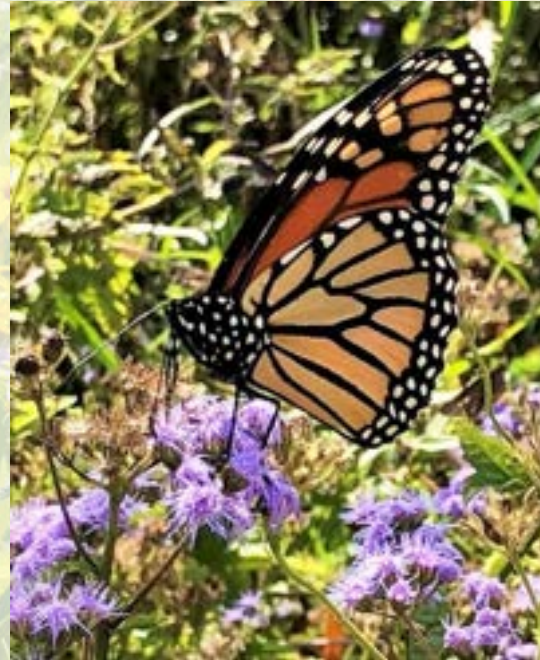
Butterflies have three very different life stages other than the egg:



Caterpillar: feeds on very specific native plants called **host plants** with which it has evolved



Chrysalis: stage when the caterpillar transforms into the adult; forms on or near the host plant



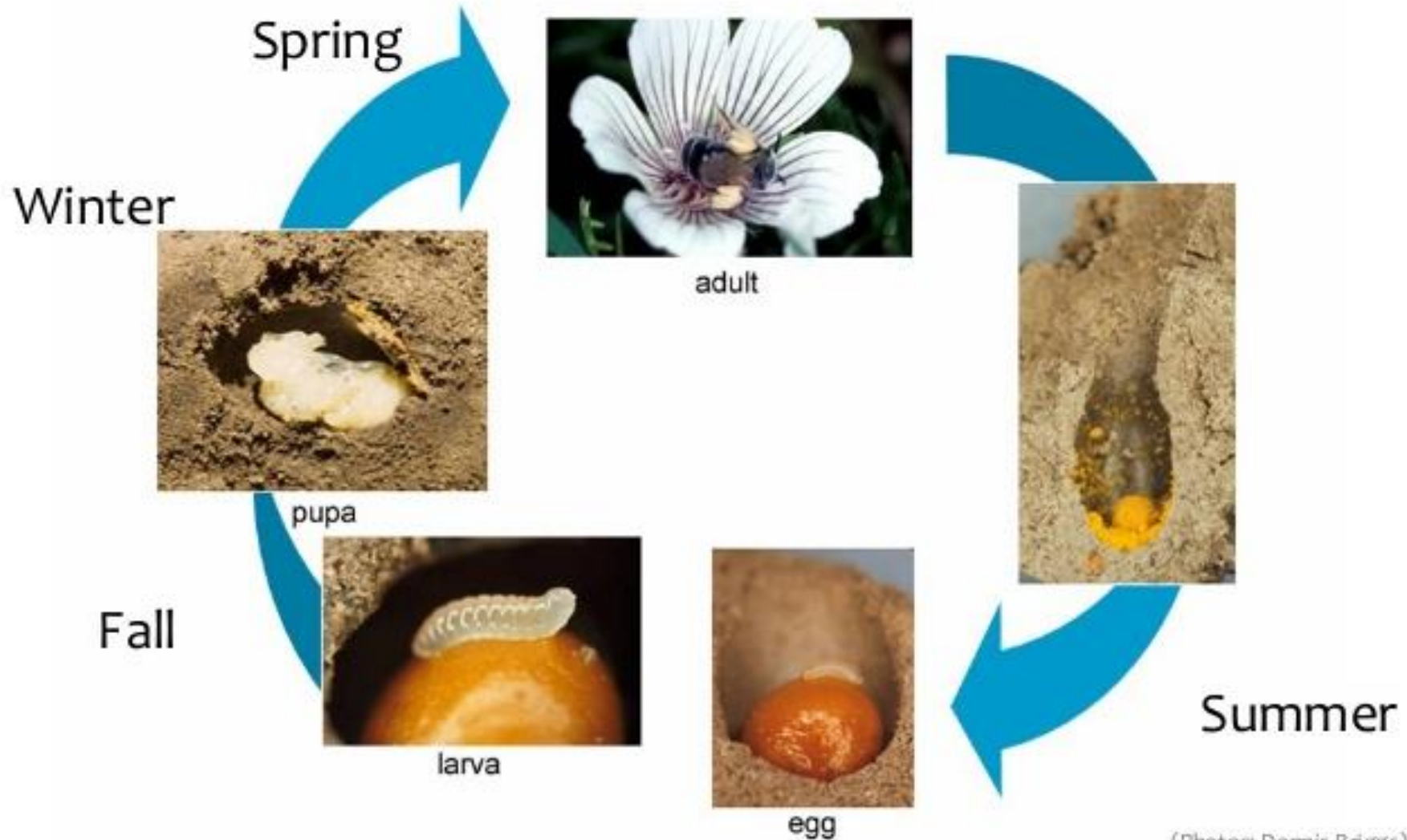
Adult: Adults often feed on a variety of nectar plants

Usually live only a short time

Must find the right **Host Plant** to lay its eggs on.

All gardens should provide a variety of native plants to insure the next generation of butterflies and bees.

Solitary bee life cycle



(Photos: Dennis Briggs)





Spring Beauties are one of the earliest wildflowers to bloom. The Spring Beauty Miner Bee is a specialist on Spring Beauties



- Spicebush, *Lindera Benzoin*, blooms in March attracting of early butterflies & pollinators.
- Aromatic foliage turns yellow in fall, with red fruit that are favored by migrating songbirds.
- Host for the Spicebush Swallowtail, shown above as well as Tiger Swallowtail & Spicebush Sphinx Moth.



Common Violet



Variegated Fritillary and Caterpillar



Green Metallic Bicolor Sweet Bee



Host to Great Spangled Fritillary

Violet Miner Bee, *Andrena violae*

Common violet as a weed smothering groundcover hosts Fritillaries



Golden Ragwort is a stunning Groundcover for moist soils and part shade. It is naturally found in shady area near streams, swamps and other damp areas.

It has handsome evergreen leaves and spreads by rhizomes to form a lovely groundcover. It is tough enough to replace English Ivy and garlic mustard & blooms from late March through May.

Early butterflies and bees are drawn to its rich nectar, and deer and rabbits avoid it.



With specialist bee

Golden Ragwort, *Packera aurea*

Wonderful groundcover that spreads into large colonies

Evergreen basal leaves topped with, long-lasting yellow flowers from March to June.

This deer resistant plant attracts early bees, pollinators and butterflies.



Golden Ragwort, Wild Columbine, r form a weed proof groundcover.

They attract a variety of pollinators including hummingbirds and butterflies.



Pollinated by Ruby-throated hummingbirds, bumblebees, and butterflies, Wild Columbine flowers have nectaries at the tips of the long spurs, requiring pollinators with long tongues. They host 12 spp. of caterpillars.



Pussytoes, *Antennaria plantaginifolia*

Low spreading groundcover

Can be mowed to 4”.

Fuzzy white flower clusters resemble ‘kitten paws’ in April – May.

Attracts pollinators, seeds eaten by birds.

Hosts 6 spp. of caterpillars including the American Lady - shown left.



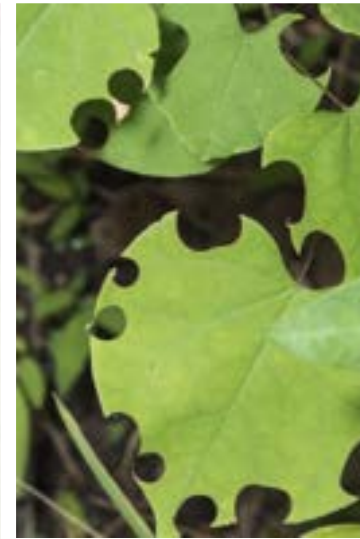
Pussytoes and Wild Columbine line a woodland path.

Attracting bees and butterflies.





Pussytoes' dense foliage spreads by rhizomes - a great, drought tolerant groundcover.



Eastern Redbud, *Cercis canadensis*, with Eastern Bumblebee queen and Leafcutter Bee



Southeastern Blueberry Bee



Eastern Blueberry Miner Bee



Wildlife friendly fruit



Zebra Swallowtail sipping nectar

Blueberries , Vaccinium spp. are important pollinator plants.

Host specialist bees.

Host to Spring Azures, Striped Hairstreaks, and moths.

Edible fruit for humans, birds and other wildlife.

Beautiful spring flowers and vibrant fall color,



Photo by Maeve Coker



Red Chokeberry, *Aronia arbutifolia*, is a four-season star and early pollinator magnet.



Lyre-leaf Sage and Black Swallowtail

Lyre-leaf Sage, *Salvia lyrata*

Has semi-evergreen lyre-shaped leaves that turn purplish in winter.

Long-lasting tubular flowers from April - June.

Spreads into groundcover for shade and sun.

Can be mowed to 4" as lawn substitute alone or mixed with other plants.

Like other mints, deer and rabbit resistant.



Lyre-leaf Sage and Clearwing Snowberry Moth

Lyre-leaf Sage, *Salvia lyrata*, attracts many pollinators

Bees, butterflies and hummingbirds.

Host to 5 species of caterpillars.

Deters deer and rabbits

Can be mown for lawn substitute





Blue-eyed Grass, Lyre-leaf Sage, Wild Columbine, and Wild Strawberry

They form a living mulch and a spring pollinator feast.

My Spring Meadow Border



Numerous birds have nested near the meadow garden to take advantage of the caterpillars and insects (baby bird food) it supports.



Silky Dogwood, *Cornus amomum* with Zebra Swallowtail

Mid-sized shrub loves damp soils along streams, rain gardens.

Forms colonies stabilizing shorelines.

May flowers attract pollinators – native bees.

Host for Spring Azure butterfly.

Blue fruit in August relished by songbirds and mammals.



SUMMER

All Milkweeds are superb butterfly and pollinator plants.

The critical host plant for Monarchs.

Resistant to deer and rabbits.

Only 2' tall and thrives in sunny sites with well-drained soils.



Butterfly Weed, *Asclepias tuberosa*, with Eastern Tiger Swallowtail



My Meadow Border in June with Butterflyweed, coneflowers, Rudbeckia, mountain mint and blue skullcap, now growing above the spring blooming herbaceous layer

Thrives in damp soils and are a favorite of Monarchs.

Perfect for a damp shoreline, rain garden, pollinator garden, or any garden!

Plant lots!!!



Monarch & Swamp Milkweed



Swamp Milkweed, *Asclepias incarnata*, with Spicebush Swallowtail



Monarch Caterpillars on Swamp Milkweed



Zebra Swallowtail

Common Milkweed, *Asclepias syriacus*, has fragrant, nectar-rich blooms in summer.

Monarch and Milkweed Tussock Moth host, but all butterflies love it.

Spreads vigorously by runners, so plant where it has room to spread.



Cuckoo Bees and European Honeybees



Honey-scented summer flowers full of nectar and pollen.

Supports 18 spp. of butterfly and moth caterpillars

It is perfect for butterfly/pollinator gardens, wet areas, and riparian buffers.



Buttonbush, *Cephalanthus occidentalis*, is a superb butterfly shrub with honey-scented summer flowers.



Thin-leaved Mt Mint, Pycnanthemum tenuifolium, with Eastern Tiger Swallowtail



American Snout Butterfly

- Mountain Mints are virtual pollinator and butterfly magnets!
- They look and smell great in any garden with long-lasting flowers and spread!



Pearl Crescents and Clustered Mt Mint



Great Purple Hairstreak

**Clustered Mountain Mint is an absolute pollinator magnet.
It blooms longer and attracts more pollinators than any other plant.**



Clustered Mountain Mint and Dozens of Variegated Fritillaries



Green-headed Coneflower, *Rudbeckia laciniata*



Black-eyed Susan and American Lady butterfly



Eastern Tiger Swallowtail

Blue Vervain, *Verbena hastata*, is a butterfly magnet!

It also supports the specialist Verbena bee and many other pollinators.

Perfect shoreline or rain garden plant for damp soils but thrives in regular garden soil.

Shown here with an Eastern Tiger Swallowtail (above) & Monarch butterfly (right).



Monarch



My meadow border in mid-July.

Spring blooming Wild Strawberry as a groundcover layer in front, Joe-pye-weed, Rattlesnake Master, & Great Coneflower in back, and Thin-leaved Mt. Mint, Blue Skullcap, Coneflowers, & Butterflyweed still blooming in mid layers.



Beautiful Sweet Pepperbush, *Clethra alnifolia*, has fragrant white flowers in July-August.

It prefers moist soils along streams, ponds, but thrives in regular garden soil in sun or shade.

Attracts dozens of butterflies and pollinators.

Shown here with a Monarch.



Blue Mist Flower, *Conoclinium coelestinum*, is a small cousin of Joe-pye-weed.

Only 2.5' tall - fuzzy blue flowers from late July - fall.

It spreads by rhizomes for a great groundcover.

Butterflies and pollinators love it! So will you!

Shown with Common Buckeye butterflies.

Sweet Joe Pye-weed,
Eupatorium purpureum,
lights up the late summer
garden.

A butterfly and pollinator
magnet!

The rare Rusty Patch
Bumble-bee favors Joe-
pye.

Supports over 3 dozen
species of caterpillars.

Shown with migrating
Monarchs!





Hollow Joe-pye-weed, *Eutrochium fistulosum*, shown here which reaches 8' or more in height.

Coastal Joe-pye-weed, *Eutrochium dubium*, tops out at 4'. Both will attract dozens of butterflies to your summer garden.

All Joe-pye-weeds love damp soils but grow well in regular garden soil too.

Shown with a Pair of Eastern Tiger Swallowtails.



New York Ironweed, *Vernonia nova-boracensis*, is a tall, statuesque plant that grows well with Joe-pye-weed. Its beautiful late summer-fall flowers attract loads of butterflies and other pollinators.

It thrives in damp soils in rain gardens, meadows, along streams or ponds, as well as in regular garden soils.

Shown here with a black female Eastern Tiger Swallowtail.



**Garden Border with Yellow and Green
Coneflowers to the right front and New
York Ironweed and Sweet Joe-pye-weed in
background**



Cardinal Flower with 7 Cloudless Sulphurs



Downy Lobelia with Painted Lady Butterfly



Cardinal Flower is a Hummingbird Magnet!



Swamp Sunflower, *Helianthus angustifolius*, is a statuesque fall bloomer that supports dozens of species of pollinators, including several specialist bees, as well providing seeds for songbirds.

It prefers full sun and moist soils but thrives in regular garden soil. It can reach 8' in height so place it in the back of a border. Stunning in any fall garden and the butterflies and other pollinators will thank you!



Margined Calligrapher Flower Fly



Goldenrods support more butterflies and moths than any other perennials and are main-stays of late summer and fall gardens.

Seaside Goldenrod, *Solidago sempervirens*, is a wonderful shoreline plant adapted to dunes, salt spray, and tidal shorelines.

It is an important pollinator plant for migrating butterflies including Monarchs in fall as well as many specialist bees.



Goldenrod with dozens of yellow-caped moths, several species of flower flies, specialist bees and other beneficial insects.



Asters support 112 species butterflies and moths and a number of specialist bees.

Superb fall pollinator plants for every garden.

Try Heart-leaved Aster, *Symphyotrichum cordifolium* for sunny to partly shady gardens or try New England Aster, Smooth Blue Aster, or Aromatic Aster (shown here) for sunny borders.

Aromatic aster is deer & rabbit resistant with its aromatic foliage.

Shown with Aromatic Aster and Monarch.



Monarch on Smooth Aster



American Lady on Aromatic Aster



My Meadow Border – Early November with several asters , goldenrods, and obedient plant still providing nectar and pollen



Juvenal's Duskywing



Eastern Comma



Many pollinators overwinter in leaf litter, hollow stems, and holes in old snags. Be sure to provide these as habitat!



Four banded Stink Bug Hunter Wasp



Orchard Oriole eating Aphids on Coral Honeysuckle



Calligrapher Flower Fly



Brown Thrasher with caterpillar

A diverse garden of native plants provides free natural pest control.



White Oak



Black Cherry



Black Willow



River Birch



Red Maple

Trees That Support High Numbers of Lepidoptera

- Oaks 550 species
- Black Cherries 456 species
- Willows 455 species
- Birches 413 species
- Maples 285 species

If you want to add biodiversity to your property, **plant these native trees!**

They support more wildlife than any other plants.

These trees support hundreds of species of wildlife.



So welcome native plants into your garden and the pollinators that will surely come.

These river birches are beautiful with cream and salmon peeling bark, a graceful airy canopy that allow generous plantings below, and they love the heat and humidity of Northern Neck.

Just as in nature, plant a r layers of native groundcovers and shrubs below to further support a diversity of wildlife.

So invite a variety of native plants into your garden this year,
and your grandchildren will thank you!



And The Pollinators and other
Wildlife Will Thank You!

