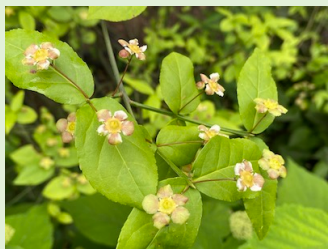




# Native Trees & Shrubs for Pollinators



Sustainable Landscaping 2023



# Overview



- Introduction to pollinators & critical role of native plants as food sources
- Importance of native woody plants in home landscapes
- Detailed look at:
  - Native understory trees
  - Native shrubs
- Resources

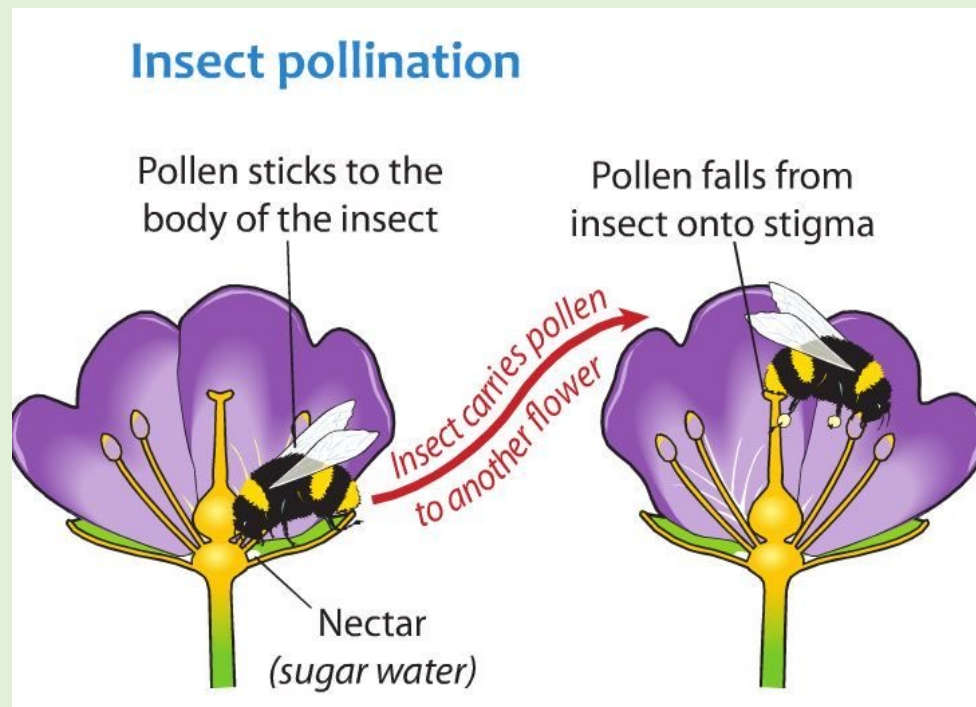
# Pollinators

# Pollination: Transfer of pollen from the anther to the stigma of a flower, enabling fertilization

**Native insects** prefer **native plants** as source of floral resources

**Nectar** is carbohydrate energy source for various adult pollinators

Insects prefer **nectar** with specific nutrient composition



**Pollen** provides nutrients to female bees for egg production

**Pollen** is vital source of protein and fats for young of bees

Some bees collect **resin or oil** to line and waterproof their brood cells

**Mutualistic Exchange**

# Beetles

- First pollinators (Mesozoic era)
- Important pollinators of ancient species, such as magnolias and spicebush
- Drawn to flowers with a spicy, fruity, or fetid fragrance
- Feed on nectar and pollen
- Can be destructive in feeding
- Beneficial as predators of aphids



Beatriz Moisset

# Beetles

Prefer scented white or cream-colored flowers



# Bees

- Best pollinators
  - Purposeful collection of pollen
  - Fuzzy bodies/special parts hold pollen
- Use nectar and pollen for energy & combine them to make food for young
- Nearly 500 species in Mid-Atlantic
- Some social (bumble bees), most solitary
- Without a colony to defend, these bees rely less on stinging
- 70% nest underground, 30% in cavities

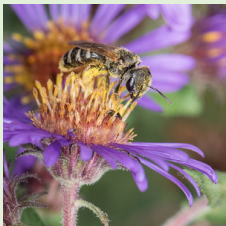


Heather Holm

# Bees



- Bumble bees (*Bombus*)**
- Carpenter bees (*Xylocopa*)**
- Leafcutter bees (*Megachile*)**
- Mason bee (*Osmia*)**
- Mining bees (*Andrena*)**
- Sweat bees (*Halictus*)**



Photos by Heather Holm

**Eyes on side of head**

**Long antennae**

**Bees vary in size & tongue length**

**Fuzzy body**

**Defined waist**

**Compact shape**

**Two pairs of wings**

**Special structures for collecting pollen**

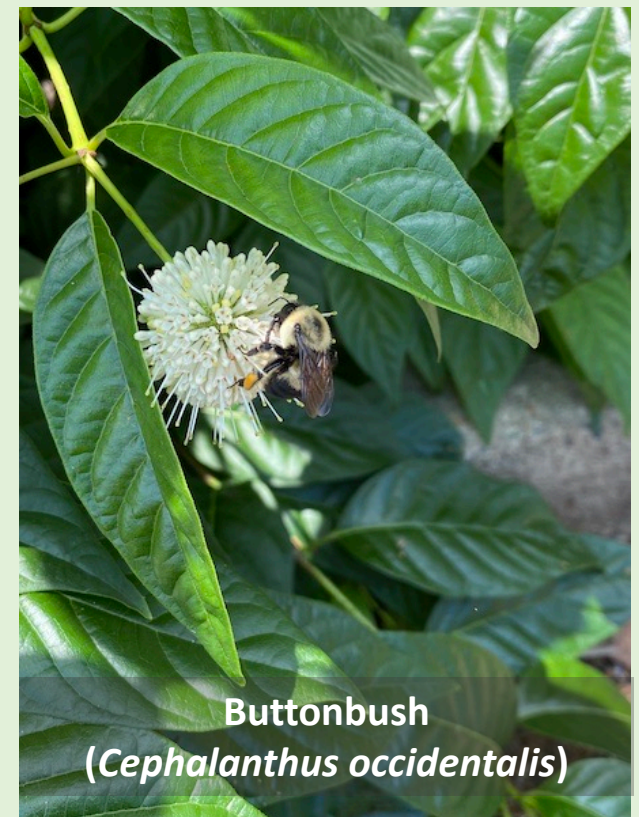
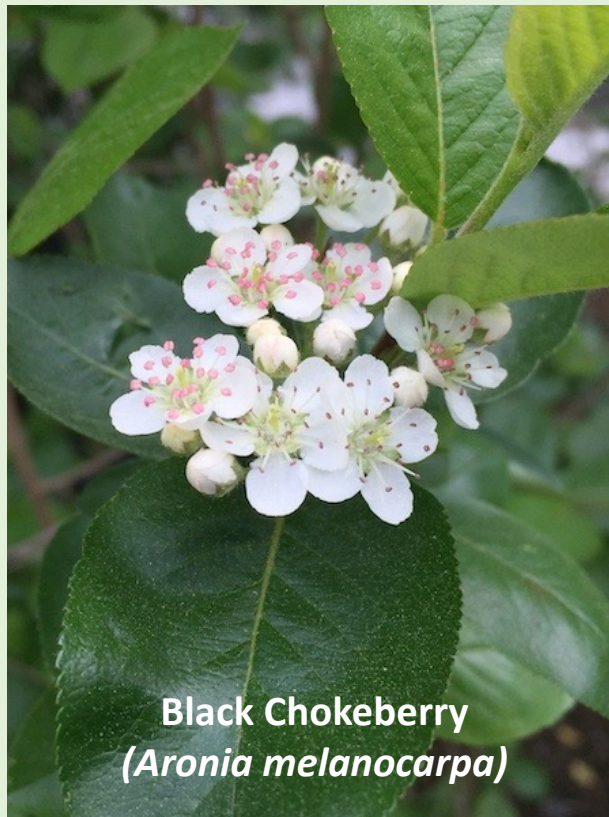
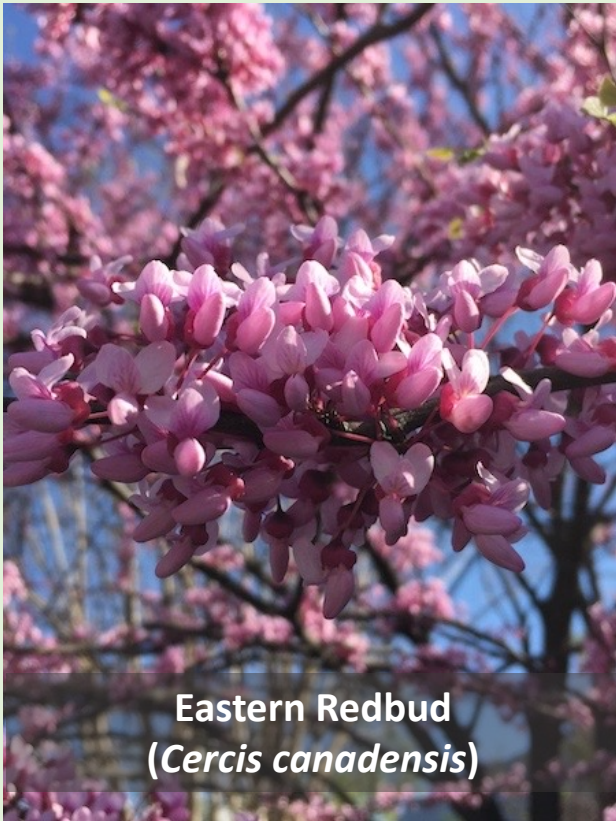
**Corbicula /scopa**

This large image shows a bumblebee on a purple flower. The bee has a very fuzzy, yellow and black body and a distinct waist. Its long antennae are visible. The labels point to these features and its specialized pollen-collecting structures.



# Bees

Prefer blue or purple flowers; yellow/white secondary



# Bees

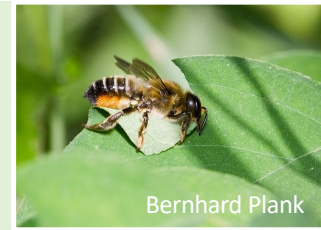
Pollen specialists require specific native plants

- Most female bees collect pollen from many genera of native plants (polylectic)
- 30% of bees have evolved as pollen specialists, collecting from fewer species (oligolectic)
- Use olfactory cues to find their host plants
- Foraging can be efficient
- Can be mismatch in emergence of bee and needed flowers



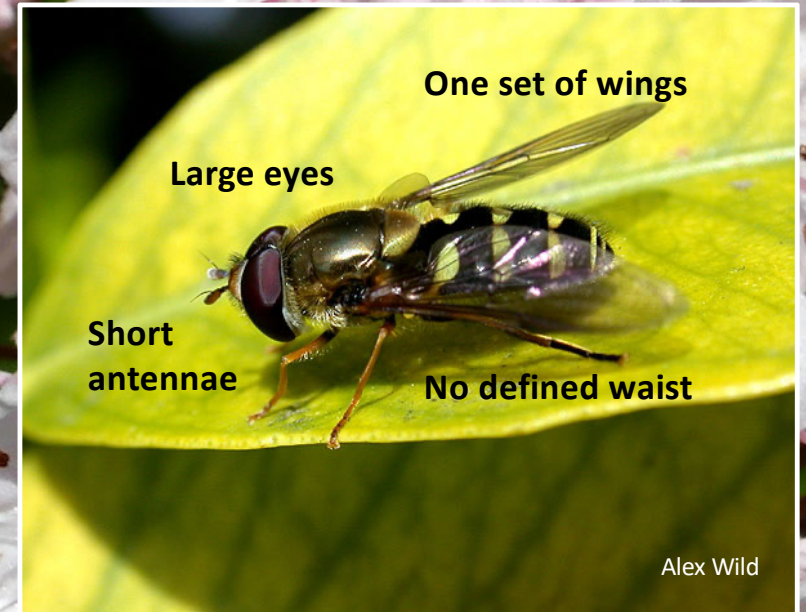
# Bees Use other plant parts

- Some bees, such as carpenter bees, create nests in pithy plant stems
- Leafcutter bees use leaf pieces to construct nests



# Flies

- Second most efficient pollinators
- Syrphid (flower or hover) flies resemble bees
- Adults feed on nectar and/or pollen
- Active at low temperatures
- Young control aphids & scales

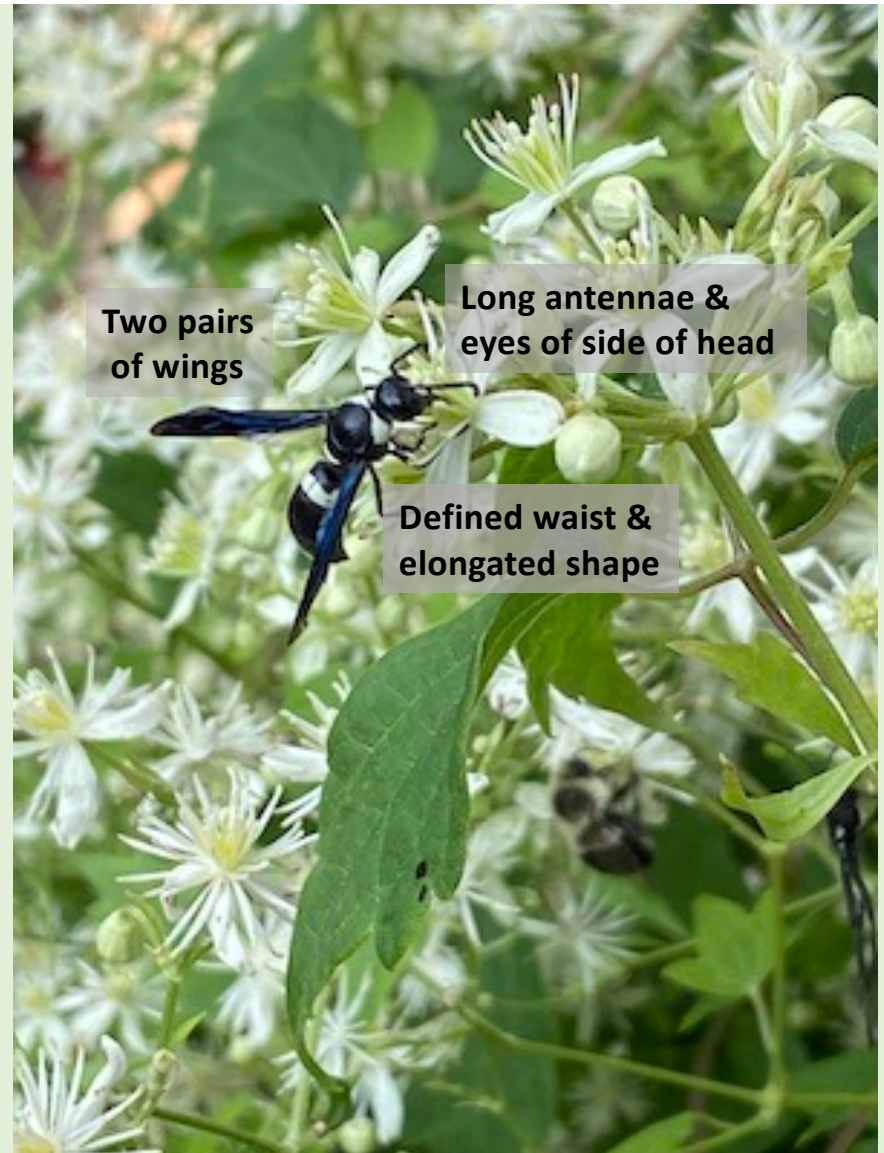


# Flies Prefer dark brown, purple, or pale flowers



# Wasps

- Evolutionary ancestors of bees, but less efficient - hairless
- Adults visit flowers for nectar and pollen for energy
- Predatory or parasitoid, feed young other insects or spiders
- Most insect stings caused by social wasps – not bees
- Solitary wasps are beneficial and not aggressive

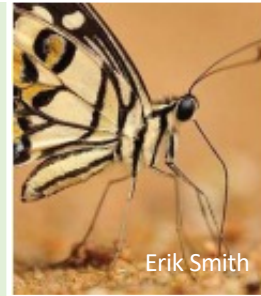


# Wasps Prefer white or yellow flowers with shallow corollas



# Butterflies

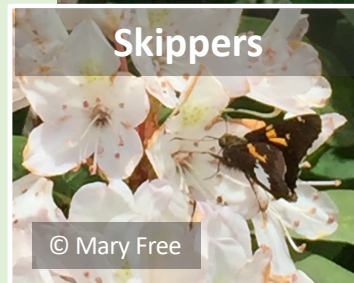
- 102 species in VA, 150 in MD
- Seek nectar with long tubelike mouth parts (proboscis)
- Primary pollinators for only 8% of plants
- Little contact with flowers
- Some pollen may remain on wings, head, or proboscis



Erik Smith



Erik Smith



Skippers

© Mary Free

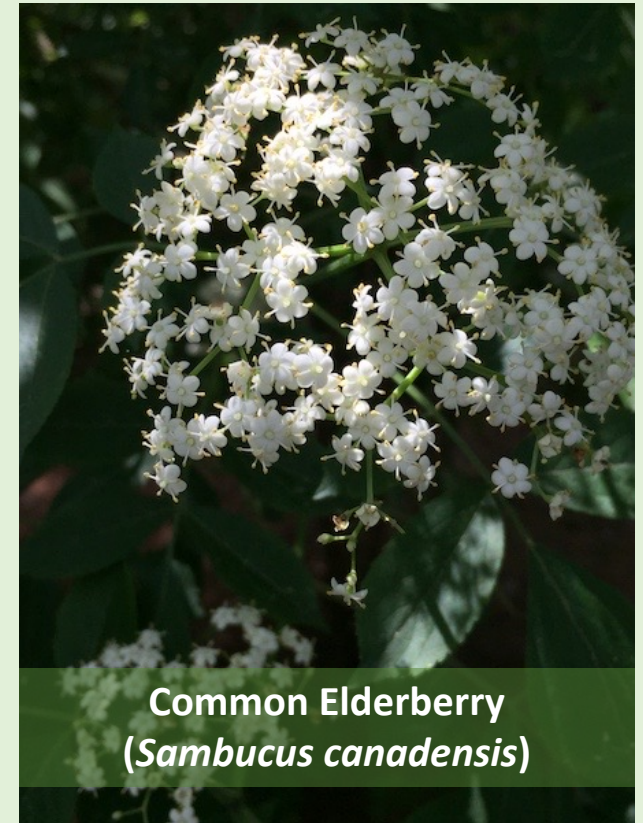
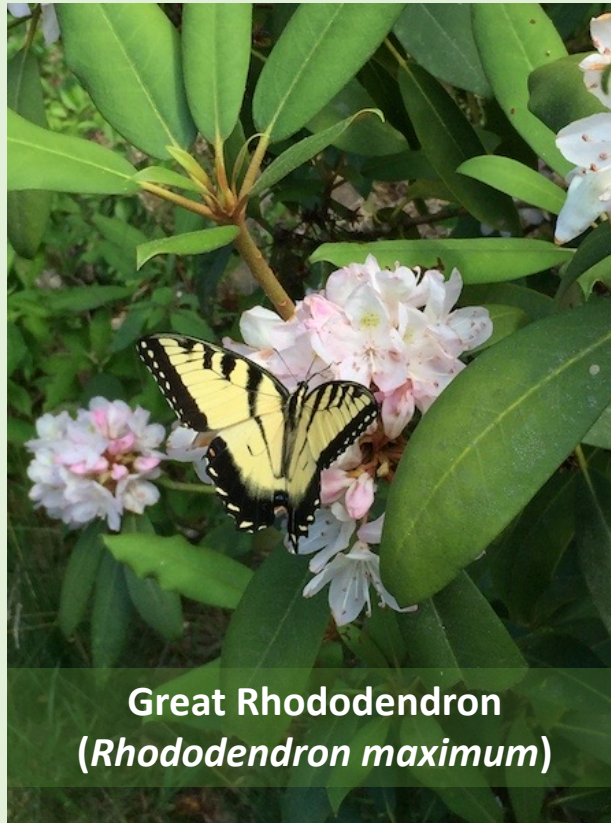


Fritillaries

Kathy Keatley Garvey



# Butterflies Prefer flat, composite flowers



# Butterflies

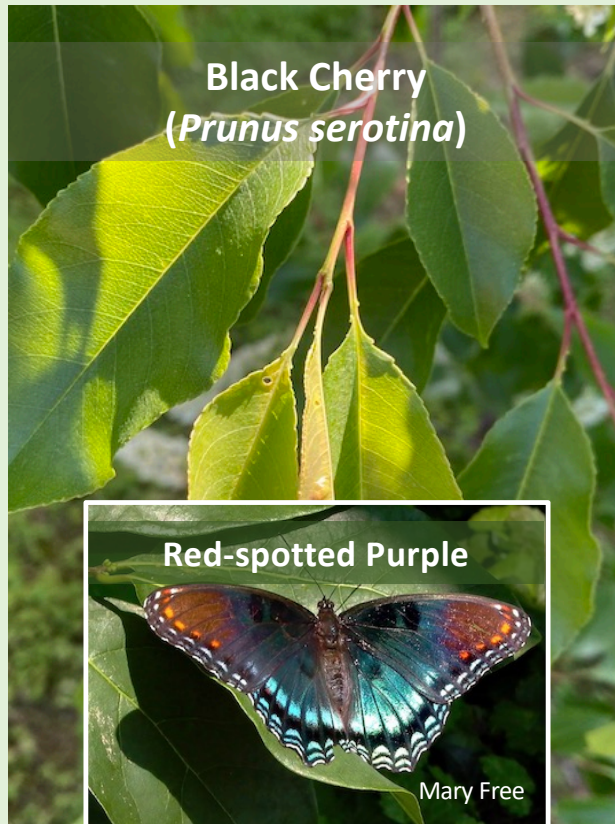
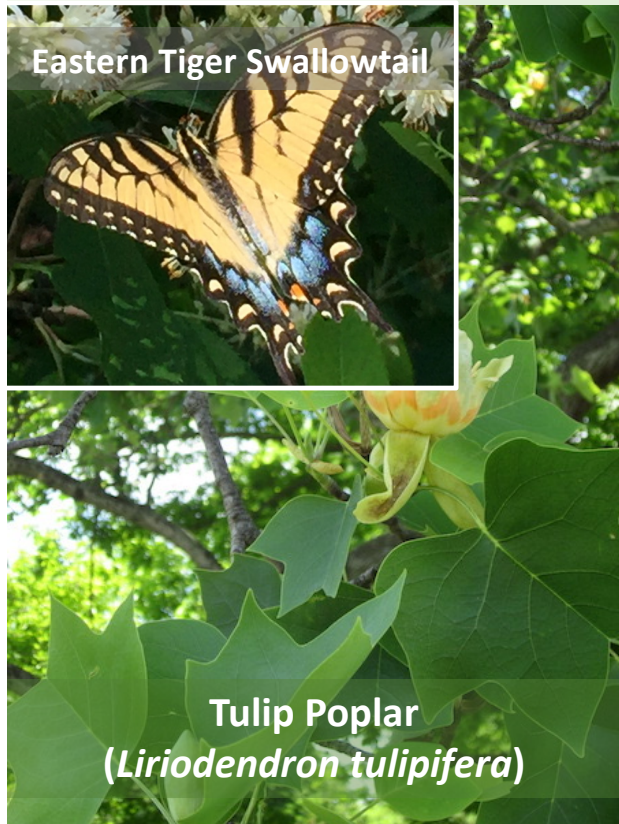
Require native host plants for full lifecycle

- Adults use nectar of plants as flight fuel
- Special evolved relationships with certain native plant species to support young
- Four stages of metamorphosis:
  - Females lay eggs on undersides of leaves
  - Caterpillars (larvae) feed on foliage through four to six stages (instars)
  - Pupa (chrysalis) stage
  - New butterfly emerges
- One to multiple generations per season, depending on species
- Feeding is in ecological balance



# Butterflies

Native larval host plants for caterpillars

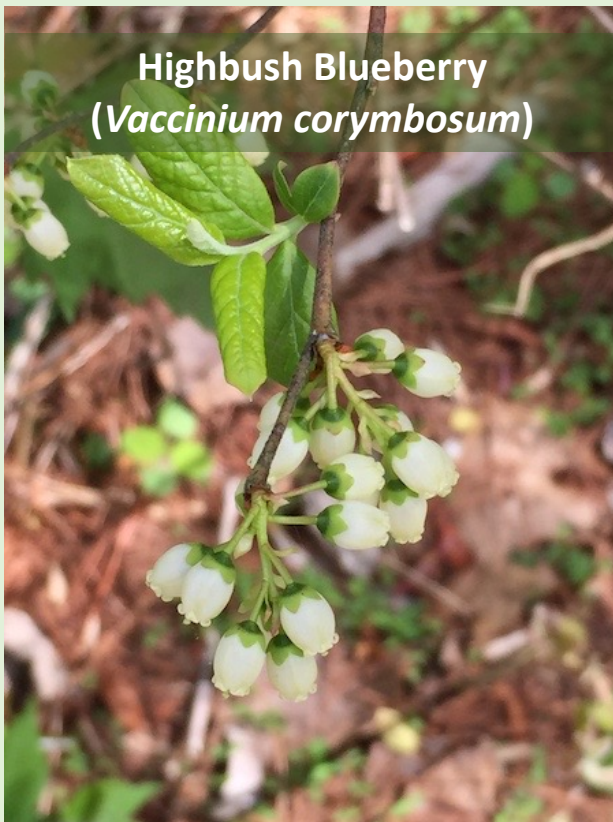


# Moths

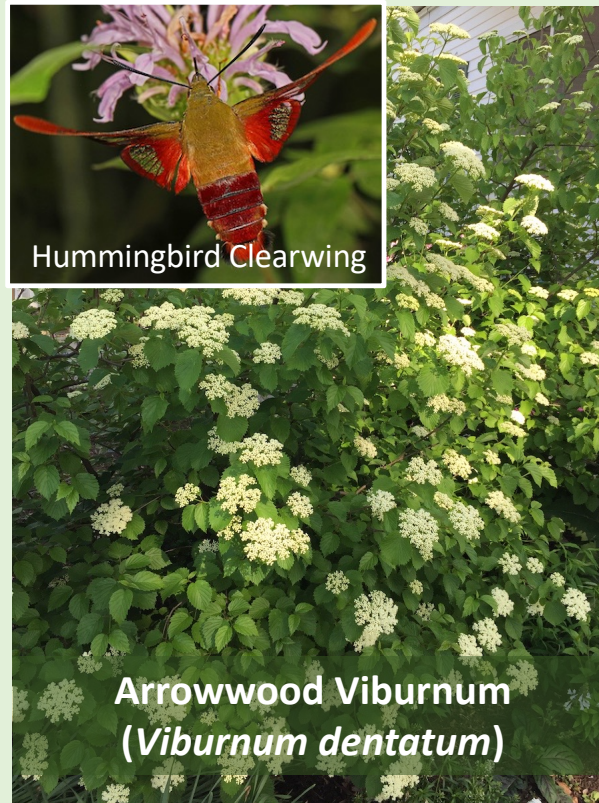
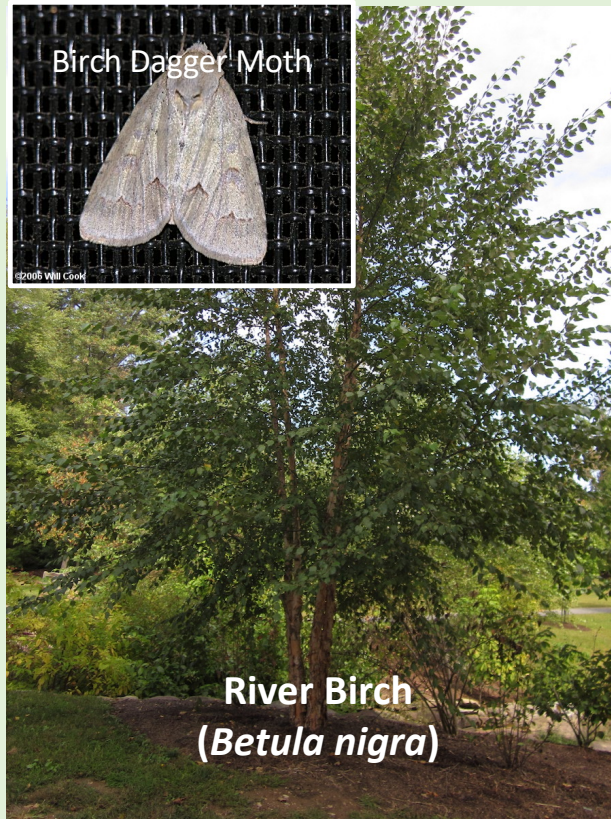
- More abundant than butterfly species (509 in VA, 489 in MD)
- Vary in size (< inch to 3-4")
- Long proboscis to access nectar or tree sap
- Many adult moths do not feed
- Pollen collects on bodies



# Moths Prefer pale or white, tubular flowers

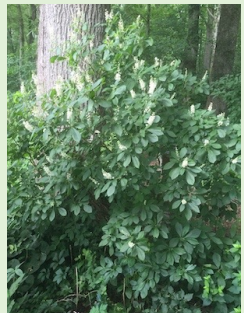


# Moths also need larval host plants



# Importance of native woody plants

- Provide varied palette of plants for nectar & pollen
- Visited by wide variety of insects, including specialists
- Long-lived & bloom for many consecutive seasons
- Support larval stage of largest numbers of Lepidoptera
- Caterpillars, in turn, support bird populations
- Can provide fruit for other wildlife & humans!
- Add layers for attractive & functional landscape:
  - Providing shelter & nesting sites
  - Screening, cooling & energy savings
  - Buffering impact of rain & absorbing stormwater
  - Other critical ecosystem services



# Keystone tree species for Lepidoptera



Top trees to support the larval (caterpillar) stage of the greatest number of butterflies and moths



Oak



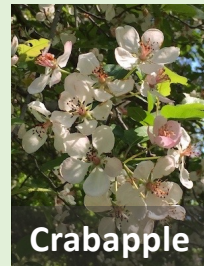
Cherry



Willow



Birch



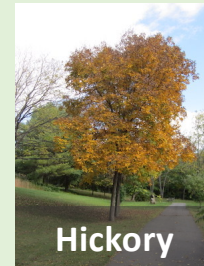
Crabapple



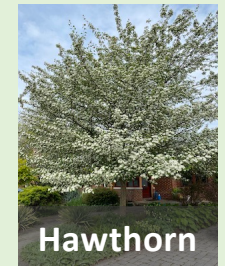
Maple



Pine



Hickory



Hawthorn



# Vines for pollinators



**Native Vines  
for the  
Home Garden**

Sustainable Landscaping 2021



Virginia  
Cooperative  
Extension  
Virginia Tech  
Virginia State University



MG  
NV  
Master Gardeners  
of Northern Virginia  
Arlington • Alexandria  
mgnv.org

Native vines also provide nectar and pollen and serve as larval host plants

A photograph of a dense, lush green forest. The trees are tall and full of vibrant green leaves, with a clear blue sky visible at the top. The foreground shows a grassy area with some reeds or tall grasses. The word "Questions?" is written in a large, white, sans-serif font across the center of the image.

Questions?

# Native Understory Trees

# Downy Serviceberry

*Amelanchier arborea*

MA to VA; throughout VA; scattered southeast and west

- Multi-stemmed
- 15-25' x 15-25'
- Sun/part-shade (sun = more fruit)
- Moist
- Tolerates clay and dry soil, pollution
- Deer seldom severely damage



Avoid planting near cedars

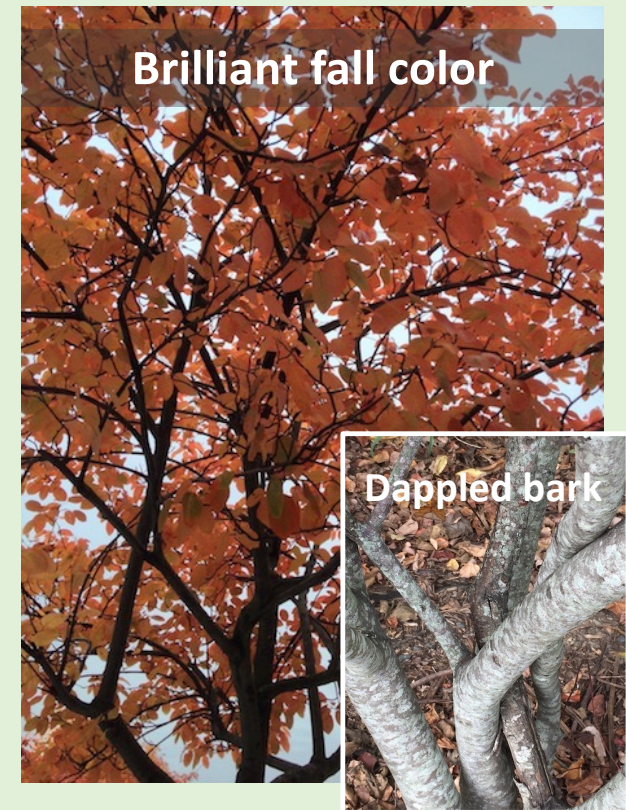


Use near patios, in groups,  
in woodland garden

# Downy Serviceberry

**Nectar:** Early source for native bees

**Larval host:** Red-spotted Purple, Viceroy, moths



# Pawpaw

## *Asimina triloba*

Coastal Plain & Piedmont in VA, S. PA south; scattered in southeast and west to MO, AR, LA

- Short trunk with rounded crown
- 15-30' x 15-30'
- Sun/part-shade
- Moist/wet
- Tolerates Black Walnut
- Suckering habit
- Deer rarely damage



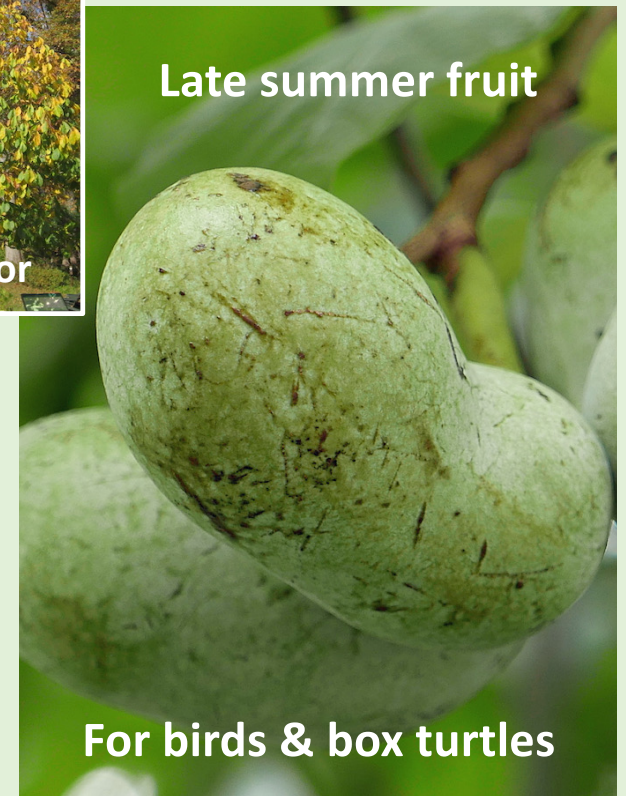
Use as a fruit tree or in  
rain or native plant gardens

Need two or more genetic  
strains to produce fruit

# Pawpaw

**Nectar & pollen:** Flies & beetles

**Larval host:** Zebra Swallowtail butterfly & Pawpaw Sphinx moth



# Eastern Redbud

## *Cercis canadensis*

Mountains & Piedmont in VA; much of eastern N. A.

- Short trunk, umbrella-like crown
- Short-lived, 20-30 years
- 15-30' x 20-35'
- Sun/part-shade/shade
- Moist
- Tolerates clay and Black Walnut
- Deer often severely damage

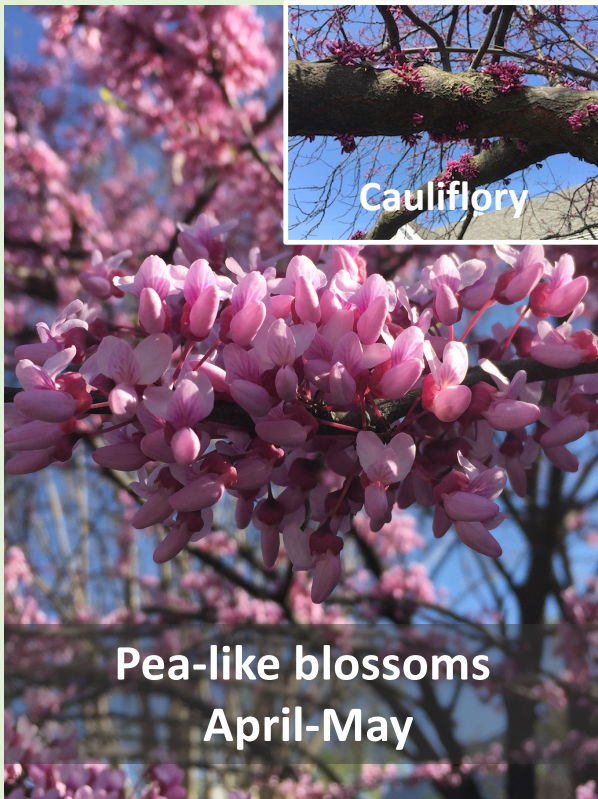




# Eastern Redbud

**Nectar & pollen:** Butterflies; specialist bee

**Larval host:** 12 species of Lepidoptera, incl. Henry's Elfin & Io Moth

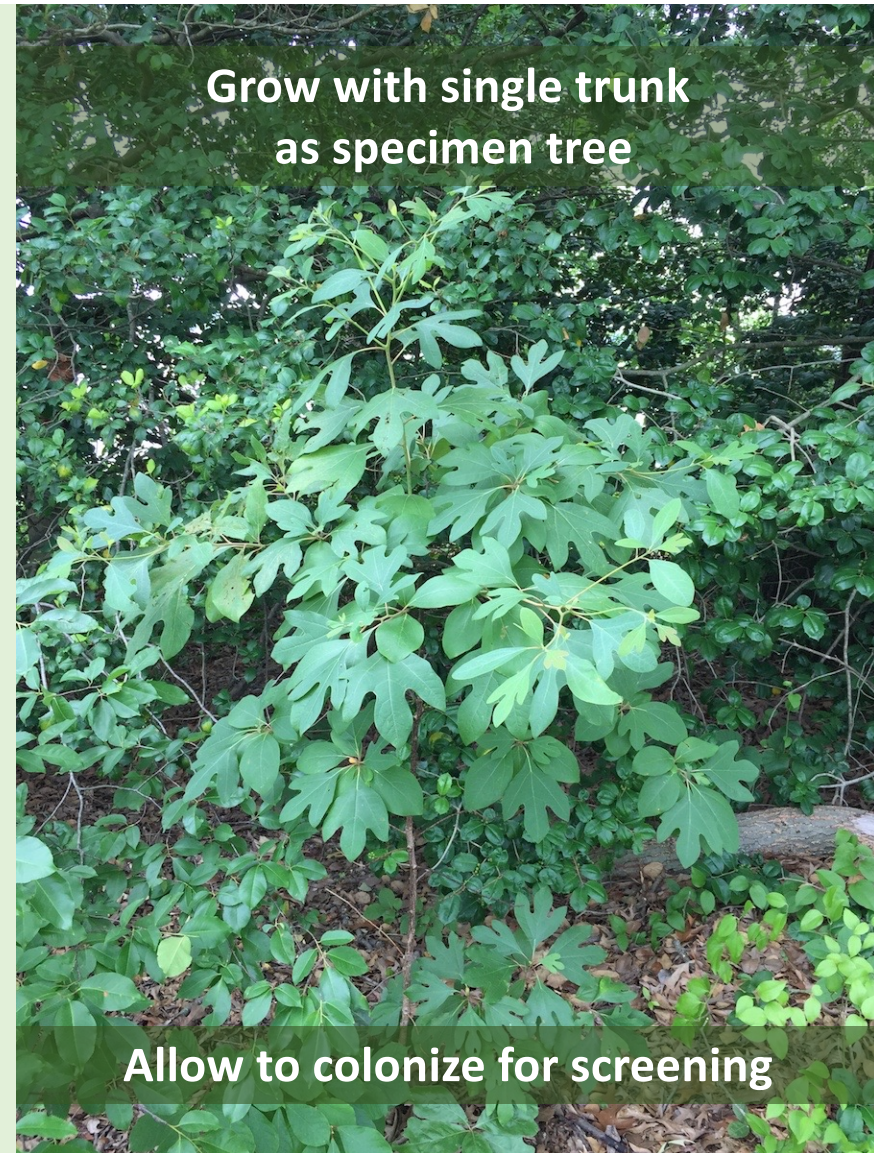


# Sassafras

## *Sassafras albidum*

Throughout Mid-Atlantic & much of eastern U.S.

- Irregular trunk, flat-topped crown
- 35-50' x 35-50'
- Sun/part-shade
- Dry/moist
- Tolerates clay soil and drought
- Suckers
- Deer may browse twigs and foliage



# Sassafras

**Nectar:** Early source for bees, butterflies

**Larval host:** Swallowtails, Imperial, Io, Prometheus & Tulip-Tree Beauty moths

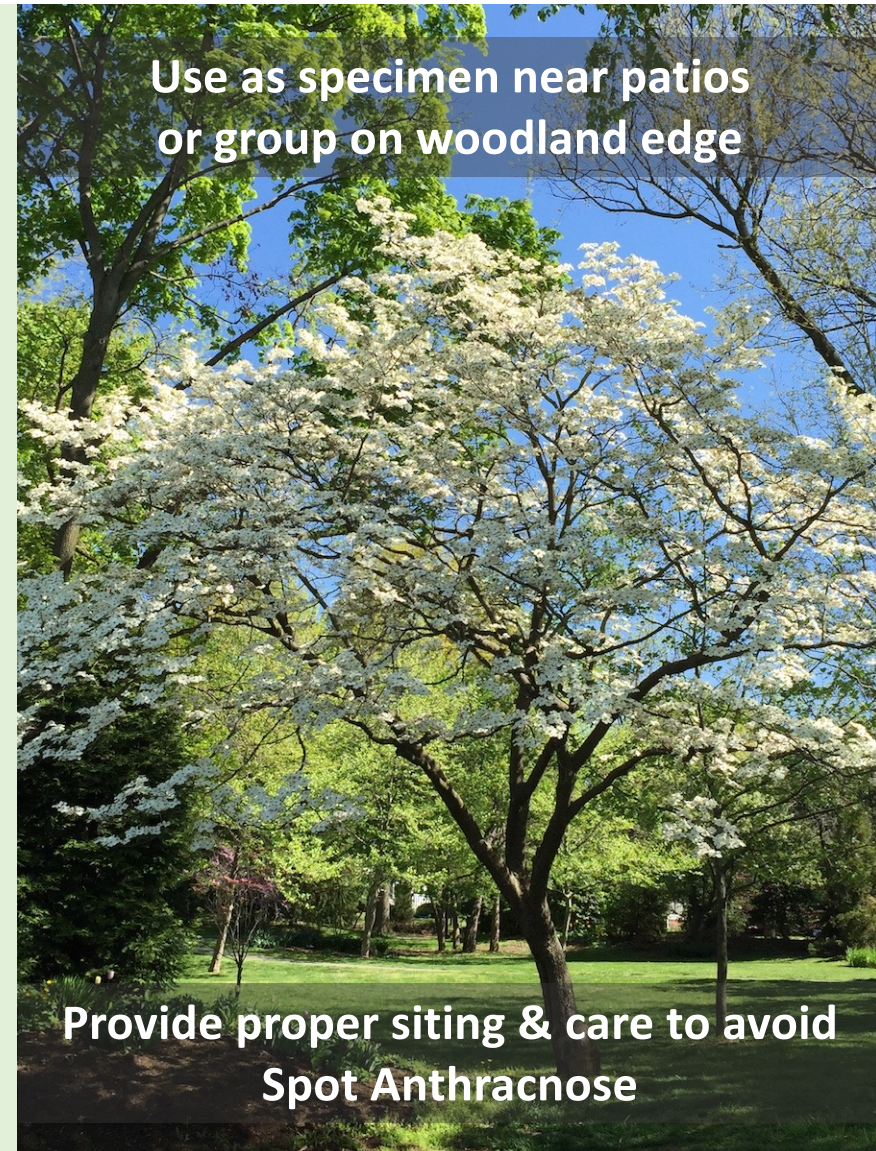


# Flowering Dogwood

*Cornus florida*

Throughout Mid-Atlantic & much of eastern N. A.

- Flat-topped, horizontal branching
- 15-30' x 15-30'
- Best in part-shade
- Moist, organically rich, acidic soil
- Tolerates clay soil & Black Walnut
- Deer may severely damage

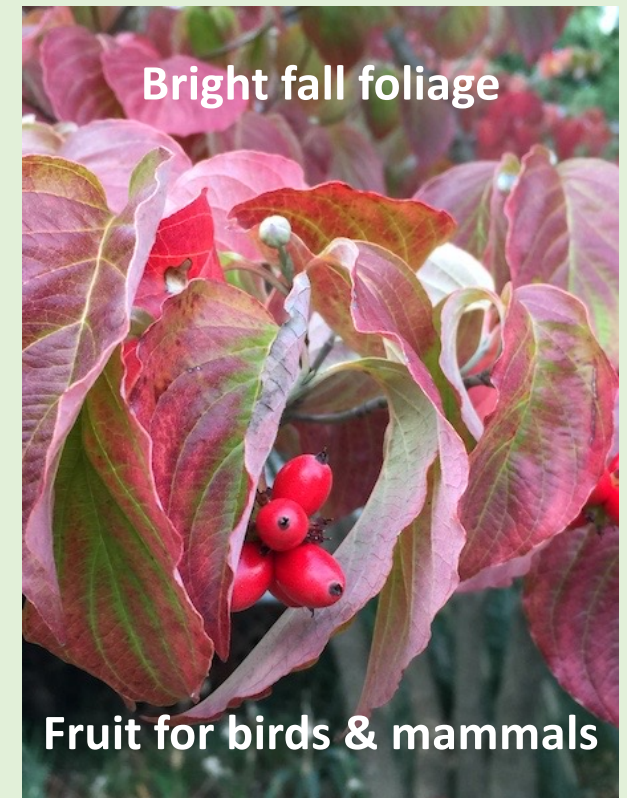
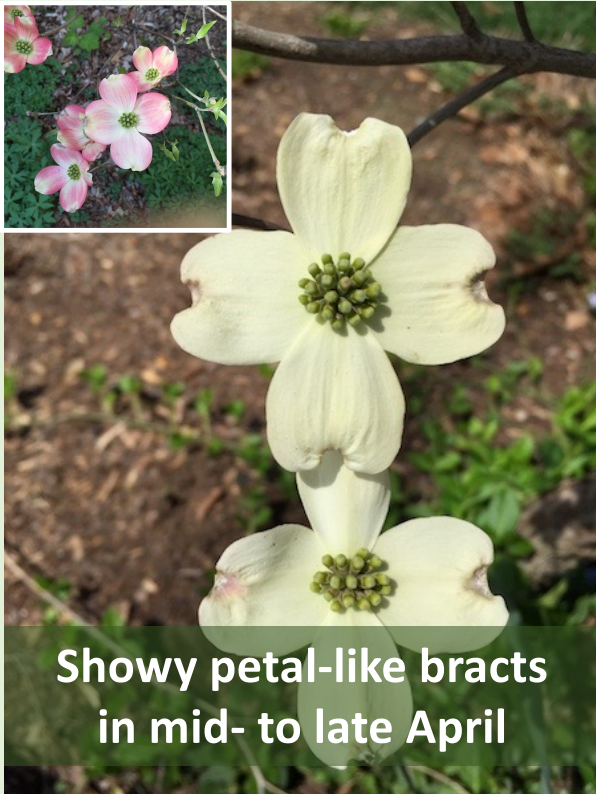


Use as specimen near patios  
or group on woodland edge

Provide proper siting & care to avoid  
Spot Anthracnose

# Flowering Dogwood

**Nectar & pollen:** Specialist bees & flies  
**Larval host:** Spring Azure butterfly



# Pagoda Dogwood

## *Cornus alternifolia*

NoVA and mountains in VA, Mid-Atlantic, northeastern N.A.

- Flat-topped, horizontal branching
- 15-25' x 15-35
- Part-shade/shade
- Moist, acidic soil
- Tolerates poor soils and clay
- Protect from wind & ice damage
- Deer occasionally severely damage



Plant singly or in groups around patios  
or in woodland gardens

# Pagoda Dogwood

**Nectar & pollen:** Bees (including specialist), flies, wasps, butterflies  
**Larval host:** Cecropia Silkmoth and Spring Azure butterfly

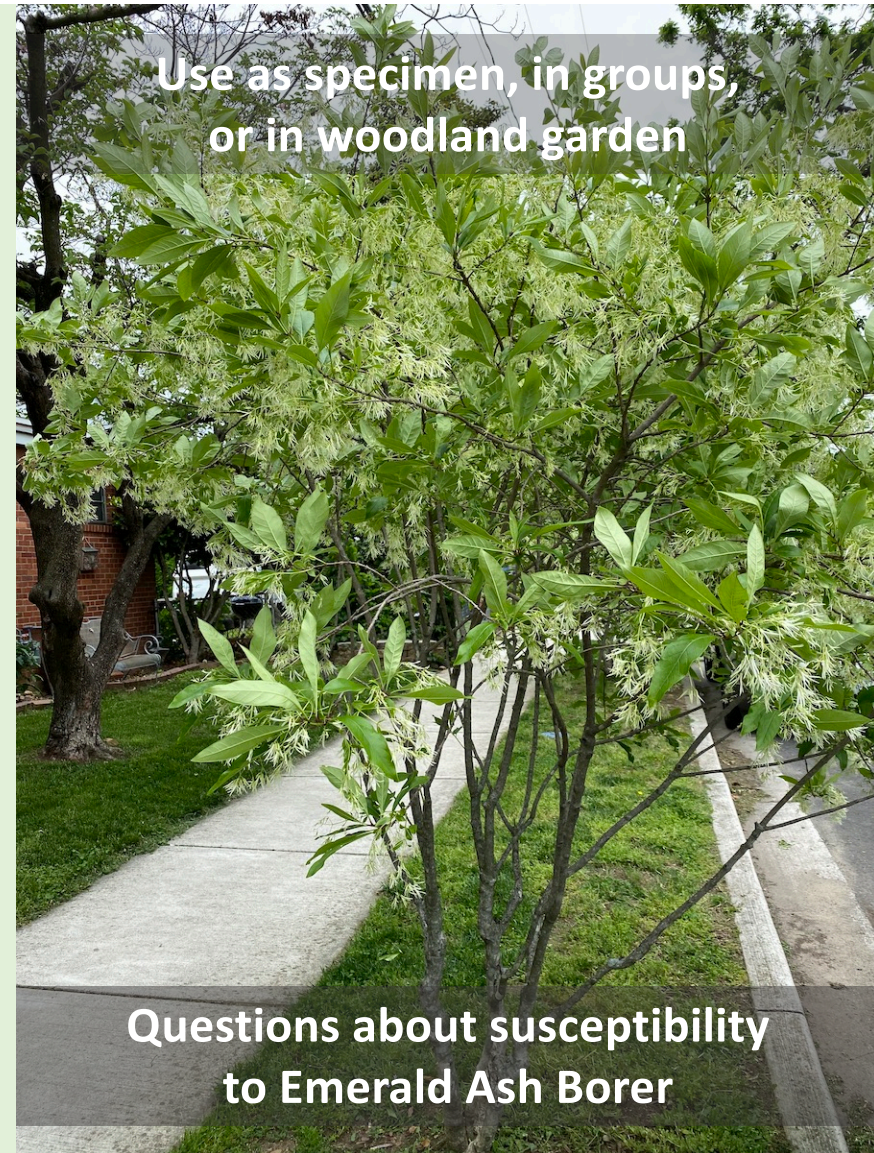


# Fringetree

*Chionanthus virginicus*

Throughout VA; S. PA south through southeast

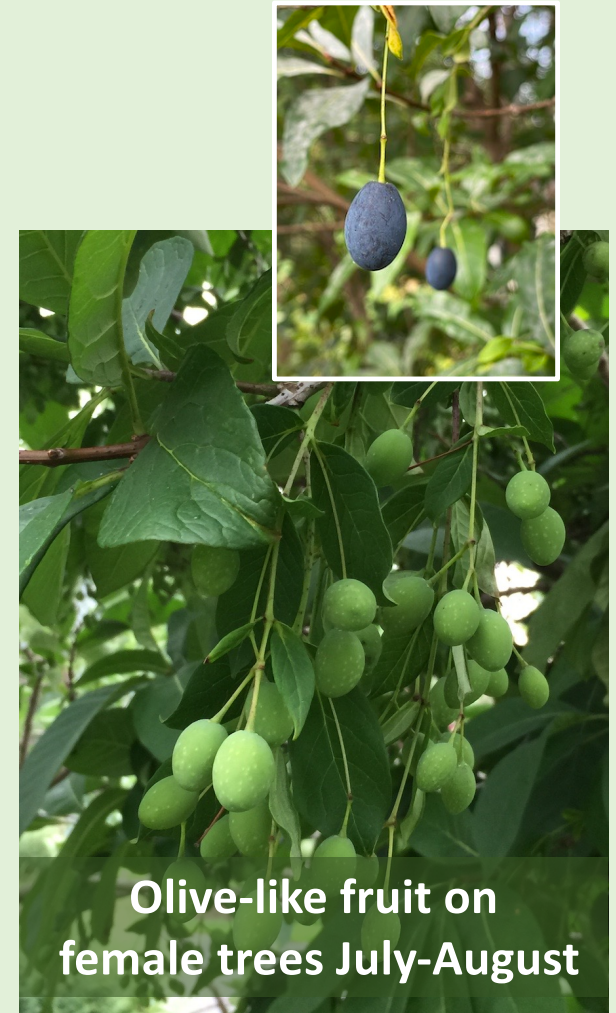
- Multi-stemmed
- 20-35' x 20-35'
- Sun/part shade/shade
- Moist
- Deer may severely damage





# Fringetree

**Nectar:** Diverse pollinators  
**Larval host:** Sphinx moths



# Sweetbay Magnolia

*Magnolia virginiana*

Coastal Plain in VA; coast from NJ to LA

- Multi-stemmed, rounded crown
- Evergreen to semi-evergreen
- 12-30' x 12-30'
- Sun/part-shade
- Moist/wet, rich, acidic soil
- Tolerates occasional flooding, shade, air pollution, some salt
- Deer may damage more in south

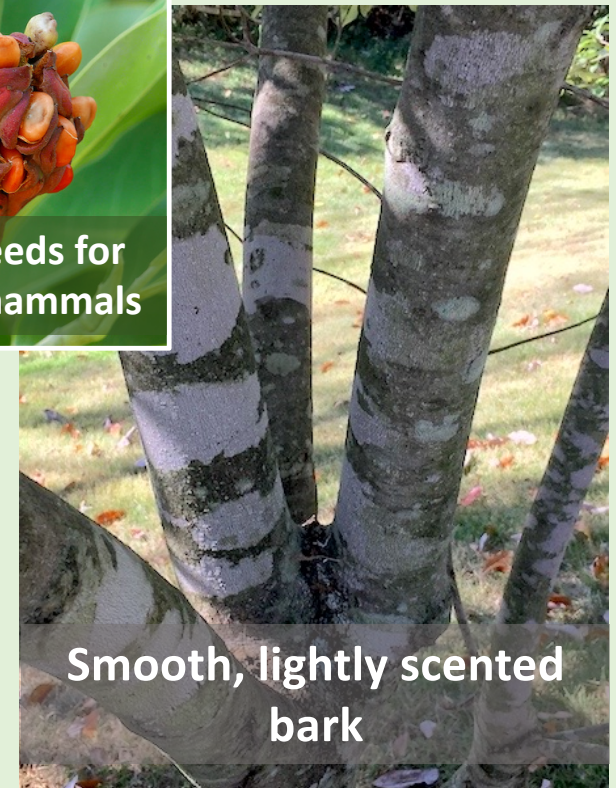
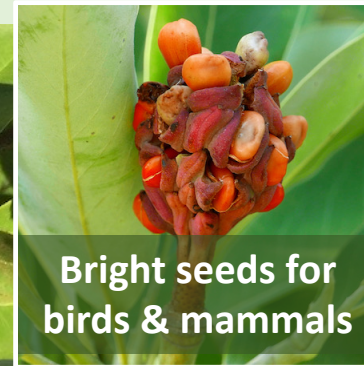


Use as a specimen or patio plant  
or in rain gardens ( >150 sq. ft.)

# Sweetbay Magnolia

**Nectar:** Beetles & moths

**Larval host:** Swallowtails, Promethea & Sweetbay Silkmoth





Questions?

# Native Shrubs

# Spicebush

*Lindera benzoin*

Much of East, less in Southeast; throughout VA

- Broad, rounded habit
- 6-16' x 6-12'
- Sun/part-shade/shade
- Moist
- Easily grown, resilient
- Tolerates clay, dense shade, drought
- Deer seldom severely damage



“Forsythia of the wilds”

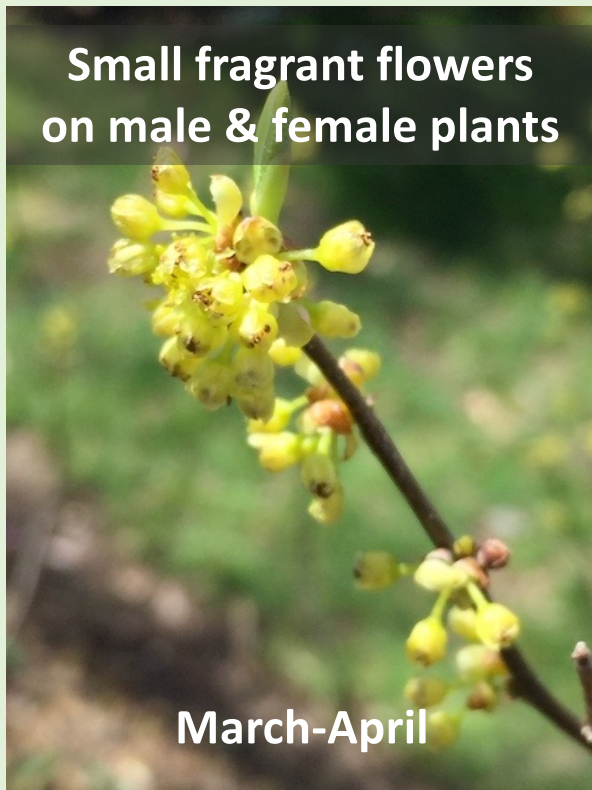


Especially suited to woodland gardens

# Spicebush

**Nectar & pollen:** Early source for bees, flies, butterflies

**Larval host:** Eastern Tiger & Spicebush Swallowtail butterflies



# Black Chokeberry

## *Aronia melanocarpa*

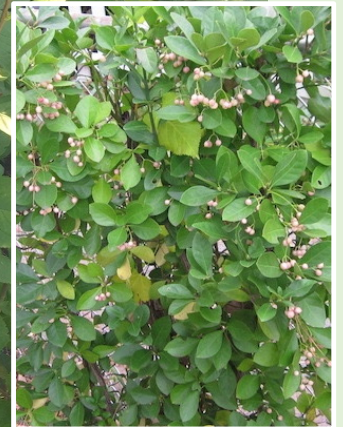
Most of Mid-Atlantic; mostly Mtns. & Pdmt. in VA

- Upright, multi-stemmed
- 4-6' x 3-6'
- Sun/part-shade
- Moist (tolerates wide range)
- Best fruiting in full sun
- Spreads via suckers
- Rabbits & deer may browse

Use as hedge or foundation plant



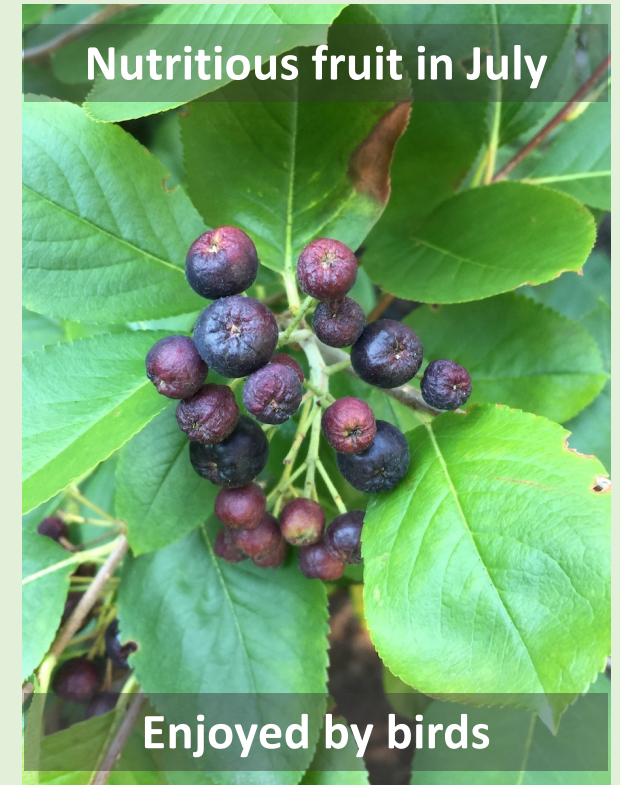
Native alternative to  
non-native Euonymus





# Black Chokeberry

**Nectar & pollen:** Esp. Mason bees (*Osmia*) & Mining bees (*Andrena*)  
**Larval host:** 29 species, incl. Coral Hairstreak & Bluish Spring Moth



# Pinxterbloom Azalea

*Rhododendron periclymenoides*

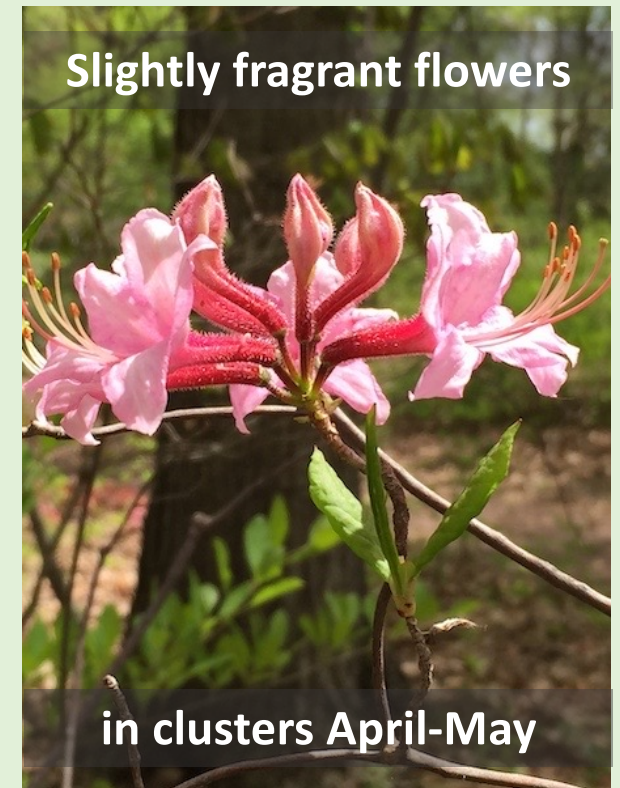
Coastal New England into Southeast; throughout VA

- Multi-stemmed, rounded with horizontal branching
- 3-6' x 4-7'
- Part-shade; dappled sunlight
- Moist, acidic soil, pH 4.5-5.5
- Deer frequently damage
- Suckering



# Pinxterbloom Azalea

**Nectar & pollen:** Bees, butterflies, hummingbirds



# Black Haw

## *Viburnum prunifolium*

Mid-Atlantic, some of Southeast; throughout VA

- Upright, multi-stemmed or single trunk
- 12-15' x 6-12'
- Sun/part-shade
- Dry/moist
- Tolerates clay soil, drought, air pollution, Black Walnut
- Can sucker
- Deer may browse

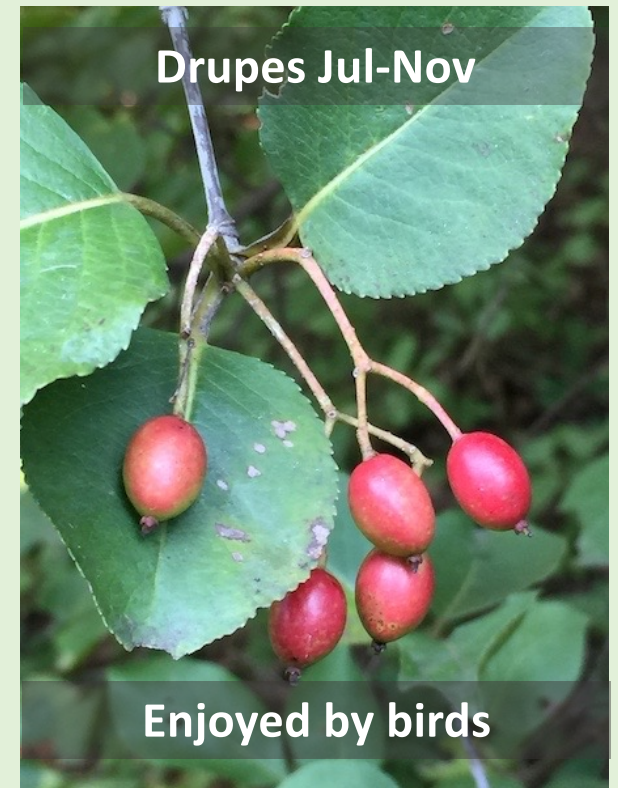
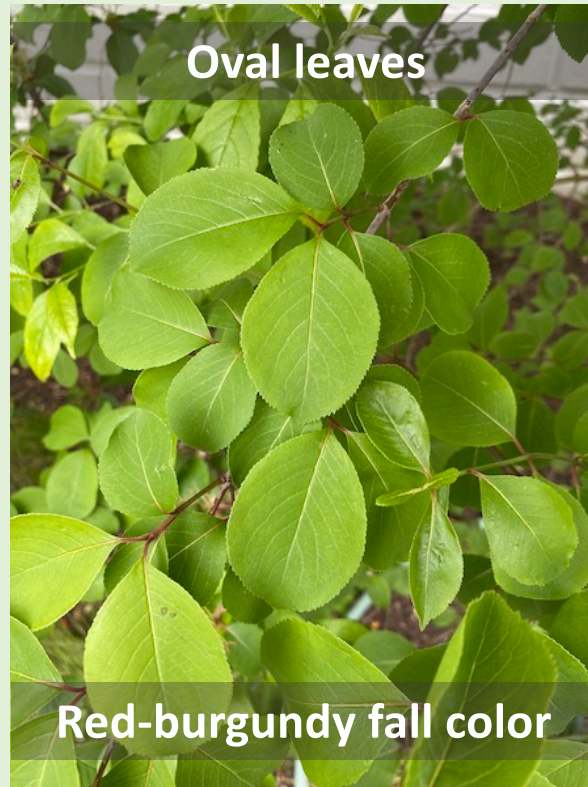
Use as specimen plant, in shrub borders, or as hedge or screen



Native alternative to  
invasive Japanese Privet

# Black Haw

**Nectar & pollen:** Myriad small bees, flies, Lepidoptera  
**Larval host:** Moths, including Hummingbird Clearwing

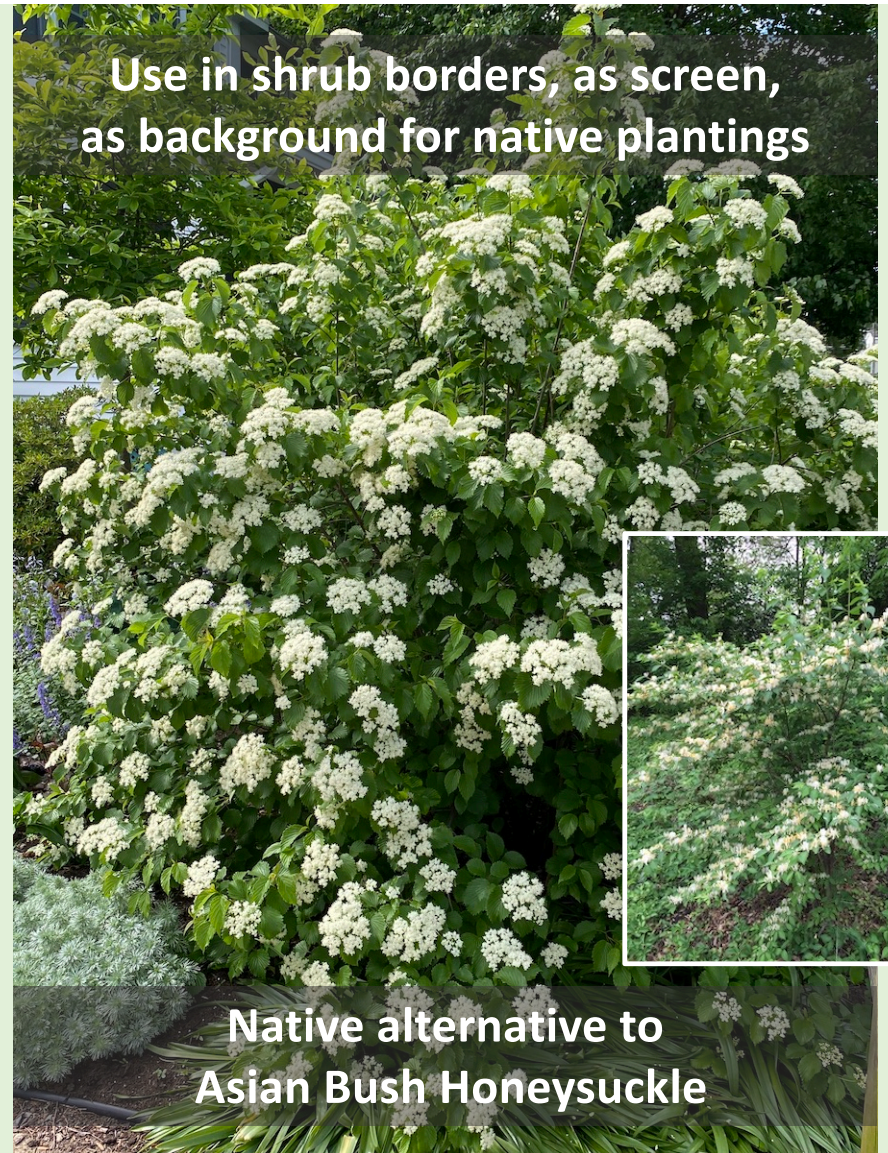


# Arrowwood

## *Viburnum dentatum*

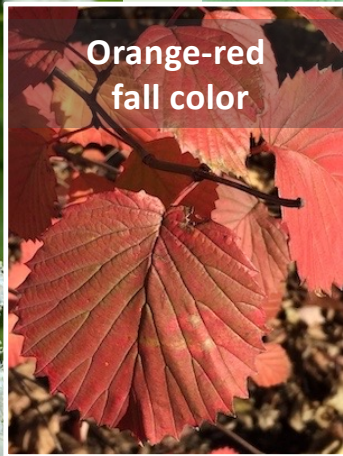
Southern PA south; most of VA, except SW

- Rounded, multi-stemmed
- 6-10' x 6-10'
- Sun/part-shade
- Moist
- Tolerates a range of soil & pH
- Spreads via suckers
- Somewhat deer-resistant



# Arrowwood

**Nectar & pollen:** Bees, butterflies  
**Larval host:** Spring Azure



# Strawberry-bush

*Euonymus americanus*

NJ through Southeast; Piedmont & Coastal Plain in VA

- Airy, multi-stemmed
- 4-6' x 4-6'
- Part-shade
- Moist
- Tolerates clay soil & full shade; fruits best in light shade
- Deer often severely damage

Use along foundations, as hedge, grouped on woodland margins



Native alternative to  
Nandina



# Strawberry-bush

Nectar & pollen: Bees, beetles, flies, ants

Delicate yellow flowers



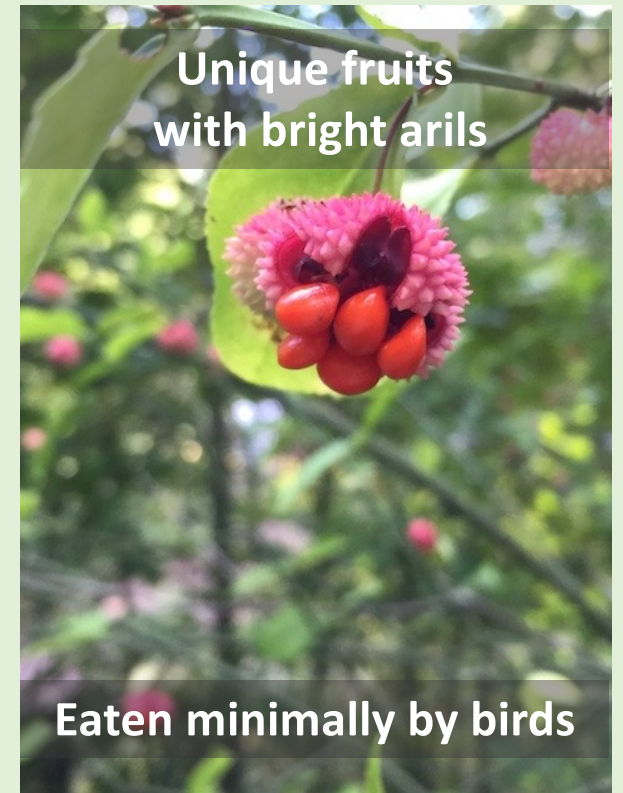
Bloom May

Oval leaves/green twigs



Dark red fall color

Unique fruits with bright arils



Eaten minimally by birds

# Common Ninebark

*Physocarpus opulifolius*

PA south; mainly Mountains & Piedmont in VA

- Fountaining, multi-stemmed
- 3-10' x 6-10'
- Sun/part-shade
- Dry/moist
- Easily grown, resilient
- Tolerates clay, dry & rocky soil, drought, erosion
- Deer rarely severely damage



# Common Ninebark

**Nectar & pollen:** Bees, butterflies, beetles

**Larval host:** Several moths

Foliage used by leaf cutter bees



# Inkberry

*Ilex glabra*

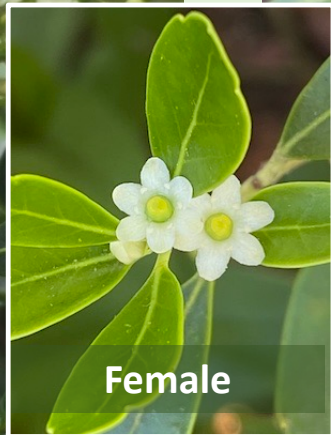
Coast ME to TX; Coastal Plain in VA

- Rounded to spreading
- 6-10' x 6-12'
- Sun/part-shade
- Moist/wet
- Evergreen, but protect from harsh winter weather
- Spreads by suckers
- Rabbits & deer may browse



# Inkberry

**Nectar & pollen:** Bees, incl. *Colletes* specialist; butterflies  
**Larval host:** Henry's Elfin



# Virginia Sweetspire

*Itea virginica*

NJ & DE, Coastal Plain & NoVA in VA, Southeast

- Arching to rounded
- 6-10' x 4-6'
- Sun/part-shade
- Moist/wet, humus-rich soil
- Tolerates clay, flooding to 6", dense shade
- Deer-resistant
- Suckers to form thickets

Hedge or foundation planting;  
rain garden, erosion control

'Henry's Garnet'

(5' x 5')

Shorter cultivars available

'Little Henry'

(3' x 3')

Native alternative to  
invasive Burning Bush



# Virginia Sweetspire

Nectar & pollen: Bees, wasps, butterflies

**Drooping flower clusters**  
May-June



**Lustrous oval leaves**



**Flaming fall color**



**Fruit capsules Jun-Mar**



**Seeds eaten by birds**

# Mountain Laurel

*Kalmia latifolia*

ME to Southeast, inland; most of VA, except coast

- Multi-stemmed, evergreen
- 5-20' x 5-15'
- Part-shade; best in morning sun or dappled shade
- Dry/moist, acidic soil, pH 4.5-6.5
- Tolerates rocky soil, but not clay
- Thicket-forming
- Deer occasionally damage

Use in shaded shrub borders  
Compliments *Rhododendron* species



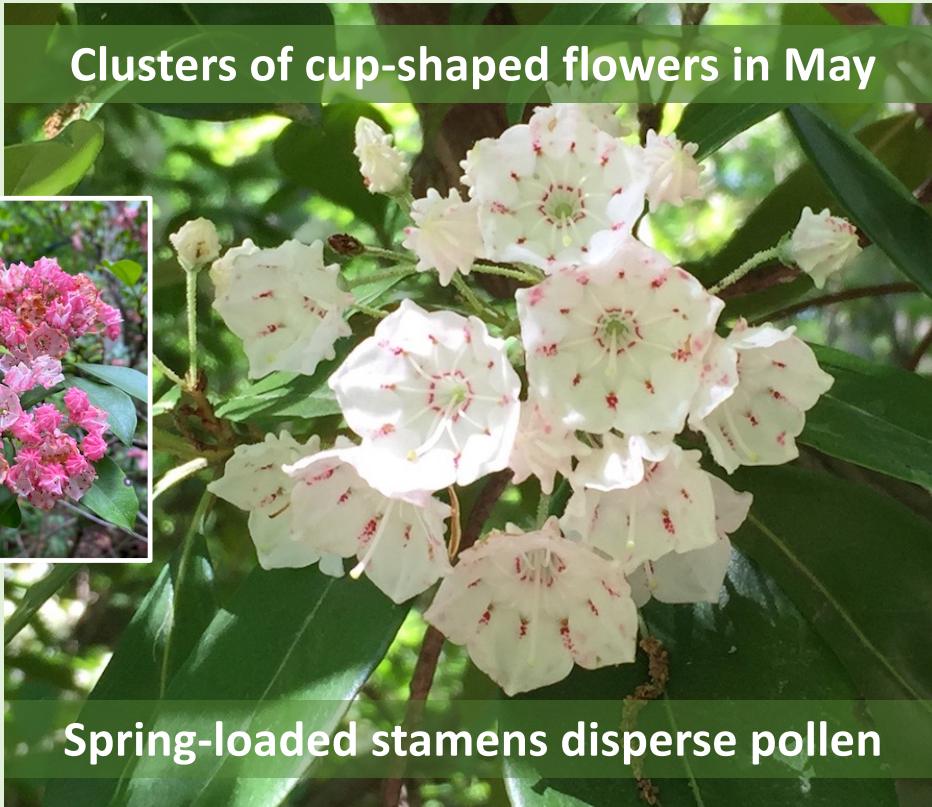
Native alternative to  
Asian Camellias



# Mountain Laurel

Nectar & pollen: Bees, esp. *Andrena* specialists; butterflies, and hummingbirds

Clusters of cup-shaped flowers in May



Spring-loaded stamens disperse pollen

Shiny evergreen leaves  
& short, crooked trunk



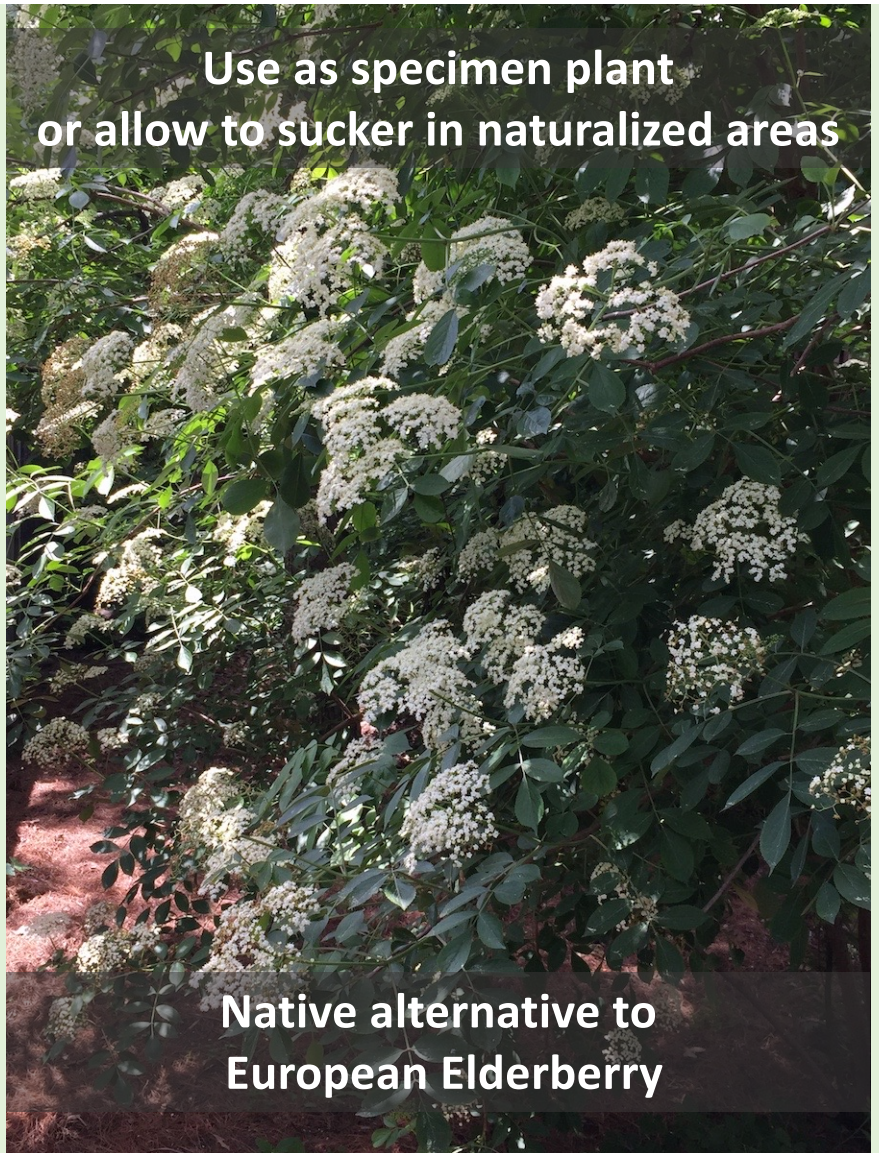
Fruit for birds

# Elderberry

## *Sambucus canadensis*

Much of Eastern U.S.; throughout VA

- Loose, arching form
- 9-12' x 6-10'
- Sun/part-shade
- Moist (tolerates wide range)
- Spreads via suckers
- Deer may browse



Use as specimen plant  
or allow to sucker in naturalized areas

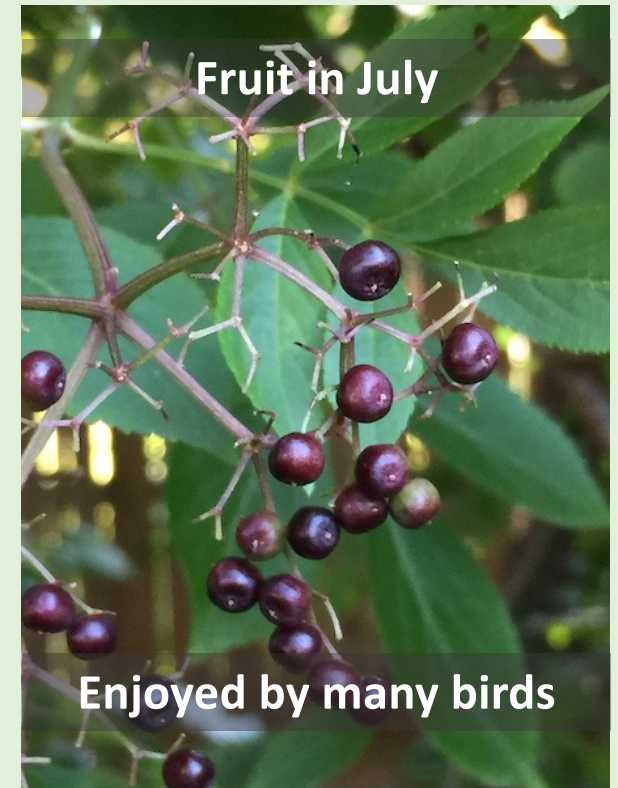
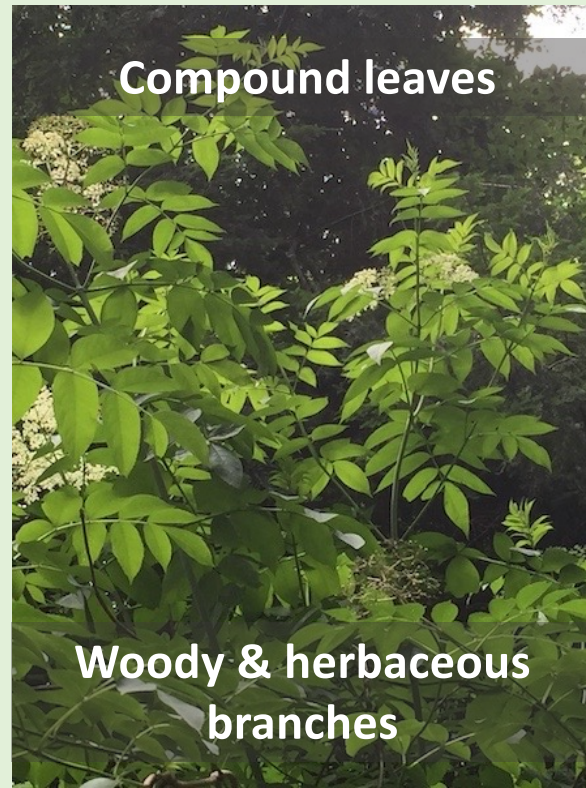
Native alternative to  
European Elderberry

# Elderberry

**Nectar & pollen:** Bees, syrphid flies, butterflies

**Larval host:** Butterflies & moths, including Cecropia moth

Stalks used by stem-nesting bees



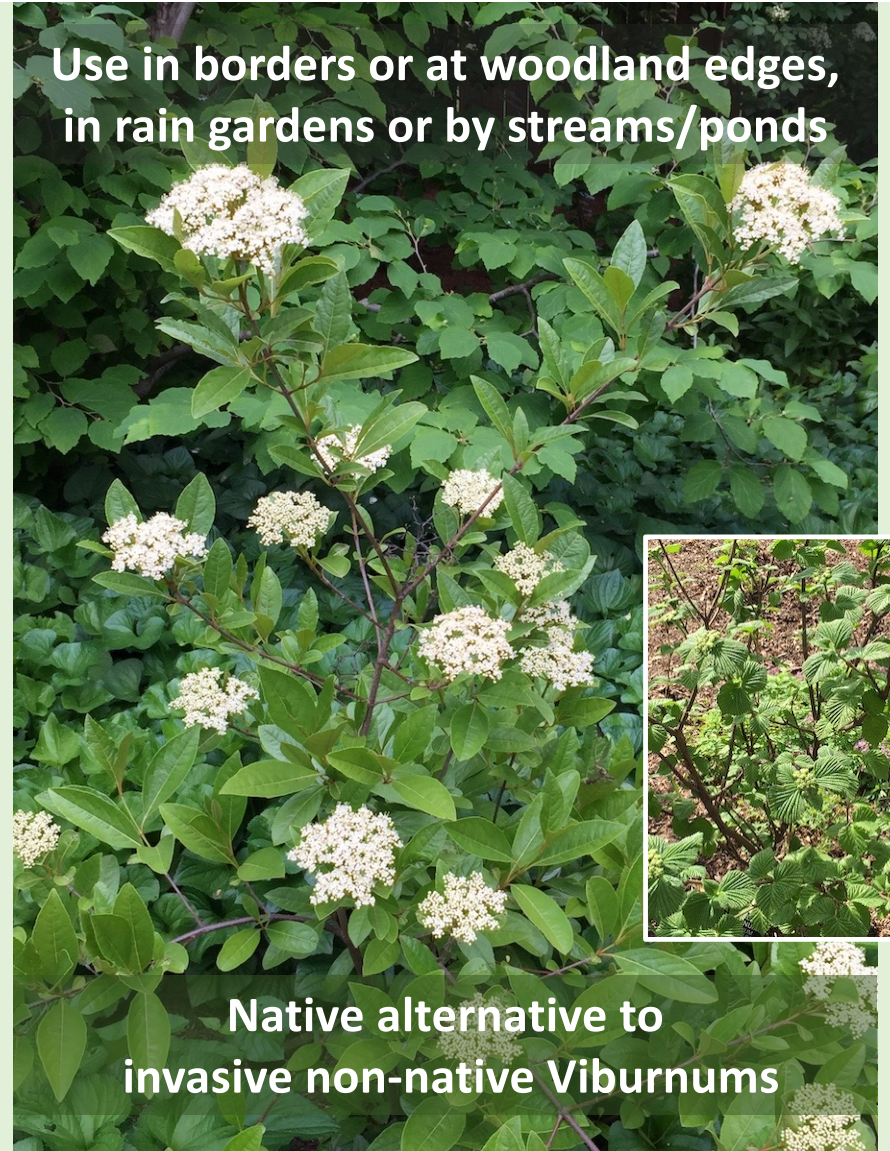
# Possum-haw

## *Viburnum nudum*

Entire East Coast & Gulf Coast to East TX

- Rounded, multi-stemmed
- 5-12' x 5-12'
- Sun/part-shade
- Moist/wet, acidic soil
- Tolerates wide range of soils
- Deer may browse

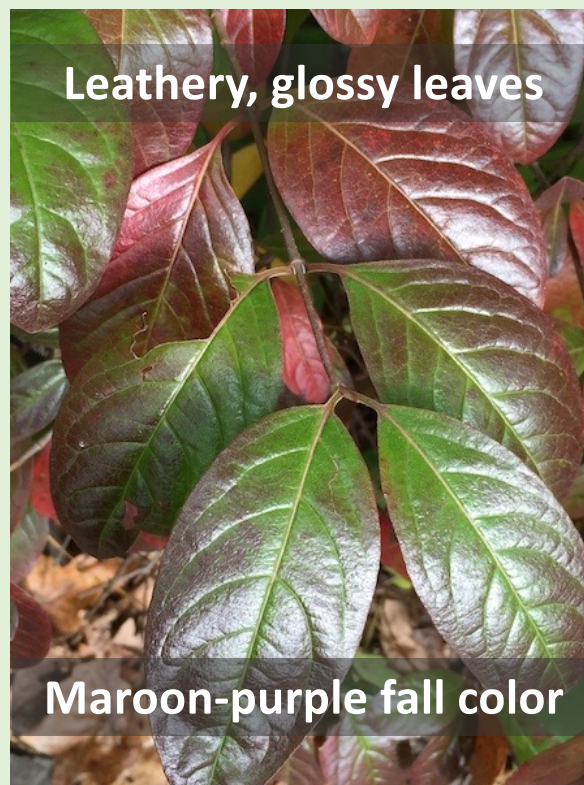
Use in borders or at woodland edges,  
in rain gardens or by streams/ponds



Native alternative to  
invasive non-native Viburnums

# Possum-haw

Nectar & pollen: Bees, butterflies  
Larval host: Spring Azure



# New Jersey Tea

## *Ceanothus americanus*

Much of Eastern U.S.; throughout VA

- Upright, multi-stemmed
- 3' x 3-4'
- Sun/part-shade
- Dry/moist
- Massive roots, drought-tolerant; great for erosion control
- Nitrogen-fixing
- Rabbits & deer may browse

Use as ground cover on dry slopes  
Site carefully; doesn't transplant well



Native alternative to  
Japanese Spiraea

# New Jersey Tea

**Nectar & pollen:** Bees incl. *Andrena* specialists; wasps, butterflies, flies, beetles  
**Larval host:** Spring/Summer Azure, Mottled Duskywing, some moths



# Wild Hydrangea

## *Hydrangea arborescens*

Central part of East; Mountains & Piedmont in VA

- Mound-shaped, unbranched canes
- 3-6' x 3-5'
- Part-shade/shade
- Moist; intolerant of drought
- Deer may browse





# Wild Hydrangea

**Nectar & pollen:** Bees, wasps, syrphid flies

**Larval host:** Hydrangea Sphinx, Leaf Tier moths



# Buttonbush

## *Cephalanthus occidentalis*

Much of Eastern U.S.; throughout VA

- Rounded, irregular form
- 6-12' x 6-10'
- Sun/part-shade/shade
- Moist/wet
- Best fruiting in full sun
- Tolerates flooding (up to 36")
- Rabbits & deer may browse

Use in shrub borders, in rain gardens,  
or beside ponds



Native alternative to  
invasive Butterfly Bush

# Buttonbush

**Nectar & pollen:** Bees, wasps, butterflies, flies, beetles, hummers  
**Larval host:** Hydrangea & Titan sphinxes, Beautiful Wood Nymph

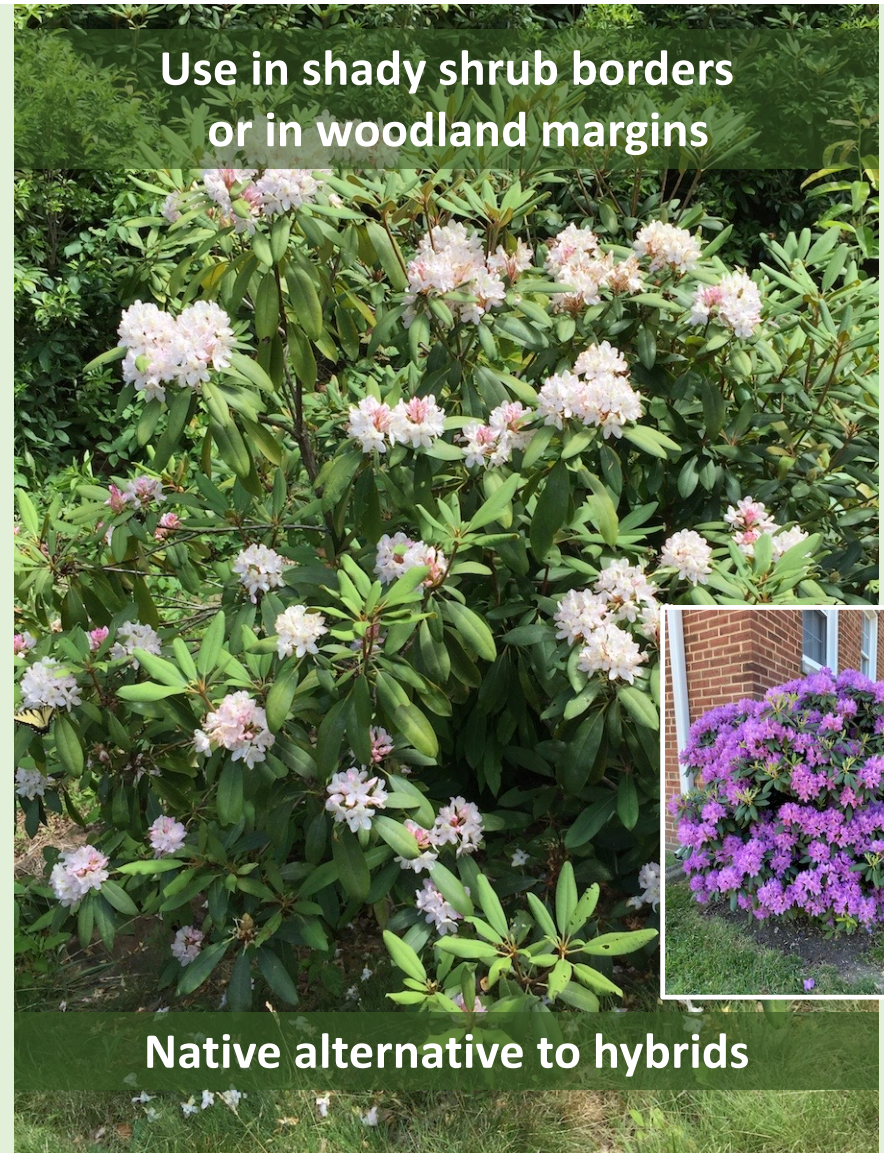


# Great Rhododendron

## *Rhododendron maximum*

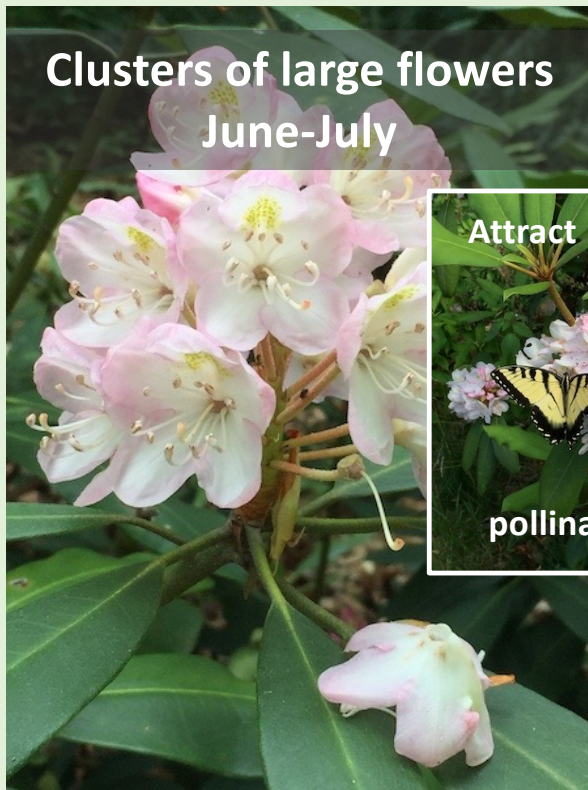
ME to AL & GA; Mountains & foothills, NoVA in VA

- Evergreen, multi-stemmed
- 5-15' x 5-12'
- Part-shade/shade
- Moist, rich acidic soil; pH 4.5-6.0
- Tolerates full shade; **intolerant** of clay soil & “wet feet”
- Deer may severely damage
- **Toxic** to dogs, cats & humans



# Great Rhododendron

**Nectar & pollen:** Bees, including specialist; butterflies and hummingbirds  
**Larval host:** Tiger Swallowtail, Elegant Sphinx



Clusters of large flowers  
June-July



Attract many

pollinators



Leathery, strap-like leaves

Provide excellent cover



Seeds eaten by songbirds

# Winterberry

*Ilex verticillata*

Eastern N.A., mainly n. of VA; throughout VA

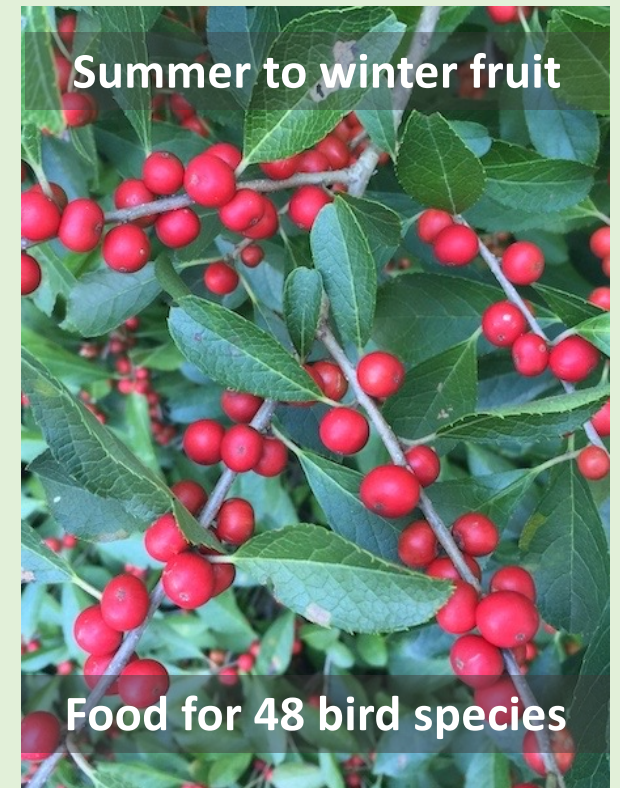
- Deciduous holly, rounded form
- 6-12' x 3-12'
- Sun/part-shade
- Moist/wet, acidic soil, pH 4.5-6.5
- Tolerates clay, air pollution
- Deer may severely damage



# Winterberry

Nectar & pollen: Bees, including *Colletes* specialist; wasps

Larval host: Henry's Elfin

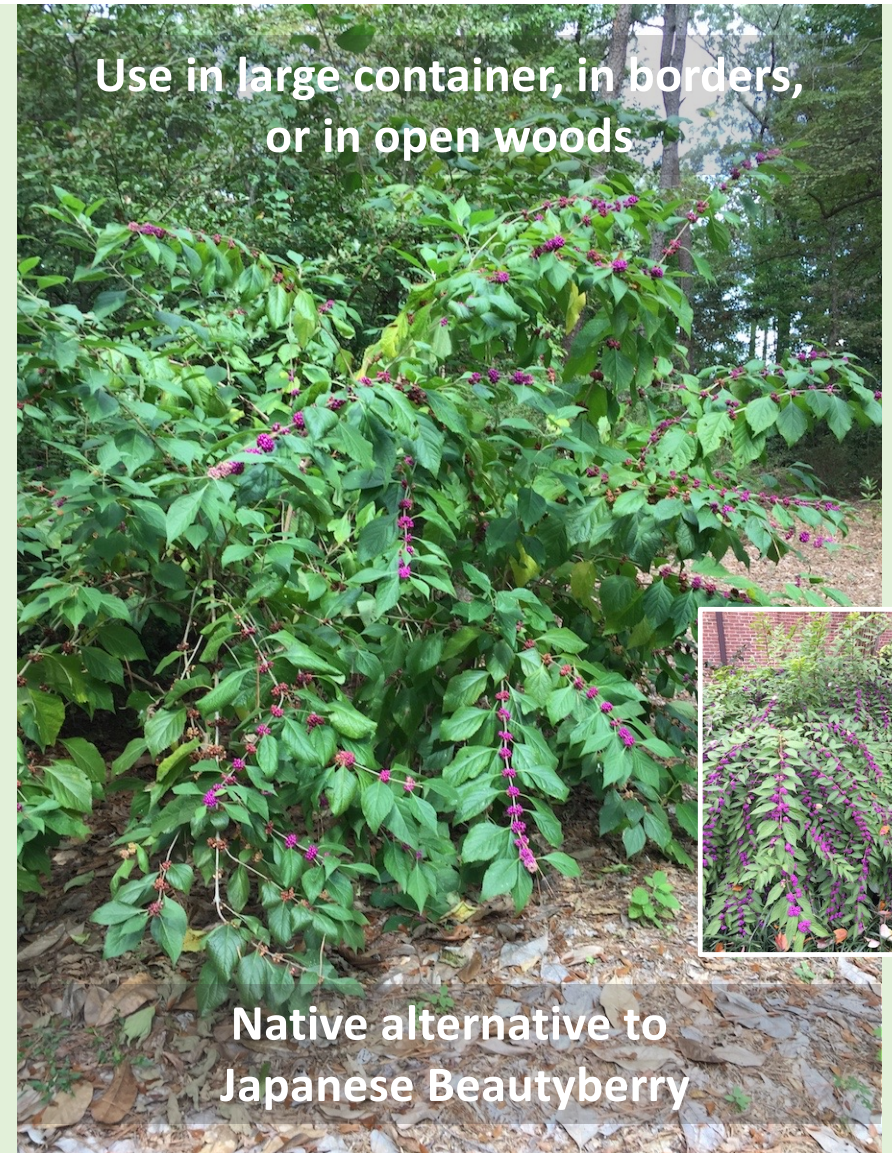


# American Beauty-berry

*Callicarpa americana*

Southeast from VA Coastal Plain to East TX

- Vase-shaped, arching branches
- 3-6' x 6-8'
- Sun/part-shade; **intolerant** of deep shade
- Moist
- Fast-growing
- Deer may damage





# American Beauty-berry

**Nectar:** Butterflies & especially bees

**Larval host:** Spring Azure butterfly & Snowberry Clearwing moth



# Sweet Pepperbush

## *Clethra alnifolia*

Coast from ME to eastern TX; Coastal Plain in VA

- Upright, rounded
- 3-8' x 4-6'
- Sun/part-shade/shade
- Moist/wet
- Tolerates clay soil, dense shade, some drought once established
- Can spread slowly via suckers
- Deer seldom severely damage

Use in butterfly gardens, in rain gardens, or to control erosion



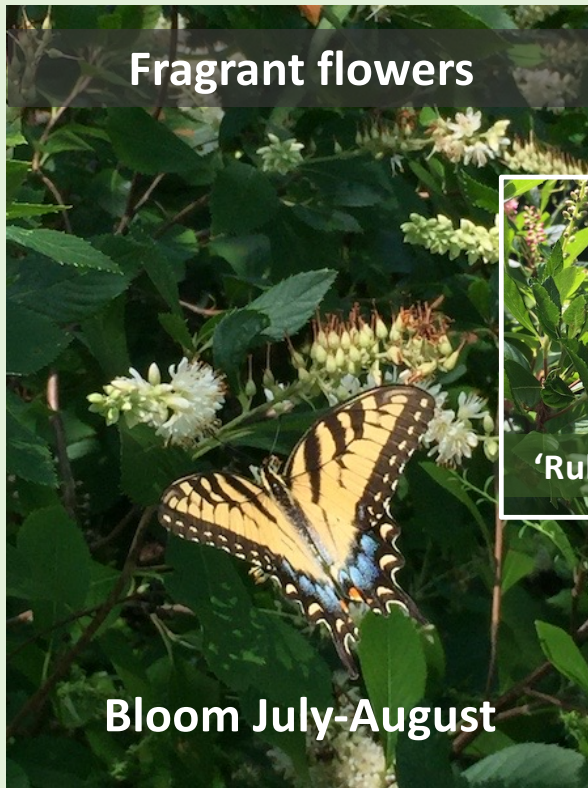
Some dwarf cultivars



Native alternative to overused non-native Cherry Laurel

# Sweet Pepperbush

**Nectar & pollen:** Many native bees, butterflies, hummingbirds  
**Larval host:** 11 moth species



# Witch Hazel

## *Hamamelis virginiana*

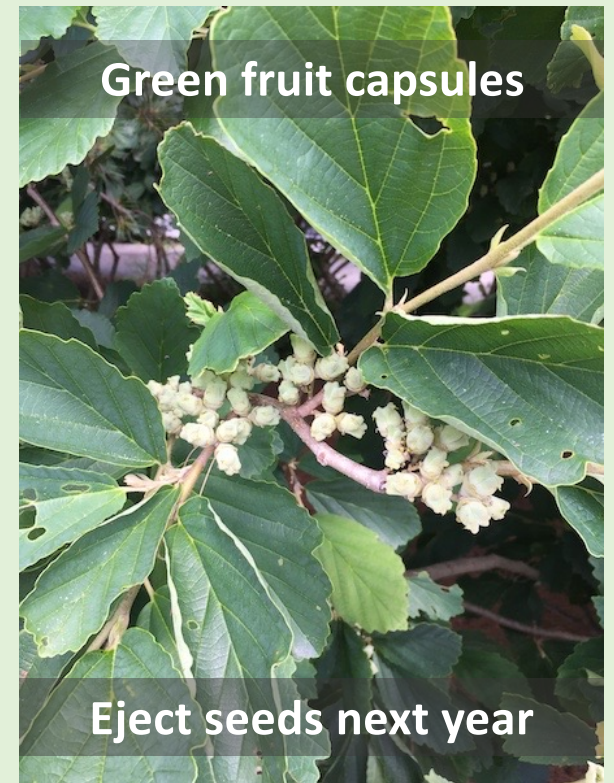
Much of Eastern U.S., west to AR & LA; throughout VA

- Multi-stemmed, vase shape
- 15-20' x 15-20'
- Sun/part-shade
- Moist, acidic, organically rich
- Tolerates heavy clay soil, erosion
- Deer may severely damage
- Can form colonies



# Witch Hazel

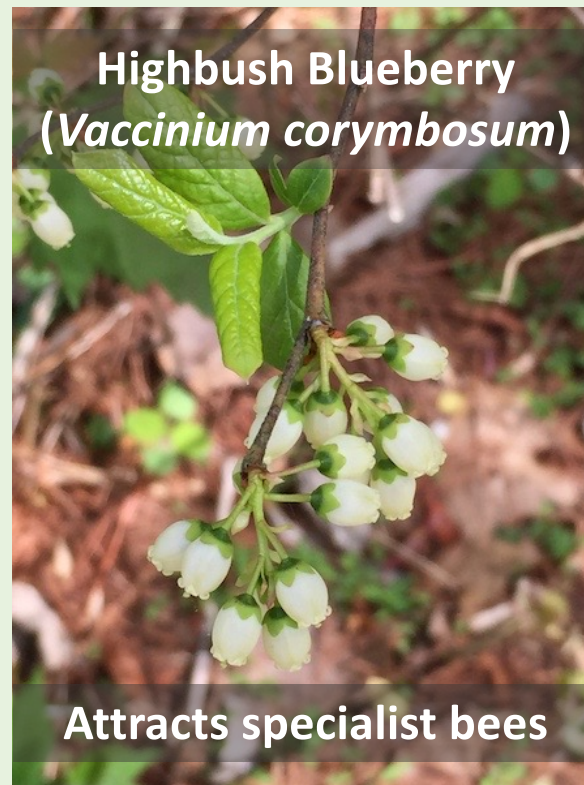
**Nectar & pollen:** Winter-flying Owlet moths? Flies? Bees?  
**Larval host:** Spring Azure, moths



# Other Species

**Highbush Blueberry:** Arl. & Fx. Cos. & s. mtns.; scattered E. Coast  
**Steeplebush:** VA Coastal Plain; scattered Mid-Atlantic & north

**#5 among top 20 woody keystone plants:  
Supports 288 species  
of Lepidoptera**



# Other Species

**Coastal Doghobble:** VA southern Coastal Plain & Southeast

**Pussy Willow:** Augusta Co. in VA; Mid-Atlantic, upper Midwest



**#3 among top 20 woody keystone plants:  
Supports 455 species  
of Lepidoptera**

# Other Species

**Sweet-shrub:** Scattered in VA; principally Southeast

**Dwarf Fothergilla:** Scattered from NC through Southeast

**Oakleaf Hydrangea:** TN & NC through Southeast





# Resources

# Resources



## Public Education Presentations in Master Gardener Virtual Classroom at MGNV.ORG



# Resources




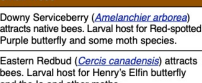
## Best Bets Fact Sheet

**Tried and True Native Plants**  
**Best Bets to Attract Pollinators**

Best Bets: Plants for Particular Uses in the Mid-Atlantic

These plants attract myriad beneficial insects. Those included in a Penn State Extension study show rankings for total pollinator visits and pollinator diversity.

MGNV  
 Master Gardeners of Northern Virginia  
 Arlington, Alexandria, Leesburg

Perennials	<i>P. muticum</i> , <sup>1</sup> <i>Solidago</i> , <sup>2</sup> <i>E. hyssopifolium</i> <sup>3,4</sup>
Columbine ( <i>Aquilegia canadensis</i> ) attracts hummers, butterflies. Hosts Columbine Duskywing skipper.	
Milkweeds ( <i>Asclepias</i> spp., <i>Asclepias incarnata</i> , <sup>5,17</sup> <i>A. tuberosa</i> ) are larval hosts for Monarch butterfly.	
White Turtlehead ( <i>Chelone glabra</i> ) attracts bees, butterflies, hummers. Hosts Baltimore Checkerspot.	
Coreopsis ( <i>Coreopsis tripteris</i> , <sup>18</sup> <i>C. verticillata</i> <sup>17</sup> ) attracts bees, wasps, syrphid flies, butterflies.	
Purple Coneflower ( <i>Echinacea purpurea</i> ) attracts pollinators, goldfinches. Hosts Silvery Checkerspot.	
Thoroughwort/Boneset ( <i>Eupatorium hyssopifolium</i> , <sup>3,5</sup> <i>E. perfoliatum</i> <sup>11,18</sup> ) attracts diverse beneficial insects.	
Joe-pye-weeds ( <i>Eutrochium</i> spp., <i>E. dubium</i> , <sup>7</sup> <i>E. fistulosum</i> , <sup>11</sup> <i>E. maculatum</i> <sup>10</sup> ) attract many pollinators.	
Gayfeathers ( <i>Liatris microcephala</i> , <sup>18</sup> <i>L. spicata</i> <sup>19</sup> ) attract bees, butterflies, and hummingbirds.	
Beebalm/Bergamot ( <i>Monarda didyma</i> , <i>M. fistulosa</i> , <sup>22</sup> <i>M. punctata</i> <sup>19</sup> ) host Orange Mint & other moths.	<b>Small Trees</b>
<i>Phlox divaricata</i> and <i>P. paniculata</i> attract butterflies.	Downy Serviceberry ( <i>Amelanchier arborea</i> ) attracts native bees. Larval host for Red-spotted Purple butterfly and some moth species.
Short-toothed Mountain-mint ( <i>Pycnanthemum thurifolium</i> ) <sup>13</sup> attracts myriad and diverse beneficial insects and pollinators.	Eastern Redbud ( <i>Cercis canadensis</i> ) attracts bees. Larval host for Henry's Elin butterfly and the lo and other moths.
Goldenrod ( <i>Solidago</i> spp., <i>S. rigida</i> , <sup>21</sup> <i>S. rugosa</i> , <sup>13</sup> <i>S. nemoralis</i> <sup>4,15</sup> ) hosts numerous moth species.	Native Dogwoods ( <i>Cornus</i> spp., <i>C. alternifolia</i> , <i>C. florida</i> ) attract bees, wasps, flies, butterflies. Larval hosts for Spring and Spring/Summer Azure butterflies and some moth species.
Asters ( <i>Symphoricarpos cordifolium</i> , <i>S. laevis</i> , <sup>16,8</sup> <i>S. novae-angliae</i> <sup>20</sup> ) attract myriad pollinators.	<b>Vines</b>
Blue Vervain ( <i>Verbena hastata</i> ) attracts wasps, bees, butterflies, hummers. Hosts Verbena moth.	Trumpet Honeysuckle ( <i>Lonicera sempervirens</i> ) attracts bees, butterflies, moths, hummingbirds. Larval host for the Snowberry Clearwing and Hummingbird Clearwing moths.
New York Ironweed ( <i>Vernonia noveboracensis</i> ) serves as larval host to American Lady butterfly.	<b>Learn More about These Plants</b>
<b>Shrubs</b>	For detailed plant fact sheets, use Latin name hyperlinks or visit <a href="#">Tried &amp; True Native Plants: Mid-Atlantic</a> on <a href="#">egvn.org</a> .
Buttonbush ( <i>Cephalanthus occidentalis</i> ) attracts bees, butterflies, hummers. Hosts several moths.	Pollinators: <sup>1</sup> Orange Mint Moth <sup>2</sup> Wasps <sup>3</sup> Honey Bees, Red-banded Hairstreak
Sweet Pepperbush ( <i>Clethra alnifolia</i> ) attracts bees, wasps, flies, butterflies, hummingbirds.	

developed by Master Gardeners of Northern Virginia, serving Arlington and Alexandria

## Blogposts on Pollinators

### Gardening to Attract Butterflies and Moths

JUNE 23, 2022



Today's #PollinatorWeek post provides gardening tips, including those for patios/balconies, to attract butterflies and moths with the use and arrangement of nectar and host plants. Also, watch a video of a monarch caterpillar eating a milkweed leaf.

### Nectar and Host Plants for Selected Mid-Atlantic Butterflies and Moths

JUNE 24, 2022



Today's #PollinatorWeek post includes a list of nectar and host plants for fifty common Mid-Atlantic lepidopterans. Plants may vary from one lepidopteran to another although some attract multiple species and some feed both adults and caterpillars.

### Survival Tactics of Butterflies & Moths

JUNE 23, 2022



Continuing our #PollinatorWeek celebration, today's post describes different tactics lepidopterans employ to survive and includes a new video of a gray hairstreak using his hindwing tails to imitate his antennae.

## eBook through VCE

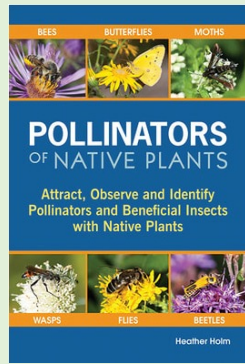
Virginia Cooperative Extension  
 For the Birds, Butterflies & Hummingbirds:

*Creating Inviting Habitats*

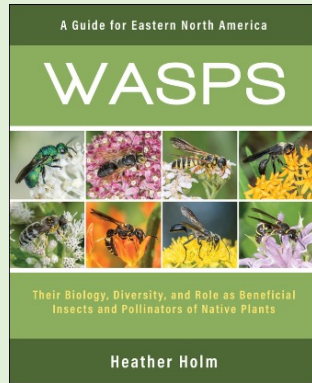
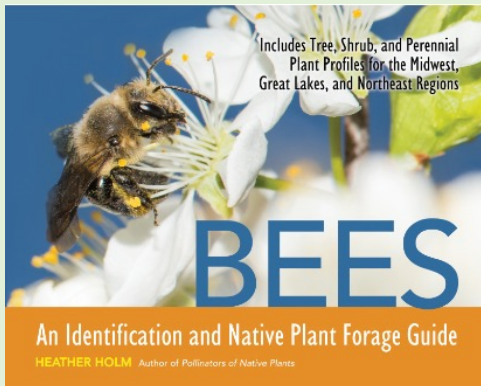
Mary Free, Virginia Cooperative Extension Master Gardener, Northern Virginia  
 Reviewed by Dave Close, Consumer Horticulture Specialist, Virginia Tech, Blacksburg, VA

Publication HORT-59NP

# Resources



## Books & Online Charts on Pollinators by Heather Holm

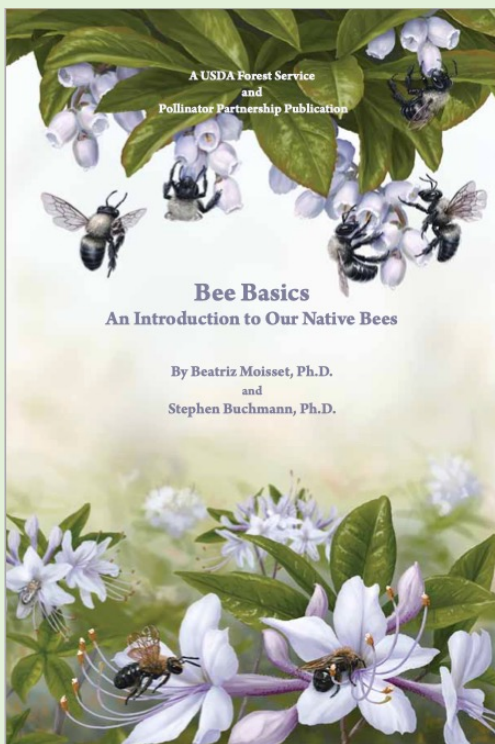


**NATIVE TREES & SHRUBS FOR POLLINATORS**

TREE TYPE	BOTANICAL NAME	COMMON NAME	COLOR	MOISTURE	HEIGHT	BLOOM				POLLINATORS										
						APR	MAY	JUN	JUL	AUG	SEP	BEES	BUTT/MOTH	WASPS	FLIES	BEEFLIES	OTHER			
CANOPY TREES	Acer rubrum	Red Maple	red/yellow	m	to 95 ft							X	X							
	Acer saccharum	Sugar Maple	yellow	m	to 100 ft							X	X	X						
	Asclepias tuberosa	Orange Milkweed	orange	m	to 35 ft							X	X	X						
	Asclepias speciosus	Yellow Milkweed	yellow	m	to 45 ft							X	X	X						
	Gymnocladia dioica	Kentucky Coffeetree	white	w,m	to 75 ft							X	X	X						
	Prunus serotina	Black Cherry	white	m,d	to 100 ft							X	X	X						
	Tilia americana	American Basswood	white	m	to 95 ft							X	X	X						
	EMERGENT TREES AND SMALL TREES	American sycamore	American Sycamore	white	w,m,d	10-25 ft						X	X	X						
		Amorpha fruticosa	Fairie Indigo	purple	w	3-7 ft							X	X						
		Cercis canadensis	Eastern Redbud	pink	m	to 25 ft							X	X	X					
		Cornus alternifolia	Pagoda Dogwood	white	m	to 25 ft							X	X	X					
		Cornus rugosa	Round Leaved Dogwood	white	m,d	5-18 ft							X	X	X					
Coturnicops cruz-galli		Cockspur Hawthorn	white	m	to 25 ft							X	X	X						
Cotoneaster mollis		Downy Hawthorn	white	w,m	to 40 ft							X	X	X						
Prunus americana		Wild Plum	white	m,d	8-20 ft							X	X	X						
Prunus pennsylvanica		Pin Cherry	white	m,d	10-35 ft							X	X	X						
Prunus virginiana		Chokecherry	white	m,d	10-30 ft							X	X	X						
Rhus glabra		Smooth Sumac	lime/yell	m,d	6-20 ft							X	X	X						
Rhus typha		Staghorn Sumac	lime/yell	m,d	10-35 ft							X	X	X						
Solidago canadensis	Pinny Willow	white/yell	w	2-3.5 ft							X	X	X							
Staphylea trifolia	American Bladdernut	white	m	8-20 ft							X	X	X							
Viburnum lentago	Hairyberry Viburnum	white	m,d	8-30 ft							X	X	X							
Zanthoxylum americanum	Prickly Ash	yellow	m,d	6-20 ft							X	X	X							
SHRUBS	Amorpha canescens	Leadplant	lavender	m,d	2-4 ft							X	X	X						
	Asinus medeolae	Black Chokeberry	white	w,m	2-4 ft							X	X							
	Ceanothus americanus	New Jersey Tea	white	w,m	2-6 ft							X	X	X						
	Cephalanthus occidentalis	Butterbush	white	w,m	5-15 ft							X	X	X						
	Cornus amomum	Silly Dogwood	white	w	10-15 ft							X	X	X						
	Cornus racemosa	Gray Dogwood	white	m,d	10-18 ft							X	X	X						
	Cornus sericea	Red Osier Dogwood	white	w,m	6-15 ft							X	X	X						
	Desmodium illinoense	Deerf Bush Honeyuckle	yellow	m,d	2-4 ft							X	X							
	Ilex verticillata	Winterberry	white	w,m	6-15 ft							X	X							
	Physocarpus opulifolius	Ninebark	white	m,d	5-10 ft							X	X	X						
	Ribes ssp.	Cornelian Dogberry	white/yell	w,m,d	2-10 ft							X	X	X						
	Rosa arkansana	Prairie Wild Rose	pink	m,d	1-3 ft							X	X	X						
Rosa blanda	Smooth Wild Rose	pink	m,d	3-7 ft							X	X	X							
Spiraea alba	Meadowsweet	white	w	3-7 ft							X	X	X							
Spiraea tomentosa	Hardhack	pink	w	3-6 ft							X	X	X							
Symphoricarpos alba	Snowberry	white/pink	d	2-5 ft							X	X	X							
Symphoricarpos occidentalis	Wolfberry	white/pink	d	3-6 ft							X	X	X							
Viburnum rafinesquianum	Downy Arrowwood Vib.	white	d	3-10 ft							X	X	X							

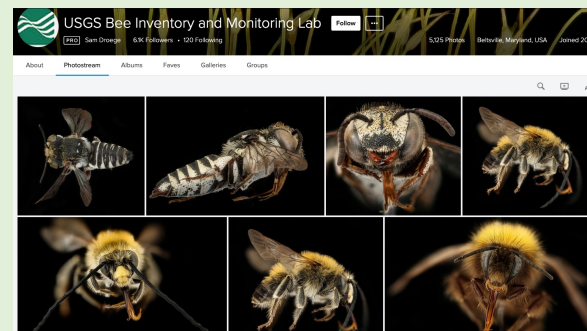
**MID-ATLANTIC PLANTING AND WASP OBSERVATION GUIDE**

# Resources



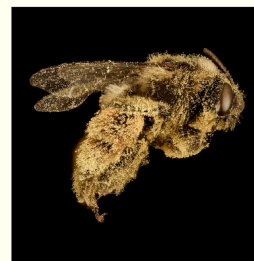
## Forest Service & Pollinator Partnership Publication

## Websites on Native Bees by Jarrod Fowler & Sam Droege

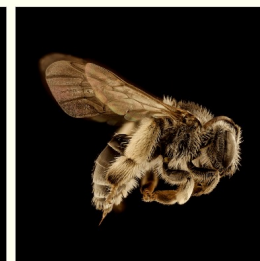


### Pollen Specialist Bees of the Eastern United States

Jarrold Fowler & Sam Droege (2020)



*Melissodes desponsus*



*Macropis ciliata*

Family	Subfamily	Tribe	Genus	Species	Authority	Year	PL	LA	ME	MS	NC	NY	VA	WV	Other	
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	Varro, 1916	1916										Ancistrinae: Gowdie, Will., & Johnson, L.
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	Robertson, 1891	1891										Ancistrinae: Friese, L., & Johnson, L. & Johnson, L., & Johnson, L., & Johnson, L.
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	(Cresson, 1878)	1878										Andr. L.
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	Robertson, 1897	1897										Discreetinae: X, X, X, X
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	Robertson, 1891	1891										Discreetinae: X, X, X, X
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	MacLeod, 1906	1906										Discreetinae: X, X, X, X
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	Varro, 1908	1908										Discreetinae: X, X, X, X, X, X
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	Varro, 1907	1907										Discreetinae: X, X, X, X
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	Varro, 1907	1907										Discreetinae: X, X, X, X
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	Dalla Torre, 1895	1895										Discreetinae: X, X, X, X
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	Varro, 1900	1900										Discreetinae: X, X, X, X
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	Cockrell, 1899	1899										Discreetinae: X, X, X, X
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	(Kirtz, 1892)	1892										Discreetinae: X, X, X, X
Ancistrinae	Ancistrinae	Ancistrini	<i>Andrena</i>	<i>Andrena (Andrena) maculosa</i>	Varro, 1907	1907										Discreetinae: X, X, X, X

# Where to Buy Native Plants

Plant NOVA Natives  
Naturally Beautiful!

Promoting native plants in Northern Virginia

Search...

Home Start here! Get plants/help Habitat gardening Landscaping solutions Spread the word Professionals

## Native-only sellers

These native plant sources make it easy to find and purchase native plants for your home and garden without the risk of purchasing a non-native or invasive species.

### Natives Sold Exclusively

Northern Virginia

- Nature by Design\*** A local native plant nursery in Alexandria, Virginia. Same day browsing appointment are always available, or shop by curbside pickup. <http://www.nature-by-design.com/>
- Watermark Woods\*** A local native plant nursery in Hamilton, Virginia. Curbside pickup available. They also sell seeds here. [www.watermarkwoods.com](http://www.watermarkwoods.com)
- Virginia Native Plant Society\*** Virginia Native Plant Society Potomack Chapter: First Wednesday of each month, 10 am to 1 pm, April through October. Native plants sold in the VNPS propagation beds at Green Spring Gardens Park, behind the horticulture center. No credit cards - cash and checks only.
- Earth Sangha\*** is a nonprofit that propagates wild plants for ecological restoration. Curbside pickup, 1-on-1 appointments or "Self-Service Saturdays." <http://www.earthsangha.org>

A little further afield

- Hill House Farm and Nursery\*** Native Plants for Harmonious Gardens. Castleton, VA. Curbside pickup and delivery available. [www.hillhouseplants.com](http://www.hillhouseplants.com)
- Chesapeake Natives** offers online sales; see their website for on-site plant sales information in Upper Marlboro, MD. <http://chesapeakenatives.org/>
- Tree Talk Natives** in Clarksburg, MD. <https://www.treetalknatives.com/>
- Wildflower Native Plant Nursery** - Bethesda, MD. open by appointment. [www.wildflowernativeplants.com](http://www.wildflowernativeplants.com)

\* Nonprofit/hold-free, per vendor. Note that the Plant NOVA Natives campaign does not verify vendor pesticide use. Click for info on "Neonics".

### Mail order nurseries

- Izel!** <https://www.izelplants.com/>
- Direct Native Plants** <https://www.directnativelplants.com/>
- MidAtlantic Natives\*** [www.midatlanticnatives.com](http://www.midatlanticnatives.com)
- National Wildlife Federation** <https://gardenforwildlife.com/collections/native-plants-for-sale>
- Plant More Natives** <https://www.plantmornatives.com/>

Many conventional garden centers have red stickers on their native plants. [Click here for a list.](#)

Northern Virginia Native

three native plant nur...

### Native seed sources

### 2022 Local Native Plant Sales

Check here for one in your area!

Virginia Native Plant Society  
Conserving Wild Flowers and Wild Places

About Membership Chapters Natives Events Conservation Blog Resources

## Native Plant Nurseries

**Listing Policy:**

- The nursery sells primarily native plants and does not sell invasive species as defined in the [Virginia Invasive Plant Species List](#) published by the Virginia Department of Conservation and Recreation Natural Heritage Program.
- Plants are propagated from nursery stock or responsibly collected seeds and not removed from the wild to sell.

*VNPS does not endorse or recommend any individual nursery and is not responsible for the accuracy of claims made by those organizations included in this listing. Please report any infractions to this policy.*

To submit a nursery or plant sale to the list, or to provide updates or corrections, please contact the VNPS office at [vnps.org@gmail.com](mailto:vnps.org@gmail.com) or (540) 837-1600.

Download the Native Plant Nursery List as an [Excel File \(.xlsx\)](#) or as a [CSV File \(.csv\)](#)

[View Most Recent Updates](#)

**Search Nurseries:**

Search

Name	City	Phone	Website
<a href="#">ArcheWild Native Nurseries</a>	Quakertown, PA	(855) 752-6862	<a href="http://archewild.com">archewild.com</a>
<a href="#">Botanique</a>	Stanardsville, VA	(434) 985-3060	<a href="http://pitcherplant.com">pitcherplant.com</a>
<a href="#">Breemo Trees</a>	Bremo Bluff, VA	(434) 842-8733	<a href="http://bremotrees.com">bremotrees.com</a>
<a href="#">Davis Natives</a>	Ashland, VA	(804) 347-8495	<a href="http://davisnatives.com">davisnatives.com</a>
<a href="#">Draper Springs Nursery &amp; Gardens</a>	Draper, VA	(540) 251-4349	<a href="http://drapersprings.com">drapersprings.com</a>
<a href="#">Earth Sangha Wild Plant Nursery</a>	Springfield, VA	(703) 333-3022	<a href="http://earthsangha.org">earthsangha.org</a>
<a href="#">Farfields Farm</a>	Arlon, VA	(434) 326-2157	<a href="http://farfieldsfarm.com">farfieldsfarm.com</a>
<a href="#">Good Seed Natives</a>	Richmond, Virginia	(804) 396-4278	<a href="http://goodseednatives.com">goodseednatives.com</a>

Maryland Native Plant Society  
APPRECIATION · CONSERVATION · EDUCATION

HOME EVENTS NATIVE GARDENING PLANT ID RESEARCH GRANTS PUBLICATIONS MEMBERSHIP DONATE

Home » Native Gardening » Native Plant Nurseries

## BUYING NATIVE PLANTS

- Check out upcoming [Native Plant Sales](#)
- More information about [Gardens and Natives](#)
- Is it native to Maryland? Search for the plant in the [Maryland Plant Atlas](#). This is the most up-to-date information on Maryland nativity.
- [How to Shop for Native Plants](#) (PDF, ~83 KB)
- The [MNPS Shoppers Protest Card](#)

## NATIVE PLANT SALES

**Baltimore Native Plant Sale**  
04/15/2023 9:00 AM  
Church of the Redeemer, Baltimore

**Native Plant Sale: Loudoun County VA**  
04/22/2023 9:00 AM  
Morven Park, Leesburg VA

**Native Plant Sale: Howard County**  
05/07/2023 12:00 PM  
Robinson Nature Center, Columbia

## REGIONAL NATIVE PLANT VENDORS

MNPS provides this list solely for the convenience of those who wish to purchase native plants. It is based primarily on information received from the vendors, and therefore is not intended as an endorsement or recommendation of any of the vendors listed. Some vendors sell non-native plants in addition to native plants. Please contact the vendors for additional information about their products.

\* Vendors marked with an asterisk are members of the Maryland Native Plant Society.

If you are a vendor who wishes to be listed or if your information has changed, please send an email to [nurserylist@MDFlora.org](mailto:nurserylist@MDFlora.org).

**Adkins Arboretum\***  
12610 Eweland Road  
Ridgely, MD 21150  
Phone: 410-634-2847  
Non-profit  
Website: [www.adkinsarboretum.org](http://www.adkinsarboretum.org)  
E-mail: [nativeplants@adkinsarboretum.org](mailto:nativeplants@adkinsarboretum.org)  
Call or see the website for spring open house dates (end of April), regular nursery hours, and special sales.



Questions?