A Guide to Gardening With
SOUTHWEST VIRGINIA NATIVE PLANTS
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Nicole Hersch, Monarda fistulosa • Wild Bergamot
This guide showcases the attractive variety of plants native to the Southwest Virginia region which includes the counties of Bland, Botetourt, Buchanan, Carroll, Craig, Dickenson, Floyd, Giles, Grayson, Lee, Montgomery, Pulaski, Roanoke, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe as well as the cities of Bristol, Galax, Norton, Radford, Roanoke, and Salem.

Native plant species have evolved within specific areas and been dispersed throughout their range. These plants form the primary structure of the living landscape and provide food and shelter for native animal species. Although this guide is not comprehensive, the native plants featured here were selected because they are attractive, relatively easy for the home gardener to acquire, easy to maintain, and offer various benefits to wildlife and the environment.

The Plant SWVA Natives Campaign is able to offer this guide due to generous financial contributions from the Virginia Outdoors Foundation and the Virginia Native Plant Society. The intention of the guide is to promote the use of these plants in the urban, suburban, and rural landscapes of Southwest Virginia for their many social, cultural, ecological, and economic benefits. We hope an increased interest will drive an increase in availability of these native plants in retail centers throughout the region.

This guide was made possible because of contributions from the following organizations:
Blue Ridge Wildflower Society
New River Valley Bird Club
New River Valley Master Gardeners
New River Valley Regional Commission
Roanoke Valley Master Gardeners
Plant NOVA Natives
Plant RVA Natives
Plant Ridge & Valley Natives
Plant Southern Piedmont Natives
Virginia Department of Conservation & Recreation – Natural Heritage Program
Virginia Coastal Zone Management Program
Virginia Master Naturalists, New River Chapter
Virginia Native Plant Society, New River Chapter
Virginia Native Plant Society, State Office
Virginia Tech Dendrology

Design and publication management by Nicole Hersch and Bethany Peters, New River Valley Regional Commission.
TERMS + SYMBOLS

1. **BOTANICAL NAME** consists of the Genus + species. For example: Rudbeckia = Coneflower genus and Rudbeckia hirta = Black-eyed Susan.

2. **COMMON NAME** is how we commonly refer to a plant. Different plants can share the same common name. Additionally, common names can be regional. In general, folks in the industry like to use botanical names to help reduce confusion. No two plants have the same botanical name.

3. **SIDEBAR** CULTIVARS are plants that were bred or found in the wild, and selected for certain desirable traits such as leaf or flower color, size, and shape. Cultivars are usually noted by their Genus and (sometimes) species with the cultivar name in single quotes, Rudbeckia hirta ‘Goldrush’. More on cultivars on page 11.

4. **HEIGHT + WIDTH**: Max at maturity. Can vary depending on soil richness, sun conditions, and soil moisture. Your plant might not reach max maturity.

5. **SOIL TYPE**: Sand particles are the largest and clay particles the smallest. Loam is somewhere in between. Most soils are a combination of the three. The relative percentages of sand, loam, and clay are what give soil its texture. Clay is sticky when wet and stays wet for a long period of time, unlike sand which does not hold water for very long.

6. **SOIL MOISTURE REQUIREMENTS**: The soil moisture is an indication of the water content in the soil and lets us know how wet or dry the soil is. Use the soil moisture information to determine what soil conditions are ideal for a native species.

7. **LIGHT REQUIREMENTS**: Sunlight can feel tricky to figure out. It constantly moves and changes throughout the year. Some shade is deeper than others and morning sun is not as hot as afternoon. Luckily most plants can handle a range.
   - Shade: 2 hours or less of sun
   - Part Shade: 2-6 hours of sun
   - Sun: 6+ hours of sun

8. **BLOOM COLOR**: Can vary depending on individuals in a population. A single plant might have a variety of bloom colors, usually hues of the same color with varying brightness.

9. **BLOOM PERIOD**: Can vary from season to season, and due to differences in elevation, microclimate, weather, and exposure. Climate change is also affecting plant bloom periods.

10. **DESCRIPTION**: Additional details to get you excited!

11. **POLLINATORS + WILDLIFE**:
   - Caterpillars
   - Butterflies
   - Monarchs
   - Bees
   - Birds
   - Hummingbirds

These symbols denote any positive relationship. For example, the butterfly symbol might imply the plant is a good host plant, meaning a butterfly might lay eggs on the the plant, or it might mean the plant is a great nectar source. Nectar is a sugar-rich liquid produced by plants, usually located in the flower, with which the plant uses to attract pollinating animals.

12. **PHOTO CREDIT**: This lets you know who the photos are attributed to. We are very grateful for these folks! Credits for creative commons images can be found on our website on the plant guide page.

NOTE: LBJ Wildflower Center = Lady Bird Johnson Wildflower Center.
Ecoregions are areas with similar patterns of climate, geology, and evolutionary history, which help determine the distribution of plants, animals, and other organisms. The ecoregions of Southwest Virginia are the Appalachian Plateau, Ridge and Valley, and Blue Ridge Mountains. All three of these are a part of the larger Mountain Ecoregion. The Plant Southwest Virginia Native Plant Campaign includes the counties of Bland, Botetourt, Buchanan, Carroll, Craig, Dickenson, Floyd, Giles, Grayson, Lee, Montgomery, Pulaski, Roanoke, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe, as well as the cities of Bristol, Galax, Norton, Radford, Roanoke, and Salem.

Mountain Ecoregion

The Guide includes plants found in all three of the smaller ecoregions listed below, but not all the plants listed in this book are present in all three. While choosing any plant from the Mountain Ecoregion is more suitable than choosing a plant native to a different part of the state or continent, plants native to your ecoregion or county are ideal for supporting biodiversity. You can find out if a plant is native to your specific county by visiting the Digital Atlas of the Virginia Flora, www.vaplantatlas.org.

APPALACHIAN PLATEAU

Southwest Virginia includes the Cumberland Mountains, which are part of the central section of the Appalachian Plateau Region. This high, rugged plateau is noted for its cool climate and infertile soils amongst its low mountains and high hills. Agricultural land is sparse, and numerous coal mines have caused the siltation and acidification of streams, impacting plant life compositions.

RIDGE AND VALLEY

The Ridge and Valley Region is the largest in our area, and along with the Shenandoah Valley, makes up part of the “Great Valley of Virginia.” The relatively low-lying region trends northeast-southwest and is sandwiched between the generally higher Blue Ridge to the east and the more rugged mountainous region of the Appalachian Plateau to the west. Many geologic folding and faulting events created roughly parallel ridges and valleys with a variety of widths, heights, and geologic materials, along with numerous springs and caves. As a result, there is a great diversity of plant and animal life.

BLUE RIDGE MOUNTAINS

Virginia’s Southern Blue Ridge Region is a major area covered by the Guide. The region varies from narrow ridges to hilly plateaus to more massive mountainous areas. Mt. Rogers, the state’s highest peak at 5730 feet, is in this region. As a result, rainfall can vary between 40 – 100 inches a year, with somewhat cooler summers than the Ridge and Valley region. These conditions make the Southern Blue Ridge one of the most diverse ecoregions for plant life and general biodiversity in the eastern United States. The majority of this region’s rare species are found in North Carolina.
BEYOND ‘HUNTING GROUNDS’
Eastern Siouan-Speaking Peoples and Land Stewardship in Southwest Virginia

Victoria Persinger Ferguson, Enrolled Citizen of the Monacan Indian Nation; Director of the Solitude-Fraction Site, Virginia Tech
Shannon Elizabeth Bell, Professor of Sociology, Virginia Tech

The Eastern Siouan-speaking peoples, including the tribes of the Monacan Alliance, have inhabited and stewarded a large portion of the land that is presently known as Southwest Virginia for more than 10,000 years. Indigenous culture in this region changed from nomadic to sedentary approximately 2,000 years ago, when Eastern Siouan tribes built semi-permanent towns, such as Belspring, Shannon, and Totera, which were located in what are known today as Pulaski, Montgomery, and Roanoke Counties.

For millennia, the Eastern Siouan-speaking tribes depended on the Appalachian forests for survival. The knowledge of the natural resources needed for food, clothing, shelter, tools, medicine, and household goods was cultivated over thousands of years, and this knowledge was passed down orally from one generation to the next. Long before European contact, the Eastern Siouan tribes grew food—such as goosefoot, squash, maize, beans, and Jerusalem artichokes—in extensive gardens. The majority of their diet, however, consisted of food that was hunted or gathered in the forests and open meadows, both of which were tended and maintained through prescribed burning practices that allowed certain nut-bearing trees and other plants to flourish and also helped to attract grazing wild game. As Indigenous ecologists Robin Wall Kimmerer and Frank Kanawha Lake have noted, the practice of intentional burning created a “mosaic of habitat patches that promoted food security by ensuring a diverse and productive landscape.”

In the early spring, leafy-green vegetables were the first edible plants to emerge after winter dormancy. Eastern Siouan families would harvest the young shoots of greens like pokeweed, ramps, wild onions, red-root amaranth, yellow wood-sorrel, wood nettle, and wild lettuce to add to their cooking pots. Wild mushrooms, such as morels, began to appear on the forest floor and were likewise incorporated into meals.

Later in the spring and early summer, a variety of fruits became available, including wild strawberries, blackberries, black raspberries, blueberries, huckleberries, serviceberries, mayapples, and red mulberries. Staghorn sumac berries and herbs like mint were harvested and dried for winter tea. Many of the berries, which were an important source of Vitamin C, were dried on mats and stored for the winter months.

The nut harvest, which began in late summer and early fall, was particularly important because of the high fat content in hickory nuts, chestnuts, butternuts, and black walnuts, which were gathered and stored for winter. White oak acorns also provided the Eastern Siouan tribes a flour option other than cornmeal for making bread. Other fruits, including pawpaws, winter grapes, and persimmons, ripened later in the fall. Wild mushrooms and medicinal roots and herbs, such as black cohosh, goldenseal, American ginseng, hepatica, pipsissewa, and running cedar, were harvested, preserved, and used throughout the year. In addition to wild plants and fungi, the mammals, birds, and fish that were hunted and harvested were a central part of the Eastern Siouan peoples’ diet. Archeological evidence reveals that deer and turkey were the most commonly eaten meat in Monacan towns.

As Europeans began to colonize the Appalachians, many Indigenous hunting and gathering practices were taught to the newcomers, who adopted this knowledge as their own. Likewise, edible and medicinal non-native plants—such as mullein, common dandelion, and upland cress—were introduced to this region by European colonists and were incorporated into Indigenous peoples’ foodways and medicinal practices. Other species were brought to the region through formal trade networks among tribes, which promoted alliance-building among culturally diverse groups. Tribes of the Monacan Alliance, for instance, were deeply involved in trade networks that American Indian Studies scholar Samuel Cook has characterized as “complex and sophisticated.”

As Cook and colleagues have argued, contrary to the popular belief that the area currently known as Southwest Virginia was simply an uninhabited “hunting ground” prior to European colonization, the vast Appalachian forests, meadows, and riparian zones claimed by settlers in the 1700s had been carefully tended and intentionally managed for centuries by Indigenous groups prior to European contact. Recognizing the Indigenous Traditional Ecological Knowledge of the Eastern Siouan-speaking peoples—knowledge that was cultivated over thousands of years while stewarding the biodiverse landscapes of this region—is an important step toward rectifying the “historicide” that has long worked to erase Indigenous groups from historical and present-day understandings of Appalachian Virginia.

For a list of references and further reading, please visit www.plantvirginianatives.org/plantswvanatives/indigenousknowledge.
Reasons to Plant Southwest Virginia Natives Plants:

1. Southwest Virginia native plants provide visual beauty year round. Unique flowers, fruit shapes and colors, vibrant fall foliage, and bark textures are all reasons to purchase native plants.

2. Native plants support more wildlife species than non-native plants. Many native plants host specific insects and are essential for pollinators. Birds, mammals, and invertebrates rely on these insects to survive.

3. As natural habitats are lost, home gardeners can be a part of the solution by landscaping with native plants, in turn supporting local ecosystems and plant communities within their own yards.

4. Southwest Virginia native plants show a sense of place. Rhododendrons, blueberries, and lilies let you know you are in Virginia’s mountain region. As do many native species unique to this region.

5. When the general public purchases and plants more local native plants, the supply will become greater and native plants will be easier to find.

6. Planting Southwest Virginia native plants is essential for a healthy watershed. If you live in one of the counties served by this guide you likely live in one of the following watersheds: Clinch River, Powell River, New River or the Roanoke River. Local native plants provide oxygen and habitat for the ecosystems of these rivers and their tributaries. Plant roots absorb nutrients and prevent sediment from entering waterways, reducing pollution and improving water quality.

7. Local native plants are adapted to local temperature and rainfall fluctuations. Once established, they require less watering and fertilizing and no mowing, which saves natural resources, time, and money.

8. Spraying pesticides for insects or diseases is generally not necessary for native plants. Insects that feed on native plants rarely eat enough to weaken the plant. Save time and money by not spraying chemicals and enjoy seeing butterflies, dragonflies, birds and lightning bugs around your yard.

An ecosystem is a functional system of continuous energy exchange, made up of diverse plant and animal communities, as well as the non-living elements in the environment, like soil, water and sunlight.

Good News!

You may or may not have considered the ecological function of your own yard, but you can now. Grassroots solutions like our own backyards can increase biodiversity, one property at a time. This book serves as a tool. Everyone will benefit from your efforts, from tiny soil microbes to you and your neighbor.

There are lots of groups that can help support you in adding natives. Visit our website for more information and to meet folks working for native plants near you. Scan the QR code on the back cover to go directly there.

A simple first goal towards increasing biodiversity is planting more natives. Any increase is good. You can add more native plants over time. Ultimately, plant diversity is the key to providing support for a healthy and functional system. Remember, keystone species are particularly good at bringing diversity to our gardens. Read more about keystone species on page 9.
Layers of vegetation provide wildlife with food sources, nesting cover and shelter from the elements.

Native plants have evolved through time within the local landscape and are a vital part of the ecosystem. Ecosystems provide us with all of the services we need to survive, such as oxygen in the air we breathe, food, and clean water. Healthy ecosystems contain robust, interactive assemblages of plant and animal species that co-evolved together, called natural communities.

Native plants feed the insects that are the base of the food web; these insects are especially important for young songbirds, frogs, bats, and dragonflies.

Polyphemus Moth larva and adult *Antheraea polyphemus*

Hummingbirds, bats, bees, beetles, butterflies, and flies carry pollen from one plant to another as they collect nectar. Without them there would be fewer berries, seeds, fruits, vegetables, and nuts.

Sweat Bee *Halictid spp.*

Plant roots are crucial for holding soil in place and soaking up rainwater before it can run off and overwhelm our waterways.

*PLANT SWVA NATIVES*
“Keystone plants are native plants critical to the food web & necessary for many wildlife species to complete their life cycle.”

- National Wildlife Federation

LEYDOPERTA
Doug Tallamy’s research has identified Lepidoptera (butterfly and moth) larvae (caterpillars) as critical links in the food chain that act as good indicators for ecological resilience in a landscape. The larvae eat a plant’s leaves, essentially converting sunlight into protein for hungry birds. The adult butterflies and moths then pollinate plants, along with other insects such as wasps, flies, and beetles. The web of life continues as these insects become food for wildlife like turtles, bats, birds, and frogs.

Following is a list of important keystone plants native to Southwest Virginia. The numbers indicate the quantity of lepidoptera species supported by each plant. Go to page 13 to learn more about why trees and shrubs are the backbone of our landscapes.

90% of the Top Keystone Species are Woody Trees + Shrubs.

30 Top Plants for Food Web Support

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<tr>
<th>Genus</th>
<th>Common Name: species</th>
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<tr>
<td>436</td>
<td>Quercus • Oak: Q. alba, Q. coccinea, Q. rubra, Q. velutina</td>
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<td>340</td>
<td>Prunus • Plum: P. americana, P. serotina, P. virginiana</td>
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<td>289</td>
<td>Salix • Willow: S. humilis, S. nigra, S. sericea</td>
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<td>284</td>
<td>Betula • Birch: B. lenta, B. nigra</td>
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<td>249</td>
<td>Populus • Cottonwood: P. deltoides</td>
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<td>238</td>
<td>Acer • Maple: A. negundo, A. pennsylvanica, A. saccharinum, A. saccharum</td>
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<tr>
<td>237</td>
<td>Malus • Apple: M. angustifolia, M. coronaria</td>
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<tr>
<td>217</td>
<td>Vaccinium • Blueberry: V. angustifolium, V. corymbosum, V. erythrocarpum, V. fuscatum, V. pallidum</td>
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<tr>
<td>213</td>
<td>Carya • Hickory: C. cordiformis, C. glabra, C. tomentosa</td>
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<tr>
<td>200</td>
<td>Pinus • Pine: P. rigida, P. strobus, P. virginiana</td>
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<td>173</td>
<td>Alnus • Alder: A. serrulata</td>
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<td>164</td>
<td>Ulmus • Elm: U. alata, U. americana, U. rubra</td>
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<td>132</td>
<td>Picea • Spruce: P. rubens</td>
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<td>132</td>
<td>Tilia • Linden: T. americana var. americana, T. americana var. heterophylla</td>
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<td>131</td>
<td>Crataegus • Hawthorn: C. crus-galli var. crus-galli, C. intricata, C. macrosperrma, C. uniflora</td>
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<td>127</td>
<td>Rubus • Raspberry: R. allegheniensis, R. flagellaris, R. occidentalis, R. pensilvanicus</td>
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<td>125</td>
<td>Juglans • Walnut: J. nigra</td>
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<td>121</td>
<td>Fraxinus • Ash: F. americana, F. nigra, F. pennsylvanica, F. quadrangulate</td>
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<td>116</td>
<td>Fagus • Beech: F. grandifolia</td>
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<td>115</td>
<td>Castanea • Chestnut: C. dentata, C. pumila</td>
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<tr>
<td>112</td>
<td>Abies • Fir: A. fraseri</td>
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<tr>
<td>108</td>
<td>Corylus • Hazelnut: C. americana, C. cornuta var. cornuta</td>
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<td>104</td>
<td>Solidago • Goldenrod: S. arguta, S. caesia, S. rugosa, S. speciosa</td>
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<tr>
<td>102</td>
<td>Rosa • Rose: R. carolina, R. palustris</td>
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<tr>
<td>100</td>
<td>Symphyotrichum • Aster: S. cordifolium, S. laeve, S. novae-angliae, S. pilosum</td>
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<tr>
<td>92</td>
<td>Tsuga • Hemlock: T. canadensis</td>
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<tr>
<td>92</td>
<td>Amelanchier • Serviceberry: A. arborea, A. canadensis, A. laevis</td>
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A few simple actions can improve habitat quality for a broad diversity of wildlife species in your yard. Here are TEN:

1. Plant native plants appropriate to our region, choosing keystone species when you can.

2. Replace invasive plants with native plants. These can be groundcovers, shrubs, or trees. Combine them with rocks and logs to create additional types of habitat in your garden. See page 25 for more on invasive plants.

3. Mulch with native leaf litter, which provides overwintering habitat for insects, rather than commercial mulch. Too many leaves? Could be a good time to make your beds bigger.

4. Reduce non-native lawn. See page 11 to learn more.

5. Set mower height to no less than 3” and preferably 4.” Try to avoid mowing in the morning or evening when small wildlife are most active.

6. Integrate signs of care, such as neatly mowed paths and maintained edges. Install signs letting the public know native plants grow here. Signs indicate intentionality, raise awareness, and educate. Xerces Society, Homegrown National Park, and other organizations offer signs.

7. Create a garden that birds want to visit and stay for awhile, but try doing it without bird seed. Instead, use water and native plants to attract birds, see page 20 and 21 to learn how.

8. Minimize or eliminate fertilizer use. Natives plants do not need it!

9. Maintain naturalized grasses and forbs with invertebrates in mind by mowing once a year in early spring while the ground is still hard.

10. Go outside and observe. Learn to identify both native and non-native flora and fauna. There are many phone apps you can utilize to support your journey. People of all ages love learning more about their backyards. One of our favorites is the Flora of Virginia App.

If you decide to use herbicides, read the labels and remember timing is important. Chemicals can be dangerous for people, pets, and the environment if they are not used appropriately.

Passiflora incarnata, Purple Passionflower, with a Carpenter bee (Xylocopa spp.) visitor.

Minimize or eliminate insecticides and herbicides. Some easy non-chemical solutions to common pests include. Here are FIVE:

1. To reduce or eliminate mosquitoes, remove standing water, clean out gutters, and install a bat house.

2. For moles, simply stamp down the tunnels when you find them. Do this around your plants as air pockets will kill roots. Moles eat grubs, not roots, and will help control or even eliminate Japanese beetle and other pest larvae which nest in the soil.

3. Can you recognize a tick? Check yourself, your friends, and your animals for ticks after playing outside. Remove ticks immediately and treat tick bites with antibiotic ointment. Encourage the predators of ticks, such as possums, by planting native habitat.


5. Carpenter bees do not eat wood, only nectar and pollen. They drill into wood to make nests. After nesting, the bees live only where there are lots of summer flower blooms. Look online for how to build them a house and encourage them to get out of yours.
LAWNS + CULTIVARS

Considering Lawn

Mowed areas are great for playing on, pets, and pathways. However, if you don’t use it, could you lose it? Do you have areas of your landscape that are currently mowed, that might make good contenders for native plant beds? Places that are hard to mow, like slopes, are great places to start.

REASONS WHY YOU MIGHT HAVE SOME LAWN:
1. You can walk on it and play on it.
2. The solid green makes a pleasing contrast next to more complex plantings. Low growing massings of native plants can provide this same affect.
3. You can see over it, which can be important for security purposes. Other low native plantings have the same advantage.
4. Healthy turf grass is mostly better than a paved surface at protecting our natural areas from run-off, and better than bare soil at preventing erosion. Established native plantings are better still at both jobs.
5. Mowing is easy maintenance. You might actually like mowing. Native plant maintenance will get easier over time and becomes more rewarding.

REASONS TO RECONSIDER LAWN:
1. All the commercially available and widely used turf grasses are not native to North America. Non-native, traditionally maintained, turf lawns create an environment that offers little to insects, butterflies, birds, and other wildlife.
2. Chemical inputs such as fertilizers and pesticides runoff into our waterways. They can also harm the people and pets who play on these spaces and the individuals who apply the chemicals.
3. Watering lawns uses billions of gallons every day of our most precious resource: fresh water.
4. Turf grass struggles in shade, making it a poor choice for those locations.
5. Lawn mowers create air pollution and noise pollution.
6. Mowing multi-acre lawns takes many hours out of your summer weeks, time when you might be on vacation!
7. Compacted lawns can be impermeable to rainwater. An excess of impervious surfaces leads to a reduced water table, massive stormwater runoff, eroded waterways, sediment filled rivers and streams which suffocate wildlife, and reduce beauty and recreational value.

Cultivars

Many nurseries carry cultivars of native plants, rather than the straight species, also known as the “wild type”, of a native plant. A cultivar, short for “cultivated variety”, is a plant variety that has been selected and propagated for specific traits, such as size, shape, or color. Cultivars may be developed through plant breeding or by propagating clones of a desirable plant.

Some cultivars may be helpful in supporting wildlife, but more research needs to be done to identify long-term impacts. You will find a few cultivars listed in our Plant Solutions section. We hope in the future more straight species will be commercially available. Here are a few reasons why you should try planting the straight species of a native plant rather than a cultivar:

1. GENETIC DIVERSITY: Cultivars are propagated asexually, resulting in genetically identical plants. This can lead to a loss of genetic diversity within the population, which can make the species less resilient to diseases and environmental changes. Planting the straight species helps to preserve the genetic diversity within the species and the resilience of our landscapes.
2. HABITAT VALUE: Cultivars may not have the same value to wildlife as the straight species. For example, a cultivar with a different flower shape may not be as attractive to pollinators as the straight species. Changes to leaf color seem to especially deter wildlife from being able to eat these cultivars. However, some cultivars retain the benefits of the straight species or may even provide additional benefits due to a longer bloom period or other features.
3. NATIVE PLANT RESTORATION: If you are trying to restore a native plant community, it is generally best to use the straight species rather than cultivars. This will help to create multiple layers of interrelationships that make up a thriving dynamic ecosystem.
4. SMALL GARDENS: In small gardens where space is limited, or in situations where the straight species is not available, a cultivar with similar ecological benefits as the straight species may be appropriate.

Ian Caton, Carex pensylvanica • Pennsylvania Sedge
SPRING is the time to cut back perennials early in the season, leaving 8 to 24 inches of stubble. These hollow stems can provide nesting sites for some native bee species. Break or cut the stems and drop on the ground next to plants to serve as mulch.

- Many butterflies overwinter in leaf litter as eggs, caterpillars, chrysalises, or adults. If you decide to remove some leaves, wait until late spring to increase the number of butterflies, bees and other insects that are able to successfully emerge.
- Native plants do not usually need dividing, but divisions of spring ephemerals, as well as, summer and fall blooming plants can be shared mid-March into May. Plants with taproots such as milkweeds usually cannot be divided.
- Plant new natives in late March to late April.
- Try to hold off on that first mow until March or April. Keeping the lawn higher and mowing less can increase the number of bee species that use your lawn.

SUMMER is the time to water newly established plants during their first season. Plants that require high moisture may need on-going watering during times of severe droughts.

- If you choose to continue planting during the summer, pay close attention to water needs.
- Keep up with invasives and undesired plants. Cut back invasive shrubs and vines to keep them from setting seeds. Dig out invasive plants that emerge in late spring or summer, ideally as seedlings and before they go to seed.
- Observe the pollinators and wildlife that visits your garden. Enjoy the blooms.

WINTER is the time to review how well your garden grew during the year and to decide what changes you would like to make next year.

- Order bareroot plants and plugs online in early winter for best selection and talk to your local native plant grower about what you are hoping to plant next year.
- Leave native plants uncut to provide critical winter habitat for native insects and seeds for birds.
- This is the best time of year to remove invasive shrubs and vines. Remove winter annual and biennial weeds and invasive bulbs before they go to seed. If the ground is not frozen, root out invasive grasses and groundcovers.
- Flowering shrubs should be pruned before budding begins in late winter or if you miss that opportunity, wait until after they flower.
- Many native perennials need as many as sixty days of cold moist stratification to sprout making January a great time to begin these seeds outdoors.

AUTUMN is the time to plant again, particularly August through October.

- Do not cut back natives now, wait until very late winter or early spring.
- Leave the leaves as much as possible. Leaves can be raked from lawns and walkways and used as mulch. Shredding the leaves will kill thousands of good insects, so try to use whole leaves. If you are able, leave logs to rot and make brush piles for wildlife shelters.
- Seeds of many natives need cold, damp stratification. Allow desired natives to go to seed in the garden or spread seeds in flats and leave outside protected from chipmunks, and squirrels with hardware cloth or screen. The seeds of most plants will emerge in mid to late spring, but some may require two winters.

A NOTE ON MULCH:

While waiting for the garden to mature, light layers of organic material can be spread to hold down weeds and hold in moisture. Free woodchips, leaves or leaf compost, and pine needles can be collected from neighbors or maybe your municipality. If you must purchase mulch, spread only a light layer that will breakdown easily. Avoid dyed mulch that tends to become compacted and inert and avoid extra plastic by buying in bulk.

FOR IMPROVED SUCCESS, USE THIS SEASONAL GUIDE TO GARDEN ACTIVITY

PLANT SWVA NATIVES
PLANTING ADVICE

Plant Lots of Woodies

Remember that 90% of the top keystone species are woody trees and shrubs, which makes them an important part of the diverse ecosystems we aim to create in our gardens.

TREES + SHRUBS
• Provide essential habitats for pollinators, birds and mammals. Plant woodies in layers; different birds nest at different heights.
• Buds, leaves, flowers, fruits, nuts and acorns provide seasonable nutrition. Leaf litter, fallen branches and/or decaying wood provide other habitats while enriching the soil with nutrients.
• Stabilize the soil and absorb thousands of gallons of water, preventing rapid run-off during storms and keeping the water table full.
• Buffer climate conditions by providing shade to cool our communities and help screen the wind and cold of winter. Birds need shade and winter protection too.
• Support essential cycles like the water, nitrogen cycle, and carbon cycle.
• Improve air quality.
• Provide beauty- Virginia’s native trees are diverse, colorful, majestic, sheltering, calming, and so much more.

Do
• Plant any time of year that the ground is not frozen or saturated (planting in wet soil causes harmful compaction). If you plant in summer, you may need to do a lot of watering! Spring and fall are great, and fall is actually ideal.
• Make a hole just slightly wider and no deeper than the plant.
• Place the plant so its base is at ground level.
• Water well that day and the next, then twice a week for a couple weeks, then weekly through the first growing season. A good 1” rain counts as watering.
• Cover bare soil with dead leaves, pine needles, straw or store-bought mulches made of plant material. Check in with your local municipality for locally recycled mulch or utilize fallen leaves found in your neighborhood.

Don’t
• Overwater. For plants that prefer dry soil, let it dry out between watering.
• Amend the soil (unless planting in construction clay or in naturally poorer soil than the plant you’ve selected prefers, in which case throw in a handful or two of compost).
• Fertilize.
• Use pesticides without thoughtful consideration.
• Let mulch pile up around the base of plants. This can cause fungal issues.

Cues to Care
It is helpful to decide up-front what look you are going for and then choose plants accordingly. If you want to recreate the typical suburban aesthetic, focus on native foundation plants and mass planting of herbaceous keystone species. If you are fine with a more wild or natural look, then mowing an edge, installing borders, or utilizing garden art can help anchor more wild looking landscapes and show intention.

Don’t purchase or plant invasive species.
Remove existing invasives from your property.
Replace invasive species with native plants.
READY TO GARDEN

On the following pages are lists of plant solutions to help in specific situations. Before you get started, thinking through some guidelines will help you achieve a more satisfying result with less frustration. Remember, you do not have to think about all these things. Landscapes can feel complicated, but the best way to learn is to get in the garden and try some things out.

### Start Small
- Insert native plants into existing plant beds, grouping as much as possible.
- Add native plants around an existing tree.
- Expand an existing bed outward, reducing your lawn area.
- Join up two beds by planting between them to create one larger bed.
- Control and remove invasive species and begin to replace them with natives.

### Start Simple
- Use larger numbers of fewer plants for cohesion and ease of maintenance.
- Plant lots of woodies – trees, canopy, and understory and a lively shrub layer. These provide structure to your landscape and habitat mass for wildlife.
- Use the height of native perennials as a benefit to your design. They can be used as foundation plants, screening, or in the center of beds.
- Commonly used ornamentals like Asiatic azaleas, hollies, and cherry trees have native counterparts; consider using them instead.
- An informal planting style with gentle curves can be easier to maintain than a formal, clipped style with straight lines.

### Plant Smart
- Choose plants suitable for your specific conditions and soil.
- Plant size and numbers should sufficiently cover the ground at plant maturity to reduce watering, weeding, and mulching.
- Planting in layers with trees, shrubs, perennials, and groundcovers provides visual interest, habitat for wildlife, and takes up space, helping prevent undesireables from taking root.

### Follow Through
- Strive to show that your informal garden is managed, not unkempt.
- Keep on top of the weeds, especially during the first 1-2 years.
- Clean-up only in the spring, after the birds and insects have utilized your garden over the winter.
- When cleaning up, break down debris into large pieces and spread them in your beds. Invasive plants, especially those with seed heads can be thrown in the trash.
- Let Nature help you by using leaves, not mulch, in your beds for nutrients and insect habitat.
- Gardens are not stagnant things; they evolve and change. Plants die. It is okay. Try and embrace it!
- Learning about the local ecology in your yard is a lifelong journey. Enjoy the ride and do not be hard on yourself if things are not perfect—they aren’t supposed to be. After all it is nature.

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### PLANT SOLUTIONS

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<th>SOLUTION</th>
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<td>WET SHADE</td>
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A “hedge” is a row of plants that deliniates an area. Some native plants take well to shearing and pruning for size and shape, but you will of course save yourself work if you choose plants that grow to the right size without any need for pruning. You can use tall perennials as a temporary screen while you wait for your woody plants to fill in. For a list of plants that can be clipped or shorn, visit page 16.

A “screen” provides a visual barrier. We often assume that screening requires evergreen plants, but deciduous plants can be just as effective and provide more options. Another alternative is to train a vine on a trellis or fence.

A “hedgerow” is a naturalized planting of mixed species, providing food and cover to a diversity of birds. Hedgerows create essential corridors for turtles and other wildlife to use as they move around our landscapes. Choosing shrubs that sucker will allow the hedgerow to gradually form a thicker barrier. Avoiding plants that sucker rapidly (or removing the suckers) will maintain a “neat-and-tidy” look. Create a visual effect by using basic design principles, such as repeating patterns and providing a succession of blooms and berries. Feed the soil and provide habitat for ground dwelling birds, toads, etc. by leaving fallen leaves in place. = Keystone Species.

### UNDER 6 FEET

- **Aronia melanocarpa** • Black Chokeberry
- **Hydrangea arborescens** • Smooth Hydrangea
- **Ilex verticillata** • Winterberry
- **Physocarpus opulifolius** • Ninebark
- **Rosa carolina** • Carolina Rose
- **Rhus aromatica** • Fragrant Sumac
- **Spirea alba** • Meadowsweet

### FORM THICKETS

- Rapidly
- Slowly
- No
- Yes

### 6-10 FEET

- **Amorpha fruticosa** • Indigo Bush
- **Aronia arbutifolia** • Red Chokeberry
- **Cephalanthus occidentalis** • Buttonbush
- **Cornus amomum** • Silky Dogwood
- **Cornus racemosa** • Gray Dogwood
- **Ilex verticillata** • Winterberry
- **Physocarpus opulifolius** • Ninebark
- **Rosa palustris** • Swamp Rose
- **Vaccinium corymbosum** • Northern Highbush Blueberry
- **Viburnum acerifolium** • Maple-leaved Viburnum
- **Viburnum dentatum** • Arrowwood Viburnum

### FORM THICKETS

- Rapidly
- Slowly
- No
- Yes

### OVER 10 FEET

- **Amelanchier species** • Serviceberry
- **Aralia spinosa** • Devil’s Walking Stick
- **Asimina triloba** • Pawpaw
- **Carpinus caroliniana** • American Hornbeam
- **Cephalanthus occidentalis** • Buttonbush
- **Corylus americana** • Hazelnut
- **Crataegus crus-galli** • Cockspur Hawthorn
- **Hamamelis virginiana** • Witchhazel
- **Lindera benzoin** • Common Spicebush
- **Prunus americana** • American Wild Plum
- **Rhododendron catawbiense** • Catawba Rhododendron
- **Rhododendron maximum** • Great Rhododendron
- **Rhus copallinum** • Winged Sumac
- **Sambucus canadensis** • Common Elderberry
- **Sassafras albidum** • Sassafras
- **Viburnum prunifolium** • Blackhaw Viburnum

### FORM THICKETS

- Slowly
- Rapidly
- Slowly
- Yes
- Rapidly
- Slowly
- No
- Slowly
- Yes
- Rapidly
- Slowly
- Yes
- Slowly
- No

### TALL TREES

- **Juniperus virginiana** • Easter Red Cedar
- **Ilex opaca** • American Holly
- **Pinus species** • Pines
- **Thuja occidentalis** • American Arborvitae

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**SCREENING + PRIVACY**

Irving Wilson, *Thuja Occidentalis* • American Arborvitae

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15
TRADITIONAL AMERICAN LANDSCAPING

Native plant landscaping too often conjures notions of an untidy weedy-looking mess. However, Southwest Virginia’s native plants include some of the most beautiful and well-adapted plants for our region. The showcase standards of traditional American landscaping can be achieved with native plants creating formal hedges, beautiful specimen plantings, even the classic mounded shrub.

A beautifully manicured lawn can be improved with planting beds that include Southwest Virginia’s best native plants. Even if you prefer a traditional aesthetic, you can still add ecological value to your landscape. Note: This list includes a few cultivars. Go to page 11 to learn more about cultivars and why you might want to plant straight species when possible. 🟢 = Keystone Species.

LOW EDGING ALONG HARDSCAPES
Asarum canadense • Wild Ginger
Carex pensylvanica • Pennsylvania Sedge
Carex plantaginea • Plantain-Leaved Sedge
Chrysogonum virginianum • Green and Gold
Fragaria virginiana • Wild Strawberry
Gaultheria procumbens • Wintergreen
Heuchera americana • American Alumroot
Heuchera villosa • Hairy Alumroot
Iris cristata • Dwarf Crested Iris
Mitchella repens • Partridgeberry
Packera aurea • Golden Ragwort
Phlox stolonifera • Creeping Phlox
Phlox subulata • Moss Phlox
Polystichum acrostichoides • Christmas Fern
Sedum ternatum • Woodland Stonecrop
Sisyrinchium angustifolium • Blue Eyed Grass

TALLER GROUNDCOVERS FOR MASSING
Anemone virginiana • Tall Thimbleweed
Anthriscus sylvestris • Southern Lady Fern
Chelone glabra • White Turtlehead
Conoclinium coelestinum • Blue Mistflower
Geranium maculatum • Wild Geranium
Maianthemum racemosum • False Solomon’s Seal
Onoclea sensibilis • Sensitive Fern
Parathelypteris noveboracensis • New York Fern
Polygonatum biflorum • Solomon’s Seal
Tiarella cordifolia • Foamflower
Xanthorhiza simplicissima • Yellowroot
Zizia aurea • Golden Alexander
Zizia aptera • Heartleaf Alexander

EVERGREEN SPIRES
Ilex opaca • American Holly
Juniperus virginiana • Eastern Redcedar
Juniperus virginiana ‘Emerald sentinel’ • Emerald Sentinel Redcedar
Juniperus virginiana ‘Taylor’ • Taylor Redcedar
Pinus strobus ‘Fastigiata’ • Fastigiata Eastern White Pine
Thuja occidentalis • American Arborvitae
Thuja occidentalis ‘Emerald Green’ • Emerald Green Arborvitae

CENTERPIECE SPECIMENS
Amelanchier laevis • Smooth Serviceberry
Amelanchier arborea • Downy Serviceberry
Asimina triloba • Pawpaw
Carpinus caroliniana • American Hornbeam
Cercis canadensis • Eastern Redbud
Chionanthus virginicus • Fringe Tree
Cornus florida • Flowering Dogwood
Cornus alternifolia • Pagoda Dogwood
Halesia tetraptera • Common Silverbell
Ilex verticillata • Winterberry
Kalmia latifolia • Mountain Laurel
Rhododendron calendulaceum • Flame Azalea
Rhododendron catawbiense • Catawba Rhododendron
Rhododendron maximum • Great Rhododendron
Rhododendron periclymenoides • Pinxterbloom Azalea

Bruce Grimes, Silvery Blue on Cornus Florida • Flowering Dogwood

PLANT SWVA NATIVES
LARGE SHRUB
Aronia arbutifolia • Red Chokeberry
Cephalanthus occidentalis • Buttonbush
Hydrangea aborescens ‘Haas’ Halo • Haas Halo Hydrangea
Hypericum densiflorum • Shrubby St. John’s Wort
Physocarpus opulifolius • Ninebark
Rhododendron calendulaceum • Flame Azalea
Rhododendron catawbiense • Catawba Rhododendron
Rhododendron maximum • Great Rhododendron
Rhododendron periclymenoides • Pinxterbloom Azalea
Sambucus canadensis • Elderberry
Vaccinium corymbosum • Northern Highbush Blueberry
Viburnum acerifolium • Maple Leaf Viburnum
Viburnum dentatum • Arrowwood Viburnum
Viburnum prunifolium • Blackhaw Viburnum

LOW ROUNDED SHRUBS
Aronia melanocarpa • Black Chokeberry
Ceanothus americanus • New Jersey Tea
Diervilla lonicera • Northern Bush Honeysuckle
Gaylussacia baccata • Black Huckleberry
Hypericum prolificum • Bushy St. John’s Wort
Ilex verticillata • Winterberry
Rhus aromatica • Fragrant Sumac
Rosa carolina • Pasture Rose
Spiraea corymbosa • Dwarf Spiraea
Vaccinium angustifolium • Northern Lowbush Blueberry
Vaccinium pallidum • Early Lowbush Blueberry

FORMAL HEDGES & CLIPPED SHRUBS
Cornus amomum • Silky Dogwood
Cornus racemosa • Gray Dogwood
Carpinus caroliniana • American Hornbeam
Ilex opaca • American Holly
Ilex verticillata • Winterberry
Ostrya virginiana • American Hop-Hornbeam
Rhus aromatica • Fragrant Sumac
Viburnum dentatum • Southern Arrowwood Viburnum

SPRING EPHEMERALS FOR THE WOODLOT
Anemone quinquefolia • Wood Anemone
Claytonia caroliniana • Carolina Spring Beauty
Dicentra canadensis • Squirrel Corn
Dicentra cucullaria • Dutchman’s Breeches
Erythronium americanum • American Trout Lily
Hepatica acutiloba • Sharp-Lobed Hepatica
Hepatica americana • Round-Lobed Hepatica
Jeffersonia diphylla • Twinleaf
Mertensia virginica • Virginia Bluebells
Podophyllum peltatum • Mayapple
Sanguinaria canadensis • Bloodroot
Thalictrum thalictroides • Rue Anemone
Trillium grandiflorum • Great White Trillium
Attracting Pollinators, Bees, and Butterflies in 5 Steps

The most famous of pollinators are bees and butterflies, but other insects (such as moths, wasps, flies, beetles, and even some species of nectar-loving birds and bats) help transfer pollen. Some scientists estimate that one out of every three bites of food we eat exists because of these animal pollinators. However, these pollinator species often rely on native plants and ecosystems to complete their lifecycle. One way to help, is by planting a native garden that supports pollinators. Although increasing the number of insects in your garden may at first seem counterintuitive, you will find that pollinators are not pests and will instead help plants thrive. Additionally, a garden with many different insects is sure to attract beautiful—and hungry—birds, which are a natural form of pest management. Here is how to bring on the pollinators.

1. **KEEP PLANTS LOCAL & DIVERSE** Planting a smorgasbord of different native plants ensures that a variety of pollinators can achieve a healthy diet. Because plants and pollinators often evolve together, native plants are more likely to provide the balanced nutrients that a local pollinator needs.

2. **CONSIDER BLOOM TIME** Pollinators need food from early spring through late fall, so don’t forget to consider the bloom times of plants. Make sure to select plants with long periods of flowering and overlapping blooms.

3. **IT’S NOT JUST ABOUT THE FLOWERS** Although it is easy to focus just on flowers, the larval form of some pollinators (like caterpillars) get their food from leaves. Consider planting keystone shrubs and trees and prepare for inevitable snacking. There are non-native plants that attract adult butterflies (butterfly bush is an invasive example), but only native plants are larval host plants. More on keystone species on page 9.

4. **LEAVE THE LEAF LITTER ALONE** Pollinators often hibernate or lay eggs in what may be considered garden debris. Although it is tempting to clean up things like leaf litter, dead stems of plants, and woody debris, letting these remain a part of your garden ensures that pollinators can complete their life cycles and return year after year. Once spring arrives, and it has been warm for a few weeks, remember that many species may still be using your leaf litter for their reproductive cycle.

5. **AVOID CHEMICALS** Although chemicals can get rid of pests, helpful insect pollinators are often caught in their crossfire. Try to avoid using pesticides altogether. If you must, aim to use lower impact pesticides and apply them in the evening or early night and when there is no wind or apply pesticides to invasive species in late fall or winter when blooms and pollinators are not out. This reduces the number of pollinators that come in contact with the pesticides directly after it is applied.

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Great Spangled Fritillary butterflies overwinter in leaf litter near their violet host plants as recently hatched caterpillars. In spring, they will need their violet food plants near-by to begin eating. Later in the summer, they can be found enjoying the nectar of native blooms, like on the Asclepias tuberosa, above.
BLOOM CHART

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<th>FEB</th>
<th>MAR</th>
<th>APR</th>
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<td>Tulip Tree, <em>Liriodendron tulipifera</em></td>
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<td>Purple Passionflower, <em>Passiflora incarnata</em></td>
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<td>Cardinal Flower, <em>Lobelia cardinalis</em></td>
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<td>Wild Hydrangea, <em>Hydrangea arborescens</em></td>
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<td>Elderberry, <em>Sambucus nigra</em></td>
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<td>Butterflyweed, <em>Asclepias tuberosa</em></td>
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<td>Fall Phlox, <em>Phlox paniculata</em></td>
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<td>Wild Bergamot, <em>Monarda fistulosa</em></td>
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<td>Oxeye Sunflower, <em>Heliopsis helianthoides</em></td>
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<td>Swamp Milkweed, <em>Asclepias incarnata</em></td>
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<td>Culver’s Root, <em>Veronicastrum virginicum</em></td>
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<td>Orange Cornflower, <em>Rudbeckia fulgida</em></td>
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<td>New York Ironweed, <em>Vernonia noveboracensis</em></td>
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<td>Buttonbush, <em>Cephalanthus occidentalis</em></td>
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<td>Boneset, <em>Eupatorium perfoliatum</em></td>
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<td>Blue Lobelia, <em>Lobelia siphilitica</em></td>
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<td>Hollow Joe-Pye-weed, <em>Eutrochium fistulosum</em></td>
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<td>Obedient Plant, <em>Physostegia virginiana</em></td>
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<td>New England Aster, <em>Symphyotrichum novae-angliae</em></td>
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<td>Bluets, <em>Mertensia virginica</em></td>
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<td>Witchhazel, <em>Hamamelis virginiana</em></td>
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Forb | Vine | Shrub | Tree
Attracting Birds in 5 Steps

Bird decline is a global issue and Southwest Virginia is no exception. Some studies suggest that since the 1970s, nearly 3 billion birds have disappeared from the United States and Canada. Years of developing wild spaces, absence of native plants from planting lists, reliance on exotic ornamentals and mowed lawns as well as changing temperatures are some of reasons for the birds’ disappearance. There are many things you can do to help restore healthy bird habitats and deliver a cascade of benefits for every living thing. Here’s how:

1. PROVIDE FOOD FOR ADULTS Utilize a variety of native plants which offer a wide variety of seeds, nuts, and berries with a high nutrition content (see chart on the following page). Native trees and shrubs provide berries with the right proportions of fats, protein, and antioxidants that match the nutritional requirements of birds in Southwest Virginia. Planting a variety of species of berries, will help ensure birds have access to those that become soft enough to eat at different times, especially during winter.

2. SUPPORT FOOD FOR NESTLINGS Each clutch of nesting birds needs thousands of caterpillars before they leave the nest. Native plants, especially woody keystone species, help support caterpillars and provide enough food for nestlings. Most caterpillars cannot digest the leaves of non-native plants. See our section on keystone species, page 9, for more information.

3. PROVIDE SHELTER All birds need protection from predators and the elements, like and secure places to hide nests and shelter from winter storms. Layers in the landscape (canopy, understory, groundcover) will appeal to a variety of birds. Thickets and hedges are ideal for many birds. See page 15 for more information native screens and hedges. Another way to provide shelter is to pile your brush trimmings in a corner of your property. The higher the better to provide nooks and crannies for birds, insects, and other creatures. Use your trimmings to make a crafted brush fence to create a garden room on your property and also shelter birds.

4. OFFER NESTING OPTIONS: Different birds require plants of varying heights. Try to plant in layers, and including canopy trees, understory trees, shrubs, grasses, and perennials. Reconsider removing dead or dying trees. Some birds, like woodpeckers, make nests in tree trunks or hollow trees. Other birds may utilize these holes as nesting sites in later seasons. If the height of a dead tree is a concern, consider leaving the bottom 15-20 feet in place as long as it isn’t a safety hazard. Cutting off the top in a jagged fashion will look more natural and provide an additional nesting site.

5. MAINTAIN CLEAN WATER A clean water source is an important tool to attract and keep birds healthy. A shallow tray or birdbath is sufficient, especially if kept clean and filled during winter. Moving water through bubblers and fountains or an in-ground pond, even a small one, is also important for birds and other wildlife. It is important to protect all water sources from chemical runoff. Lawn and yard chemicals are washed into the drainage system and readily impact water quality for birds, humans, and other creatures. Remember: you won’t need to apply fertilizers or pesticides to native plants, so try to plant as many natives as possible.

Hummingbirds will drink sugar water if you offer it to them, but what they really need are insects, nectar, and shelter. Actually, 80% of their diet is insects and spiders. By planting keystone species and other native plants, you will automatically be supporting hummingbird habitat.
| **Wild Strawberry**, *Fragaria virginiana* | **SPRING** | **SUMMER** | **FALL** | **WINTER** |
| **Witch Hazel**, *Hamamelis virginiana* | | | | |
| **River Birch**, *Betula nigra* | | | | |
| **Jack in the Pulpit**, *Arisaema triphyllum* | | | | |
| **Wild Geranium**, *Geranium maculatum* | | | | |
| **Highbush Blueberry**, *Vaccinium corymbosum* | | | | |
| **Maples**, *Acer species* | | | | |
| **Common Elderberry**, *Sambucus canadensis* | | | | |
| **Serviceberry**, *Amelanchier species* | | | | |
| **American Plum**, *Prunus americana* | | | | |
| **Cockspur Hawthorn**, *Crataegus crusgalli* | | | | |
| **Milkweed**, *Asclepias species* | | | | |
| **Oxeye sunflower**, *Helianthus helianthoides* | | | | |
| **Hackberry**, *Celtis occidentalis* | | | | |
| **Redbud**, *Cercis canadensis* | | | | |
| **Asters**, *Symphyotrichum species* | | | | |
| **Goldenrod**, *Solidago species* | | | | |
| **Jewelweed**, *Impatiens species* | | | | |
| **Sassafras**, *Sassafras albidum* | | | | |
| **Viburnum**, *Viburnum species* | | | | |
| **Chokeberry**, *Aronia species* | | | | |
| **Buttonbush**, *Cephalanthus occidentalis* | | | | |
| **Dogwoods**, *Cornus species* | | | | |
| **Spicebush**, *Lindera benzoin* | | | | |
| **Hickory**, *Carya species* | | | | |
| **Oaks**, *Quercus species* | | | | |
| **Pines**, *Pinus species* | | | | |
| **Coral Honeysuckle**, *Lonicera sempervirens* | | | | |
| **Purple Passionflower**, *Passiflora incarnata* | | | | |
| **Virginia Creeper**, *Parthenocissus quinquefolia* | | | | |
| **Tulip Tree**, *Liriodendron tulipifera* | | | | |
| **Black Haw Viburnum**, *Viburnum prunifolium* | | | | |
| **Red Chokeberry**, *Aronia arbutifolia* | | | | |
| **Winterberry Holly**, *Ilex verticillata* | | | | |
| **American Holly**, *Ilex opaca* | | | | |
| **Eastern Red Cedar**, *Juniperus virginiana* | | | | |
| **Sumacs**, *Rhus species* | | | | |

**BIRD CHART**

- **Berries**
- **Seeds**
- **Forb**
- **Vine**
- **Shrub**
- **Tree**
Deer population numbers vary a lot from season to season and year to year. When deer populations are high, anyone who gardens may become frustrated with the damage they cause. Use as many of these tactics as you can to protect your garden.

1. Use more deer resistant plants around the perimeter of your property and use more vulnerable plants in areas closest to your house where you frequent the most. You can also try this on a smaller scale, planting deer resistance plants around the edge of a planting bed or surrounding more vulnerable plants with a ground cover of highly scented plants that deer typically avoid.

2. Not every year is the same. Some years there might be summer drought (reduced plant growth), a poor nut and acorn year, and excessive snow cover. All these things affect what food is available for deer and therefore may change what they are nibbling in your yard.

3. A little nibble is okay, especially on mature plants. They will recover. Constant grazing, particularly on young plants, is detrimental and will likely mean failure to thrive and/or death.

4. Male deer also damage trees by rubbing their antlers in the fall. Consider protection for this reason, too.

FENCING
Fencing remains the most effective option. Install a single 8’ high fence or two, 4’ high fences installed 4-5’ apart. If permanent fencing is not feasible, and conditions suggest a need to protect vulnerable plants, consider using one of these temporary fencing options to protect individual plants or small areas.

1. Place 4’ high fencing 18-24” from furthest branches. The fencing must be tight to keep deer from leaning in to eat.

2. If needed to occasionally prevent tree rubbing, drive galvanized metal pipe until level with the ground. The pipes will not be visible, but posts with netting can then be easily inserted and removed.

3. Use wire strung between posts. From the wire, hang scent bags with a strong-scented soap and/or human hair, along with white nylon cut to look like a deer tail. These will help prevent the deer from breaking through the lengths of wire.

4. Temporarily use tree tubes to protect plants from deer as they get established or grow out of browsing reach. A 5’ tube is best. Check with the local Native Plant Society and Soil & Water District for tree tube sales.

REPELLENTS
Repellents can be effective if used regularly and appropriately. Focus on vulnerable plants and understand how different repellants work. Some rely primarily on odor, some on taste, and some combine both. Be sure to research safety issues with any repellant.

1. Odor repellants can be biological (hair, feces, blood/feather meal, urine) or chemical (soap, mothballs, other substances) and are applied to a general area and/or plants. Be sure any biological repellant is humanely collected and that chemical repellants are safe for humans and pets.

2. Taste repellants use substances such as hot peppers, garlic, rotten eggs, along with an adhesive, to taste bad and burn a deer’s nose. They may also smell bad initially but are most effective when the deer nibbles a leaf.

3. Alternate between taste repellents and odor repellents. Start with taste repellents in early spring, before plants start to leaf out. Switch to odor repellents when leaves are fully out, and then continue to alternate.

4. For all new plantings, spray immediately with odor repellent. Train the deer to stay away!

5. Systemic repellents designed to be applied to the soil can help, but flower buds must still be spraying since they don’t have the tissue to take up systemic repellents.

6. Certain fertilizers have a repellent effect, creating about four weeks of protection. For example, spread a smelly fertilizer like Milorganite or Coast of Maine Fermented Salmon at half-rate when plants are emerging. One month later, spread the other half amount. Do not fertilize again for the year.

MECHANICAL REPELLENTS
Mechanical scare devices (which use noise, light, or water to startle deer) have some initial utility, if not disruptive to humans. Chimes and noise makers that operate with the wind can help. Be sure to alternate tactics and move them around, or the deer will stop reacting. Consider partnering with your local chapter of Hunters for the Hungry or other hunters. Make sure you first check with local regulations and the Virginia Department of Wildlife Resources. Or get a dog!
DEER RESISTANT PLANTS

FORBS
Achillea millefolium • Common Yarrow
Agastache species • Hyssops
Allium cernuum • Nodding Onion
Aquilegia canadensis • Red Columbine
Asarum canadense • Wild Ginger
Asclepias species • Milkweeds
Baptisia species • Indigos
Chrysogonum virginianum • Green-and-gold
Conoclinium coelestinum • Blue Mistflower
Dicentra species • Bleeding Hearts
Helenium autumnale • Common Sneezeweed
Heliopsis helianthoides • Oxeye
Iris versicolor • Northern Blue Flag
Liatris species • Liatris
Lobelia species • Lobelias
Monarda species • Beebalms
Penstemon digitalis • Foxglove beardtongue
Polemonium reptans • Spreading Jacob’s Ladder
Pycnanthemum species • Mountain Mints
Rudbeckia species • Coneflowers
Salvia species • Sages
Senna marilandica • Maryland Wild Senna
Symphyotrichum species • Asters
Thalictrum dioicum • Early Meadow-rue
Vernonia noveboracensis • New York Ironweed

FERNS
Adiantum pedatum • Northern maidenhair fern
Dryopteris marginalis • Marginal wood fern
Matteuccia struthiopteris • Ostrich fern
Polystichum acrostichoides • Christmas fern

GRASS + SEDGES
Deschampsia cespitosa • Tufted Hair Grass
Muhlenbergia capillaris • Pink Muhly Grass
Schizachyrium scoparium • Little Bluestem
Carex appalachica • Appalachian Sedge
Carex pensylvanica • Pennsylvania Sedge
Carex plantaginea • Plantain-leaved Sedge
Carex platyphylla • Broadleaf Sedge

SHRUBS
Amelanchier laevis • Allegheny Serviceberry
Asimina triloba • Pawpaw
Comptonia peregrina • Sweet-fern
Dieris ionicera • Northern Bush-honeysuckle
Hypericum prolificum • Shrubby St. John’s wort
Ilex species • Hollies
Lindera benzoin • Spicebush
Physocarpus opulifolius • Common Ninebark
Rhus species • Sumacs
Rosa species • Roses
Viburnum dentatum • Arrowwood
Xanthorrhiza simplicissima • Yellowroot

Bruce Grimes, Painted Lady on Asclepias syriaca • Common Milkweed
Invasive, non-native plants do not provide the same ecosystem services as natives and have a harmful effect on our environment, not only in the built community but also in our forests, parks, and other natural areas.

Volunteers and natural resource management staff spend many hours and resources to mitigate the spread and the consequences of these and other invasive species. Although there are many non-native plant species that invade our natural areas, the plants listed below are particularly problematic because they are still available in the trade and are sold and planted throughout the region.

Our public areas are particularly prone to infestations of invasives. You can help! Reach out to your local municipality, State Park, Land Trust, or Master Naturalist Program to see how you might support a project near you.

Most garden escape artists offer clues to their intentions. Be wary of any nonnative garden plant that is:

- Weedy within your garden – it can escape to natural areas.
- Supposed to attract birds with showy berries – birds will spread it outside your property.
- Advertised as easy to “naturalize” – that word really means it can take over landscapes.
- Included in a “meadow garden” mix – such plants may be nonnative prolific seeders and can escape.
- Contained in a “wildflower” mix – these plants are rarely native wildflowers and likely will not preform as well as a native mix.
- Touted as good for erosion control – translate this to mean it spreads aggressively by its roots.

You might feel overwhelmed when you realize how many invited and uninvited invasive plants are on your property. Develop a strategic plan to guide your efforts. You will feel more rewarded and less frustrated as a result. Follow the tips on the next page when developing your plan.

Please do not plant these non-native, invasive species & Plant a native alternative.

<table>
<thead>
<tr>
<th>COMMONLY SOLD INVASIVES</th>
<th>NATIVE ALTERNATIVES</th>
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<tbody>
<tr>
<td>Bamboo • Phyllostachys spp</td>
<td>Eastern Red Cedar</td>
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<tr>
<td>Bradford Pear • Pyrus calleryana</td>
<td>Serviceberries • Amelanchier, Redbud • Cercis canadensis, Dogwood • Cornus florida, Hawthorns • Crataegus species</td>
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<tr>
<td>Burning Bush • Euonymous alatus</td>
<td>Blueberries • Vaccinium species, Viburnum species</td>
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<td>Chocolate Vine or Five-leaf Akebia • Akebia quinata</td>
<td>Crossvine • Bignonia capreolata, Coral Honeysuckle • Lonicera sempervirens, Virginia Creeper • Parthenocissus quinquefolia, Vitis species</td>
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<td>English Ivy • Hedera helix</td>
<td>Wild Ginger • Asarum canadense, Creeping Phloxes, Ferns, Virginia Creeper • Parthenocissus quinquefolia, Golden Ragwort • Packera aurea</td>
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<td>Hall’s (Japanese) Honeysuckle • Lonicera japonica</td>
<td>See alternatives listed for Hall’s Honeysuckle</td>
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<td>Japanese Barberry • Berberis thunbergii</td>
<td>Winterberry • Ilex verticillata, Maple-leaved Viburnum • Viburnum acerifolium</td>
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<td>Japanese or Chinese Wisteria • Wisteria floribunda &amp; W. sinensis</td>
<td>Trumpet Honeysuckle • Lonicera sempervirens</td>
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<td>Japanese Hop Vine • Humulus japonicus</td>
<td>See alternatives listed for Akebia</td>
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<tr>
<td>Liriope • Liriope muscari</td>
<td>Sallow Sedge • Carex lurida, Blue Sedge • Carex glaucodea, Plantain-leaved Sedge • Carex plantaginea, Bottlebrush Grass • Elymus hystrix</td>
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<tr>
<td>Miscanthus • Miscanthus sinensis</td>
<td>Little Bluestem • Schizachyrium scoparium</td>
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<tr>
<td>Porcelain-Berry • Ampelopsis brevipedunculata</td>
<td>See alternatives listed above for Akebia</td>
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<tr>
<td>Norway Maple • Acer platanoides</td>
<td>Red Maple • Acer rubrum, Oaks • Quercus species, Birch • Betula species</td>
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<tr>
<td>Winter Creeper • Euonymus fortunei</td>
<td>see English Ivy</td>
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Develop a Strategic Plan

1. Evaluate all the areas you need to address. Are there existing native plants struggling to survive? Might there be a seed bank of native plants that will grow once they have a chance? Are some invasive plants creating more problems than others? Your goal is not just to remove invasive plants, but to ensure each area recovers with native plants.

2. Prioritize the areas that will bring you both joy and success. First prevent the deterioration of good areas. Then address the areas where you can both enjoy and maintain success. Starting with areas that are “less bad” will allow you to achieve success sooner. Then cautiously move to the “more bad” areas. Resist the temptation to start with the worst areas, which will give the “less bad” areas time to get worse.

3. For larger areas, work from the boundaries of desirable plants inward toward the center of the invasive plant mass. By first addressing the less-infested area, you tip the balance in favor of the native plants, which will help contain the infested area.

4. Disturb the ground as little as possible to prevent weed seeds from germinating. A plant that can be successfully cut should not be dug out. Replace any soil disturbed and cover with the natural mulch around you (leaves, sticks, etc.).

5. Let the rate of native plant replacement, whether by nature or by you, dictate the rate of invasive plant removal. If you remove too much too fast, you are setting yourself up to repeat the exercise.

6. Monitor for recurring growth of the removed invasive plant and newly sprouting weeds. Learn to distinguish native plant seedlings, many of which will help you hold on to your advantage.

Methods of Removal

You can attack the nonnative invasive plants that menace your property many ways: by hand-pulling, digging, mowing or cutting, spraying with herbicides, grazing with goats, and even unleashing an insect or disease upon them. Some methods work better than others in each situation. Which method is best for a particular invasive plant depends upon several factors, including:

- Extent and severity of the infestation.
- Length of time the invasive has been a problem.
- Time of year you wish to treat it.
- Quality of the surrounding desirable vegetation.
- Other invasives to be treated at the same time.

MANUAL & MECHANICAL CONTROL

When we spot an invasive plant, our first impulse is often to yank it out. Sometimes this works and sometimes it does not. Manual and mechanical methods can allow invasives to resprout and even form dense thickets from a small piece of root left in the ground. This is one reason non-native invasive plants are so successful – they are persistent! Following up by spot-spraying or hand-pulling resprouts can solve this problem.

- Hand-pulling works best with small plants, small areas of infestation, and new invasions. Try to work when the soil is moist and roots are less likely to break off in a tug-of-war.
- Weed-whackers can kill some invasives (especially annual ones) by cutting them to the ground just before they begin to flower. Perennial invasives can be exhausted by repeating cutting.
- Clipper, lopper, handsaw or chainsaw might be more practical to cut individual woody shrubs, vines, and saplings to ground level. Resprouts will need to be cut back repeatedly. Applying herbicide to the resprouts should kill them.

CHEMICAL CONTROL

If you use herbicides to control invasive plants, be cautious. Read the herbicide label carefully and in its entirety and make sure you understand it prior to use. The label contains all the information you need to know to use the product correctly. The label on the herbicide product is a legal document and using the product inconsistent with label instructions is a violation of the law. Always follow label instructions and use the correct amount and the correct concentration at the correct time.

Blue Ridge PRISM collaborated with the Virginia Department of Forestry (DOF) to create an easy-to-use chart that includes DOF’s control recommendations for using manual, mechanical, and chemical control techniques. You can find this chart at www.blueridgeprism.org.

The content in “Avoid Planting Invasive Species” and “Managing Invasive Plants on Your Property” has been borrowed with permission from Blue Ridge PRISM. For more information about the work they do and invasives species commonly found in Virginia please visit their website: www.blueridgeprism.org.
Groundcovers are typically used in lieu of mulch to cover the soil around taller trees and shrubs, around foundations, or along pathways. When native groundcovers are used, the landscape becomes dramatically more ecologically resilient and supportive of wildlife. Note that many of these plants are highly adaptable. For instance many dry groundcovers, may do quite well in average or even moist soil. For additional groundcover options, visit the Traditional American Landscaping Solutions on page 16.

**DRY SHADE**

*Antennaria plantaginifolia* • Plantain-Leaved Pussytoes  
*Carex pensylvanica* • Pennsylvania Sedge  
*Chrysogonum virginianum* • Green and Gold  
*Eurybia divaricata* • White Wood Aster  
*Iris cristata* • Dwarf Crested Iris  
*Mitchella repens* • Partridgeberry  
*Parthenocissus quinquefolia* • Virginia Creeper  
*Phlox stolonifera* • Creeping Phlox  
*Phlox subulata* • Moss Phlox  
*Potentilla canadensis* • Dwarf Cinquefoil  
*Salvia lyrata* • Lyreleaf Sage  
*Sedum ternatum* • Woodland Stonecrop

**AVERAGE/MOIST SHADE**

*Anemone virginiana* • Tall Thimbleweed Anemone  
*Asarum canadense* • Wild Ginger  
*Carex plantaginea* • Plantain-Leaved Sedge  
*Conoclinium coelestinum* • Blue Mistflower  
*Convallaria pseudomajalis* • American Lily-of-the-Valley  
*Fragaria virginiana* • Wild Strawberry  
*Geranium maculatum* • Wild Geranium  
*Maianthemum racemosum* • False Solomon’s Seal  
*Pachysandra procumbens* • Allegheny Pachysandra  
*Packera aurea* • Golden Ragwort  
*Parathelypteris noveboracensis* • New York Fern  
*Phlox stolonifera* • Creeping Phlox  
*Polystichum acrostichoides* • Christmas Fern  
*Potentilla canadensis* • Dwarf Cinquefoil  
*Sisyrinchium angustifolium* • Blue Eyed Grass  
*Symphyotrichum oblongifolium* • Aromatic Aster  
*Tephrosia virginiana* • Virginia Goat’s Rue  
*Zizia aptera* • Heart-Leaf Golden Alexanders  
*Zizia aurea* • Golden Alexanders  

**WET SHADE**

*Athyrium asplenioides* • Southern Lady Fern  
*Caltha palustris* • Marsh Marigold  
*Deschampsia caespitosa* • Tufted Hairgrass  
*Onoclea sensibilis* • Sensitive Fern  
*Packera aurea* • Golden Ragweed  
*Sisyrinchium angustifolium* • Blue Eyed Grass  
*Viola cucullata* • Marsh Blue Violet

**FULL SUN**

*Allium cernuum* • Nodding Onion  
*Antennaria plantaginifolia* • Plantain-Leaved Pussytoes  
*Chamaecrista fasciculata* • Common Partridge Pea  
*Erigeron pulchellus* • Robin’s Plantain  
*Fragaria virginiana* • Wild Strawberry  
*Oenothera fruticosa* • Sundrops  
*Phlox subulata* • Moss Phlox  
*Salvia lyrata* • Lyreleaf Sage  
*Symphyotrichum oblongifolium* • Aromatic Aster  
*Tephrosia virginiana* • Virginia Goat’s Rue  
*Zizia aptera* • Heart-Leaf Golden Alexanders  
*Zizia aurea* • Golden Alexanders
Dry sunny conditions present a wonderful opportunity to introduce important nectar flowers for native pollinators. While establishing a native prairie, wildflower meadow, or oak savannah is tricky, it is worth exploring with the help of a qualified professional if you have the acreage. Otherwise, these native perennials and grasses can be planted in masses to great effect. If you choose to plant a seed mix, make sure to use high quality seed, preferably from a seed source as close to Southwest Virginia as possible. Many “wildflower” mixes sold at garden centers include non-native and even invasive species. For a list of seed sources visit our website.

**Keystone species.**

**GRASSES**
- *Andropogon gerardii* • Big Bluestem
- *Andropogon virginicus* • Broomsedge
- * Bouteloua curtipendula* • Side Oats Grama
- *Carex pensylvanica* • Pennsylvania Sedge
- *Danthonia spicata* • Poverty Oatgrass
- *Deschampsia cespitosa* • Tufted Hairgrass
- *Eragrostis spectabilis* • Purple Lovegrass
- *Muhlenbergia capillaris* • Muhly Grass
- *Schizachyrium scoparium* • Little Bluestem
- *Sorghastrum nutans* • Indian Grass

**FORBS**
- *Allium cernuum* • Nodding Onion
- *Antennaria neglecta* • Field Pussytoes
- *Antennaria plantaginifolia* • Plantain-Leaved Pussytoes
- *Asclepias tuberosa* • Butterfly Weed
- *Asclepias syriaca* • Common Milkweed
- *Baptisia tinctoria* • Yellow Wild Indigo
- *Blephilia ciliata* • Downy Wood Mint
- *Chamaecrista fasciculata* • Partridge Pea
- *Chrysopsis mariana* • Maryland Golden Aster
- *Clematis virginiana* • Virgin’s Bower
- *Coreopsis verticillata* • Threadleaf Coreopsis
- *Monarda fistulosa* • Wild Bergamot
- *Parthenium integrifolium* • Wild Quinine
- *Penstemon canescens* • Gray Beardtongue
- *Phlox subulata* • Moss Phlox
- *Pycnanthemum tenuifolium* • Narrow Leaf Mountain Mint
- *Rudbeckia hirta* • Black Eyed Susan
- *Salvia lyrata* • Lyreleaf Sage
- *Solidago odora* • Sweet Goldenrod
- *Solidago speciosa* • Showy Goldenrod

**SYMPHYOTRICHIUM LAEVE** • Smooth Blue Aster

**SHRUBS**
- *Ceanothus americanus* • New Jersey Tea
- *Diervilia lonicera* • Bush Honeysuckle
- *Juniperus virginiana* • Eastern Red Cedar
- *Rhus glabra* • Smooth Sumac
- *Rosa carolina* • Pasture Rose
- *Salix humilis* • Prairie Willow
- *Vaccinium angustifolium* • Northern Lowbush Blueberry

**TREES**
- *Acer rubrum* • Red Maple
- *Amelanchier arborea* • Downy Serviceberry
- *Amelanchier laeve* • Smooth Serviceberry
- *Diospyros virginiana* • American Persimmon
- *Nyssa sylvatica* • Black Gum
- *Oxydendrum arboreum* • Sourwood
- *Pinus rigida* • Pitch Pine
- *Pinus strobus* • Eastern White Pine
- *Pinus virginiana* • Virginia Pine
- *Prunus serotina* • Wild Black Cherry
- *Quercus alba* • White Oak
- *Quercus coccinea* • Scarlet Oak
- *Quercus montana* • Chestnut Oak
- *Quercus muehlenbergii* • Chinkapin Oak
- *Quercus rubra* • Red Oak
- *Rhus typhina* • Staghorn Sumac
- *Robinia pseudoacacia* • Black Locust
- *Thuja occidentalis* • American Arborvitae

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*Ian Caton, Andropogon glomeratus • Broomsedge*
Whether you want to plant a sunny depression that holds standing water after a rain, or plan a sunny rain garden, these easy native perennials will thrive, beautify, and add ecological value to your wet sunny spot. These are not aquatic plants suited for planting in a pond but thrive in moist areas and tolerate occasional flooding. [Keystone species.]

**GRASSES, FERNS, & SEDGES**
- *Andropogon glomeratus* • Bushy Bluestem
- *Carex crinita* • Long Fringed Sedge
- *Carex lurida* • Sallow Sedge
- *Carex stricta* • Tussock Sedge
- * Dichanthelium clandestinum* • Deertongue Grass
- *Juncus effusus* • Common Rush
- *Carex crinita* • Long Fringed Sedge
- *Carex lurida* • Sallow Sedge
- *Carex stricta* • Tussock Sedge

**FORBS**
- *Asclepias incarnata* • Swamp Milkweed
- *Chelone glabra* • White Turtlehead
- *Eupatorium perfoliatum* • Boneset
- *Eutrochium fistulosum* • Hollow Joe Pye Weed
- *Helenium autumnale* • Common Sneezeweed
- *Hibiscus moscheutos* • Swamp Rose Mallow
- *Liatris spicata* • Dense Blazing Star
- *Lobelia cardinalis* • Cardinal Flower
- *Lobelia siphilitica* • Great Blue Lobelia
- *Monarda didyma* • Scarlet Bee Balm
- *Packera aurea* • Golden Ragweed
- *Solidago rugosa* • Wrinkle Leaf Goldenrod
- *Symphyotrichum novae-angliae* • New England Aster
- *Verbena hastata* • Blue Vervain
- *Vernonia noveboracensis* • New York Ironweed
- *Viola cucullata* • Marsh Blue Violet

**SHRUBS**
- *Alnus serrulata* • Smooth Alder
- *Amelanchier canadensis* • Canada Serviceberry
- *Aronia arbutifolia* • Red Chokeberry
- *Cornus amomum* • Silky Dogwood
- *Hypericum densiflorum* • Bushy St. John’s Wort
- *Ilex verticillata* • Winterberry
- *Kalmia latifolia* • Mountain Laurel
- *Physocarpus opulifolius* • Ninebark

**TREES**
- *Acer rubrum* • Red Maple
- *Acer saccharinum* • Silver Maple
- *Betula nigra* • River Birch
- *Betula alleghaniensis* • River Birch
- *Carya cordiformis* • Bitternut Hickory
- *Platanus occidentalis* • American Sycamore
- *Populus deltoides* • Eastern Cottonwood
- *Quercus bicolor* • Swamp White Oak
- *Quercus palustris* • Pin Oak
- *Salix nigra* • Black Willow

Perrin Heartway, *Rhododendron maximum* • Great Rhododendron
Dry shade presents one of the most challenging landscapes for the home gardener. However, the lack of weed pressure also makes these areas full of opportunity. With a little planning and care, these landscapes can be beautifully shaped to require very little weeding or maintenance. Create depressions or bioswales to improve moisture levels for fuller foliage. Add paths, rock features, or statuary to make the most of the dry shade garden. Extra care will be needed to ensure adequate moisture during establishment. Keystone species.

GRASSES, SEDGES & FERNS
Carex appalachia • Appalachian Sedge
Carex pensylvanica • Pennsylvania Sedge
Danthonia spicata • Poverty Oatgrass
Dichanthelium clandestinum • Deertongue Grass
Dryopteris intermedia • Evergreen Wood Fern
Dryopteris marginalis • Marginal Wood Fern
Polystichum acrostichoides • Christmas Fern

FORBS
Anemone virginiana • Tall Thimbleweed Anemone
Anemone quinquefolia • Wood Anemone
Clitoria mariana • Butterfly Pea
Erigeron pulchellus • Robin’s Plantain
Eurybia divaricata • White Wood Aster
Fragaria virginiana • Wild Strawberry
Galax urceolata • Galax
Hepatica acutiloba • Sharp-Lobed Hepatica
Hepatica americana • Round-Lobed Hepatica
Heuchera americana • American Alumroot
Mitchella repens • Partridgeberry
Mitella diphylla • Two-Leaved Miterwort
Parthenocissus quinquefolia • Virginia Creeper
Penstemon canescens • Eastern Gray Beardtongue
Polygonatum biflorum • Solomon’s Seal
Potentilla canadensis • Dwarf Cinquefoil
Pycnanthemum incanum • Hoary Mountain Mint
Salvia lyrata • Lyreleaf Sage
Sanguinaria canadensis • Bloodroot
Solidago caesia • Blue-stemmed Goldenrod
Symphyotrichum cordifolium • Blue Wood Aster

SHRUBS
Castanea pumila • Allegheny Chinquapin
Cornus alternifolia • Alternate-leaf Dogwood
Gaultheria procumbens • Wintergreen
Gaylussacia baccata • Black Huckleberry
Vaccinium corymbosum • Northern Highbush Blueberry
Vaccinium pallidum • Early Lowbush Blueberry
Viburnum acerifolium • Maple-Leaf Viburnum

TREES
Carya glabra • Pignut Hickory
Carya tomentosa • Mockernut Hickory
Diospyros virginiana • Common Persimmon
Quercus falcata • Southern Red Oak
Quercus velutina • Black Oak

VINES
Bignonia capreolata • Crossvine
That wet spot beside the driveway or in the bottom of your yard does not need to stay a bare, dank puddle. Instead, it can become a lush zone full of charming greenery. These native perennials will thrive in moist shady areas and tolerate occasional flooding. While they will work in shady rain gardens, they are not aquatic plants suited for submersion in a pond or wetlands.

**Keystone species.**

**GRASSES, SEDGES & FERNS**
- *Athyrium asplenioideae* • Southern Lady Fern
- *Carex crinita* • Long Hair Sedge
- *Carex lurida* • Sallow Sedge
- *Dryopteris intermedia* • Evergreen Wood Fern
- *Onoclea sensibilis* • Sensitive Fern
- *Osmunda spectabilis* • Royal Fern
- *Osmundastrum cinnamomeum* • Cinnamon Fern

**FORBS**
- *Allium tricoccum* • Wild Leeks
- *Arisaema triphyllum* • Jack-in-the-Pulpit
- *Aruncus dioicus* • Goatsbeard
- *Caltha palustris* • Marsh Marigold
- *Chelone glabra* • White Turtlehead
- *Claytonia virginica* • Spring Beauty
- *Impatiens capensis* • Orange Jewelweed
- *Impatiens pallida* • Yellow Jewelweed
- *Lobelia cardinalis* • Cardinal Flower
- *Lobelia siphilitica* • Great Blue Lobelia
- *Mertensia virginica* • Virginia Bluebells
- *Mitchella repens* • Partridgeberry
- *Packera aurea* • Golden Ragweed
- *Phlox maculata* • Meadow Phlox
- *Rudbeckia laciniata* • Cutleaf Coneflower
- *Trillium grandiflorum* • Large Flowered Trillium
- *Viola cucullata* • Marsh Blue Violet
- *Zizia aurea* • Golden Alexanders

**SHRUBS**
- *Alnus serrulata* • Smooth Alder
- *Cephalanthus occidentalis* • Buttonbush
- *Cornus amomum* • Silky Dogwood
- *Ilex verticillata* • Winterberry
- *Kalmia latifolia* • Mountain Laurel

**TREES**
- *Betula alleghaniensis* • River Birch
- *Betula lenta* • Sweet Birch
- *Betula nigra* • River Birch
- *Carya cordiformis* • Bitternut Hickory
- *Quercus bicolor* • Swamp White Oak
- *Quercus palustris* • Pin Oak
- *Populus deltoides* • Eastern Cottonwood
- *Platanus occidentalis* • American Sycamore
- *Salix nigra* • Black Willow

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Linderas benzoin • Spicebush
*Physocarpus opulifolius* • Ninebark
*Ptelea trifoliata* • Hop-tree
*Rhododendron calundulaceum* • Flame Azalea
*Rhododendron catawbiense* • Catawba Rhododendron
*Rhododendron maximum* • Great Rhododendron
*Rhododendron periclymenoides* • Pinxterbloom Azalea
*Salix sericea* • Silky Willow
*Sambucus canadensis* • Elderberry
*Vaccinium corymbosum* • Northern Highbush Blueberry
*Viburnum acerifolium* • Maple-leaf Viburnum
*Viburnum dentatum* • Southern Arrow-wood Viburnum
*Xanthorhiza simplicissima* • Yellowroot
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Forbs (also known as perennial plants) live for two or more years and lack woody stems at or above the ground. Usually flowers produce seed each year, but some plants reproduce by means of bulbs, tubers, woody crowns, and rhizomes. Some perennials die back to ground level at the end of the growing season, remain dormant during the winter, and resume growth in the spring (herbaceous). Others remain semi-green or totally green in winter (evergreen). Perennials are common in a wide range of landscapes including sunny, shady, dry, wet, windy, salty, formal and natural. The position and composition of leaves, stems, roots, and other parts of perennial plants are specific to an individual plant’s needs in order to survive. They might have specialized stems or crowns that allow them to survive periods of dormancy over cold or dry seasons during the year. The many different colors of flowers, seeds or leaves of perennials are the showy, decorative parts of a landscape. They stand out when surrounded by complimentary or contrasting colors, or surrounded by groundcovers in a landscape. Perennial plants are usually better competitors than annual plants, because they develop larger root systems which can access water and nutrients deeper in the soil and cause them to emerge earlier in the spring.

**Achillea borealis, American Yarrow**

- **Height:** 3 ft. 3 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** White
- **Bloom Period:** J J J F M A M J J A S O N D

Flat-topped clusters of small, fragrant flowers grow atop gray-green and hairy stems, lined with fine ferny leaves. Achillea has ancient herbal lore and supports many insects. May have hybridized with introduced species.

**Actaea racemosa, Common Black Cohosh**

- **Height:** 6 ft. 4 ft.
- **Soil Type:** Clay, loam
- **Bloom Color:** White
- **Bloom Period:** J J J F M A M J J A S O N D

Moisture and shade loving herbaceous perennial, favors rich humic soils and north facing slopes. Compound-lobed, dark green, shiny leaves ascend from a central stem topped by a narrow white flower plume in midsummer.

**Agastache nepetoides, Yellow Giant Hyssop**

- **Height:** 6 ft. 3 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow
- **Bloom Period:** J J J F M A M J J A S O N D

Green flower spikes sprinkled with small yellow flowers top the bold foliage of downy arrowhead leaves. Beloved by pollinators. Has a presence in the winter landscape. Good in a mass along the back of the garden bed.
Agastache scrophulariifolia, Purple Giant Hyssop

- **Bloom Color:** Purple
- **Soil Type:** Clay, loam, sand
- **Bloom Period:** J F M A M J J A S O N D
- **Light purple to white flower spikes top the bold foliage of downy arrowhead leaves. Beloved by pollinators. Has a presence in the winter landscape. Good in a mass along the back of the garden bed.**

Ageratina altissima, White Snakeroot

- **Bloom Color:** White
- **Soil Type:** Clay, loam
- **Bloom Period:** J F M A M J J A S O N D
- **Upright, spreading, branching, with nettle-like toothed leaves. White flower clusters in late summer to fall fade to small seeds with fluffy white tails. Adaptable, easily naturalizes, prefers rich moist soils.**

Allium cernuum, Nodding Onion

- **Bloom Color:** Pink
- **Soil Type:** Loam, sand
- **Bloom Period:** J F M A M J J A S O N D
- **Low grass-like onion foliage sends up an arching green stem from which hangs a cluster of pale pinkish purple flowers. Native bees hang from the delicate, long-stamened flowers to gather nectar and pollen.**

Allium tricoccum, Ramps, Wild Leek

- **Bloom Color:** Pink
- **Soil Type:** Loam, sand
- **Bloom Period:** J F M A M J J A S O N D
- **Grows a cluster of 2-6 bulbs below flat, smooth, and light green leaves in open woods. A single flower stalk rises above the leaves bearing a starburst ball of green buds and white flowers. Over-harvested in the wild.**
**Anemone quinquefolia, Wood Anemone**

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

Has single star-shaped white flowers above deeply cut dark green leaves. Late spring ephemeral. Grows beautifully in mass and can make a good shade groundcover.

**Antennaria neglecta, Field Pussytoes**

- **Soil Type:** Clay, loam
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

White tufted flowers like tiny cat’s paws rise in late spring above low-growing velvety narrow leaves. Makes a good groundcover for dry areas. Best grown in lean, gritty to rocky well-drained soils.

**Anemone virginiana, Tall Thimbleweed**

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

In late spring and early summer the white flowers appear suspended above palmate, dark green leaves. The distinctive thimble-shaped flower center accounts for its name. Spreads slowly in the woodland garden.

**Antennaria plantaginifolia, Plantain-Leaved Pussytoes**

- **Soil Type:** Loam, sand
- **Bloom Color:** White, pink
- **Bloom Period:** J F M A M J J A S O N D

Short, mat-forming woolly herbaceous plant with paddle-shaped 3” basal leaf rosettes and fuzzy flower stalks with pearly white clusters of rayless flowers. Grows in glades with acid soils, dry or rocky slopes.
Aquilegia canadensis, Wild Columbine

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow, red
- **Bloom Period:** J F M A M J J A S O N D

Nodding clusters of red and yellow intricate bell flowers. Host plant for Columbine duskywing, nectar source for hummingbirds and butterflies. Grows well in shady woodland gardens. Will self-sow to form colonies.

Aralia racemosa, Spikenard

- **Soil Type:** Clay, loam
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

Large compound leaves are serrated and oval-rounded. Large, tapered white and green flower clusters are followed by purple-red fruits in fall. A soft-stemmed, herbaceous perennial. Grows in moist rich woods.

Arisaema triphyllum, Common Jack-In-The-Pulpit

- **Soil Type:** Loam, sand
- **Bloom Color:** Green, purple
- **Bloom Period:** J F M A M J J A S O N D

Spring woodland flower that sports 1-2 large, almost tropical feeling, compound leaves which shade the flower and its red berry cluster. Flower spathe (pulpit) and spadix (Jack) are striped green, white, and/or purple.

Aruncus dioicus, Goat’s Beard

- **Soil Type:** Clay, loam
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

Leaves resemble blackberry leaves. Bears plumes of tiny white flowers in sometimes-showy panicles. Shrubby perennial that easily shares space with other moist shade-loving perennials. Host to the dusky azure butterfly.
Asarum canadense, Common Wild Ginger

- Height: 1 ft. Width: 18 in.
- Soil Type: Loam, sand
- Bloom Color: Purple, brown
- Bloom Period: J F M A M J J A S O N D


Asclepias incarnata, Swamp Milkweed

- Height: 5 ft. Width: 3 ft.
- Soil Type: Clay, loam
- Bloom Color: White, pink
- Bloom Period: J F M A M J J A S O N D

Showy milkweed that blooms profusely and fragrantly in pretty rose pink for a long duration. Excellent for wetland rehabilitation, it makes many ecosystem contributions. Also grows in average garden soil.

Asclepias syriaca, Common Milkweed

- Height: 4 ft. Width: 1 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: White, pink
- Bloom Period: J F M A M J J A S O N D

Tall stems sprout thick fat oval-shaped leaves and dusty pink flower clusters from mid-summer to early fall. Thrives in poor dry soil and disturbed sites. Larval host for monarch butterfly, nectar source for butterflies.

Asclepias tuberosa, Butterfly Weed

- Height: 2 ft. Width: 18 in.
- Soil Type: Clay, loam, sand
- Bloom Color: Yellow, orange
- Bloom Period: J F M A M J J A S O N D

**FORBS**

*Baptisia australis*, Blue Wild Indigo

- **Height**: 4 ft. ↔ 4 ft.
- **Soil Type**: Loam, sand
- **Bloom Color**: Blue
- **Bloom Period**: J F M A M J J A S O N D

Bushy perennial with soft rounded blue-green leaves and dense spikes of purple flowers reminiscent of peas. Attractive foliage and broad growth habit make a good background, dies back in early fall.

*Ian Caton, Wood Thrush Native Nursery*

*Baptisia tinctoria*, Yellow Wild Indigo

- **Height**: 3 ft. ↔ 3 ft.
- **Soil Type**: Loam, sand
- **Bloom Color**: Yellow
- **Bloom Period**: J F M A M J J A S O N D

Smooth, shrubby perennial with small, yellow to cream, pea-like flowers in sparsely-flowered clusters above rounded, gray-green leaves. Durable and long-lived, good for erosion control in dry conditions.

*Ian Caton, Wood Thrush Native Nursery*

*Blephilia ciliata*, Downy Wood Mint

- **Height**: 3 ft. ↔ 2 ft.
- **Soil Type**: Loam, sand
- **Bloom Color**: Purple
- **Bloom Period**: J F M A M J J A S O N D

Straight square stems above downy lance-shaped leaves are topped by blue-purple flowers in several tiered, globular clusters. Reminiscent of Monarda, a deer-resistant perennial that spreads slowly from a central taproot.

*Jennifer Lovern, Draper Springs Nursery*

*Caltha palustris*, Marsh Marigold

- **Height**: 2 ft. ↔ 18 in.
- **Soil Type**: Loam, sand
- **Bloom Color**: Yellow
- **Bloom Period**: J F M A M J J A S O N D

Low mounding succulent plant with glossy, ruffled leaves, hollow branching stems and bright, showy yellow rounded star-shaped flowers in late spring. Native to wet woods, marshy hollows, and stream edges.

*Gloria Schoenholtz*
**Caulophyllum thalictroides**, Blue Cohosh

![Image of Blue Cohosh]

- **Soil Type:** Clay, loam
- **Bloom Color:** Yellow, green
- **Bloom Period:**
  - J F M A M J J A S O N D

Elegant, beautifully divided blue-green foliage, erect clusters of blue fruits, and purplish highlights. Leaflets are tulip-shaped and broadly serrated at the tip. Toxic for small children.

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**Chamaecrista fasciculata**, Common Partridge Pea

![Image of Common Partridge Pea]

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow
- **Bloom Period:**
  - J F M A M J J A S O N D

Native annual legume with feathery green leaves that fold together when touched and in the evening. Large yellow flowers. Blooms summer to fall. Attractive to bees and butterflies, and narrow seed pods attractive to birds.

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**Chamaelirium luteum**, Devil’s Bit

![Image of Devil’s Bit]

- **Soil Type:** Loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  - J F M A M J J A S O N D

Charming basal rosette of leaves sends up stalks of dramatic white flower spikes in mature moist oak forests. Flowers are larger and yellowish in male plants, smaller in females. Wild collection threatens this plant.

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**Chelone glabra**, White Turtlehead

![Image of White Turtlehead]

- **Soil Type:** Clay, loam
- **Bloom Color:** White, pink
- **Bloom Period:**
  - J F M A M J J A S O N D

Moisture-loving perennial spreads to form handsome masses, with showy white flowers in late summer. Excellent for rain gardens or lining streams. Prefers partial shade. Nectar source for butterflies and hummingbirds.
**Chrysogonum virginianum, Green-and-Gold**

![Image](Chrysogonum_virginianum.jpg)

- **Height**: 1 ft. 18 in.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Yellow
- **Bloom Period**: J F M A M J J A S O N D

Low-growing rhizomatous perennial makes an excellent shade groundcover, spreading to easily controlled mats of green foliage and star-shaped yellow flowers. Blooms peak in May but continue through the growing season.

Tara Poelzing

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**Chrysopsis mariana, Maryland Golden Aster**

![Image](Chrysopsis_mariana.jpg)

- **Height**: 3 ft. 2 ft.
- **Soil Type**: Loam, sand
- **Bloom Color**: Yellow
- **Bloom Period**: J F M A M J J A S O N D

Low-growing sturdy rosettes of woolly leaves sprout silky flower stems in late summer with yellow aster-like flowers favored by native pollinators. Native to sandy pine woods and roadides, prefers sunny well-drained soil.

Gloria Schoenholtz

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**Claytonia virginica, Spring Beauty**

![Image](Claytonia_virginica.jpg)

- **Height**: 8 in.
- **Soil Type**: Loam, sand
- **Bloom Color**: Pink
- **Bloom Period**: J F M A M J J A S O N D

Spreads by seed to form patches. Disappears above ground after setting seed, so include other plants. The Spring Beauty Miner Bee (Andrena erigeniae) is an important pollinator, emerging at the same time. All parts are edible.

Tara Poelzing

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**Conoclinium coelestinum, Blue Mistflower**

![Image](Conoclinium_coelestinum.jpg)

- **Height**: 3 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Blue
- **Bloom Period**: J F M A M J J A S O N D

Native wildflower that can take over an area through self-seeding and rhizomes in moist soils. Its blooms attract nectar feeders for many months. Cutting back in summer helps prevent flopping.

Gloria Schoenholtz
**Convallaria pseudomajalis**, American Lily-of-the-Valley

- 1 ft. ➔ 2 ft.
- Soil Type: Clay, loam, sand
- Bloom Period: J F M A M J J A S O N D
- Fragrant bell-shaped flowers on short stalks. Found in rocky or sandy dry woodlands at elevations from 2000’ to 5000’. Drought tolerant once established. Spreads by rhizomes to form colonies. Highly poisonous.

**Coreopsis major**, Woodland Coreopsis

- 3 ft. ➔ 2 ft.
- Soil Type: Loam, sand
- Bloom Period: J F M A M J J A S O N D
- Small branching clusters of large yellow daisy-like flowers with yellow or red disks top the straight stems. Whorls of 6 lance-shaped leaflets clasp the stems at intervals. Native to upland forests, clearings, outcrops.

**Coreopsis tripteris**, Tall Coreopsis

- 8 ft. ➔ 8 ft.
- Soil Type: Clay, loam, sand
- Bloom Period: J F M A M J J A S O N D
- Tall and slender with anise-scented three-lobed leaves, and pale-yellow daisy-like flowers with brown disks born on long stems. Short-lived perennial and self-sows freely to form perennial colonies under ideal conditions.

**Coreopsis verticillata**, Threadleaf Coreopsis

- 3 ft. ➔ 2 ft.
- Soil Type: Loam, sand
- Bloom Period: J F M A M J J A S O N D
- Profusion of showy yellow flowers bloom amidst bright green thread-like foliage growing in mounds. Shear in late summer to promote fall rebloom. Spreads by rhizome and self-seeding and can become aggressive.
**Dicentra canadensis**, Squirrel Corn

<table>
<thead>
<tr>
<th>1 ft.</th>
<th>1 ft.</th>
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</thead>
</table>

**Soil Type:** Loam, sand  
**Bloom Color:** White  
**Bloom Period:**

**Charming spring ephemeral has lacy blue-green foliage and stems with a cluster of white fragrant heart-shaped flowers. Thrives in moist deciduous woods, attracts chipmunks and mice, toxic to humans, deer resistant.**

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**Dicentra cucullaria**, Dutchman’s Breeches

<table>
<thead>
<tr>
<th>1 ft.</th>
<th>1 ft.</th>
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</thead>
</table>

**Soil Type:** Clay, loam  
**Bloom Color:** White  
**Bloom Period:**

**Mounds of feathery blue-green leaves and flower stems dangling showy white pantaloon-shaped flowers make this a prized spring ephemeral. Pollinated by native bumblebees, toxic to humans, deer resistant.**

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**Dicentra eximia**, Wild Bleeding Heart

<table>
<thead>
<tr>
<th>2 ft.</th>
<th>18 in.</th>
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</thead>
</table>

**Soil Type:** Clay, loam  
**Bloom Color:** Pink  
**Bloom Period:**

**Gray-green lacy fern-like foliage grows in low mounds with clusters of rose-pink heart-shaped flowers blooming freely from spring to fall. Does not tolerate wet soil in winter. Deer resistant.**

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**Endodeca serpentaria**, Virginia Snakeroot

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<tr>
<th>2 ft.</th>
<th>2 ft.</th>
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</table>

**Soil Type:** Clay, loam, sand  
**Bloom Color:** Yellow, purple  
**Bloom Period:**

**Small plant with pipe-shaped flowers and heart-shaped leaves. Often overlooked because it grows low to the ground. Bruised plant parts emit a faint, turpentine-like aroma. Increasingly rare in the wild.**

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**Erigeron pulchellus, Robin’s Plantain**

- **Height:** 2 ft. ↔ 2 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

Downy basal paddle-shaped leaves can form a dense mat. Downy stems rise above base leaves bearing small clusters of whitish flowers with very narrow rays around a yellow center. After flowering, stems fade to the base.

**Erythronium americanum, Yellow Trout Lily**

- **Height:** 6 in. ↔ 6 in.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow
- **Bloom Period:** J F M A M J J A S O N D

Spring ephemeral that sends up two elliptical, brown-mottled leaves and a stalk bearing a single nodding flower, yellow inside, bronzy outside, petals curl back around six brown stamens. Grows best under native leaf litter.

**Eupatorium perfoliatum, Common Boneset**

- **Height:** 6 ft. ↔ 4 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

Robust spreading perennial with hairy lance-shaped leaves growing in pairs united at the stem and topped with clusters of small white flowers. All parts are toxic. May over compete in meadow plantings.

**Eurybia divaricata, White Wood Aster**

- **Height:** 3 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White, yellow
- **Bloom Period:** J F M A M J J A S O N D

Grows in loose clumps of arrow shaped leaves with dark, sprawling, sometimes zigzag stems and small white daisy-like flowers with narrow petals and yellow centers. In cultivation may form larger mounds.
**Eutrochium fistulosum, Hollow Joe-Pye-weed**

![Image of Eutrochium fistulosum]

- **Height:** 7 ft. ↔ 4 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Pink
- **Bloom Period:**
  - J F M A M J J A S O N D

Tall, vigorous, and clumping, with straight stems bearing whorls of arching lance-shaped leaves topped by large dusty mauve umbel flowers loved by Monarch butterflies. Makes a dramatic statement in the fall garden.

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**Fragaria virginiana, Wild Strawberry**

![Image of Fragaria virginiana]

- **Height:** 6 in. ↔ 1 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  - J F M A M J J A S O N D

Three leaflets with parallel veins and evenly serrated edges, small white flowers, and small, delicious berries. Highly adaptable, aggressive groundcover. A parent of cultivated hybrid strawberries.

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**Geranium maculatum, Wild Geranium**

![Image of Geranium maculatum]

- **Height:** 2 ft. ↔ 18 in.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Pink
- **Bloom Period:**
  - J F M A M J J A S O N D

Five-petaled flowers in pink, purple or rarely white bloom in spring above distinctive deeply lobed foliage. A nice groundcover in the shady woodland gardens. Attracts native birds and bees.

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**Helenium autumnale, Common Sneezeweed**

![Image of Helenium autumnale]

- **Height:** 5 ft. ↔ 3 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow
- **Bloom Period:**
  - J F M A M J J A S O N D

Tall showy perennial with as many as 100 flower heads in a branching array. Flowers have raised centers and wedge-shaped, yellow petals which end in three teeth. Poisonous to livestock.
Helianthus decapetalus, Thin-leaved Sunflower

- Sun
- Full foliage, serrated lance shaped or oval leaves, and large yellow daisy-like flowers with dark gold centers.
- Native to alluvial forest, riverbanks and mesic forest clearings.
- Soil Type: Loam, sand
- Bloom Color: Yellow
- Bloom Period: J J F M A M J J A S O N D

Helianthus divaricatus, Woodland Sunflower

- Sun
- Easily grown in a wide range of soil conditions. Spreads over time by creeping rhizomes to form colonies. Divide every 3-4 years to control spread and maintain vigor.
- Soil Type: Loam, sand
- Bloom Color: Yellow
- Bloom Period: J J F M A M J J A S O N D

Heliopsis helianthoides, Oxeye

- Sun
- Popular in Europe where there are a number of cultivars. Large yellow ray flowers with dark yellow cone stand out against the nice dark green foliage. Found by streamsides, roadsides, open woodlands, grasslands.
- Soil Type: Clay, loam, sand
- Bloom Color: Yellow
- Bloom Period: J J F M A M J J A S O N D

Hepatica acutiloba, Sharp-lobed Hepatica

- Shade
- Early spring ephemeral bears white, pinkish or purple flowers with 6 petal-like sepals atop narrow dark stems, followed by pointed trifoliate leaves that are sometimes mottled. New leaves emerge after flowering begins.
- Soil Type: Clay, loam, sand
- Bloom Color: White
- Bloom Period: J J F M A M J J A S O N D
Hepatica americana, Round-Lobed Hepatica

- **Height**: 1 ft. ↔ 1 ft.
- **Bloom Period**: J F M A M J J A S O N D
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: White, pink
- **Description**: Very early spring ephemeral bears white, pink, blue, or purple flowers atop fuzzy stems, followed by rounded trifoliate leaves which remain evergreen until next spring. Native to drier rich woodland areas than A. acutiloba.

Heuchera americana, American Alumroot

- **Height**: 3 ft. ↔ 18 in.
- **Bloom Period**: J F M A M J J A S O N D
- **Soil Type**: Loam, sand
- **Bloom Color**: White
- **Description**: Low mounding perennial with attractive leaves in shades of green, purple, bronze and cream, with or without veining and marbling. Thrives in well-drained, humus-rich acid soil. Tolerates poor dry alkaline soil.

Heuchera villosa, Hairy Alumroot

- **Height**: 3 ft. ↔ 2 ft.
- **Bloom Period**: J F M A M J J A S O N D
- **Soil Type**: Loam, sand
- **Bloom Color**: White, pink
- **Description**: Low mounding semi-evergreen perennial with feathery, plume-like flower spikes and graceful, maple-like, hairy, basal leaves. Tiny flowers bloom pink to white in summer. Prefers moist rich shade but tolerates some drought.

Hibiscus moscheutos, Swamp Rose-mallow

- **Height**: 8 ft. ↔ 4 ft.
- **Bloom Period**: J F M A M J J A S O N D
- **Soil Type**: Clay, loam
- **Bloom Color**: White, pink
- **Description**: Native hibiscus that sports giant hibiscus flowers in white to pink to maroon with maroon centers. Dies to the ground in the fall. Makes a good wetland summer hedge.
**Hydrastis canadensis, Golden-seal**

- Height: 2 ft. ± 2 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: White
- Bloom Period: J F M A M J J A S O N D

Low stems support a hand of maple-like, shiny-green wrinkled leaves, topped by a single, white flower with yellow stamens followed by a cluster of red berries. Wild collection has threatened this medicinal herb.

- Irvine Wilson, VA DCR

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**Impatiens capensis, Orange jewelweed**

- Height: 5 ft. ± 3 ft.
- Soil Type: Clay, loam
- Bloom Color: Orange
- Bloom Period: J F M A M J J A S O N D

Dangling orange flowers result in slender seed capsules which explosively split open at a touch, dispersing the tiny seeds within in all directions, sometimes called touch-me-not. Attracts the Ruby Throated Hummingbird.

- Nicole Hersch, New River Chapter VNPS

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**Impatiens pallida, Yellow Jewelweed**

- Height: 5 ft. ± 3 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: Yellow
- Bloom Period: J F M A M J J A S O N D

Called jewelweed because of the way dew sits on its leaves. Said to be an antidote to poison ivy. A long bloom season results in capsules that explosively split open. Tolerates drier soils than Orange jewelweed.

- Jennifer Lovern, Draper Springs Nursery

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**Iris cristata, Dwarf Crested Iris**

- Height: 2 ft. ± 1 ft.
- Soil Type: Clay, loam
- Bloom Color: Purple
- Bloom Period: J F M A M J J A S O N D

Low-growing rhizomatous perennial that makes an excellent shade groundcover, spreading to easily controlled mats of green foliage and purple flowers. Blooms peak in May but continue through the growing season.

- Gloria Schoenholtz
**Iris versicolor**, Northern Blue Flag Iris

- **Soil Type:** Clay, loam
- **Bloom Color:** Purple
- **Bloom Period:** J F M A M J J A S O N D

Vigorous, forms small colonies from rhizomes in wet, sunny places. Deer resistant. Called *versicolor* because of the variation of hue in the blue violet flowers. Propagate by division after bloom.

**Jeffersonia diphylla**, Twinleaf

- **Soil Type:** Clay, loam
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

Plants are best sited under deciduous canopies to receive part sun in spring, but shade throughout the heat of summer. Do not allow soil to dry out. Mulch to help keep the roots cool. Sometimes confused with bloodroot.

**Liatris spicata**, Dense Blazing Star

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Purple
- **Bloom Period:** J F M A M J J A S O N D

Erect, slender perennial. Grass-like leaves, clumped toward the base of the plant, but extend up the stem to the showy flower cluster. Flower cluster has a feathery appearance and attracts many pollinator species.

**Lilium canadense**, Canada Lily

- **Soil Type:** Loam
- **Bloom Color:** Red, yellow
- **Bloom Period:** J F M A M J J A S O N D

Large showy lily, with one to several nodding bell-shaped flowers. Flower buds and roots were eaten by Indians. One plant can have as many as 16-20 flower stalks. Division after blooming is an easy way to propagate.
Lilium superbum, Turk’s-cap Lily

8 ft. 1 ft.
Soil Type: Loam, sand
Bloom Color: Orange
Bloom Period: J F M A M J J A S O N D

The largest and most spectacular of the native Lilies. Up to 40 flowers have been recorded on a single plant. Attracts hummingbirds. Flower petals bend and reflex farther back distinguishing it from the Canada Lily.

Lobelia cardinalis, Cardinal Flower

4 ft. 2 ft.
Soil Type: Clay, loam
Bloom Color: Red
Bloom Period: J F M A M J J A S O N D

Named after the robes of Roman Catholic cardinals, which share its bright red color. A late summer bloomer. Attracts butterflies and hummingbirds to wet meadows, woodland gardens, and pondside areas.

Lobelia siphilitica, Great Blue Lobelia

3 ft. 18 in.
Soil Type: Clay, loam, sand
Bloom Color: Blue
Bloom Period: J F M A M J J A S O N D

Showy perennial with tubular flowers crowded together on the upper stem. Bright summer blooms are a welcome addition to any woodland garden. Named from the fact that it was supposed to cure syphilis.

Maianthemum racemosum, False Solomon’s-seal

3 ft. 2 ft.
Soil Type: Clay, loam, sand
Bloom Color: White
Bloom Period: J F M A M J J A S O N D

Masses of small white fragrant flowers at end of gracefully arched, unbranched stems. Flowers attract many insects; the fruit is eaten by birds. Roots do not like to be disturbed, particularly before establishment.
**Mertensia virginica**, Virginia Bluebell

- **Height:** 2 ft. 18 in.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Blue
- **Bloom Period:**
  - January
  - February
  - March
  - April
  - May
  - June
  - July
  - August
  - September
  - October
  - November
  - December

Nodding bell-shaped lavender-blue flowers rise from pink buds and gray-green foliage. Attracts bees and butterflies. Plant becomes dormant after blooming. Can be interplanted along borders or for a pollinator garden.

**Mitchella repens**, Partridgeberry

- **Height:** 4 in. 1 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  - January
  - February
  - March
  - April
  - May
  - June
  - July
  - August
  - September
  - October
  - November
  - December

Slow, evergreen creeping groundcover, with stems running along the ground. Dainty, best grown in small areas. Red berries in July-December, which may persist through winter; leaves are used for a medicinal tea.

**Mitella diphylla**, Two-leaved Miterwort

- **Height:** 2 ft. 1 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  - January
  - February
  - March
  - April
  - May
  - June
  - July
  - August
  - September
  - October
  - November
  - December

Slender cluster of tiny white flowers with five delicately fringed petals with a single pair of heart-shaped leaves. Attracts pollinator bees. Prefers moist rich shade. Slow to establish, no known pests or diseases.

**Monarda didyma**, Scarlet Beebalm

- **Height:** 3 ft. 3 ft.
- **Soil Type:** Clay, loam
- **Bloom Color:** Red
- **Bloom Period:**
  - January
  - February
  - March
  - April
  - May
  - June
  - July
  - August
  - September
  - October
  - November
  - December

Bright red tubular flowers atop square stems with a minty aroma. Very showy and frequently used in cultivated gardens for pollinators, butterflies, and hummingbirds. Leaves were historically used for tea.
**Monarda fistulosa, Wild Bergamot**

- **Growth**: 5 ft. ↔ 3 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Pink
- **Bloom Period**: J F M A M J J A S O N D
- **Flower Description**: Produces stunning violet blooms that attract native bees, birds, and butterflies. A larval host plant for Eastern Tiger Swallowtail, Great Spangled Fritillary, and Monarch butterflies. Deer resistant.

**Oenothera fruticosa, Narrow-leaf Sundrops**

- **Growth**: 2 ft. ↔ 2 ft.
- **Soil Type**: Loam, sand
- **Bloom Color**: Yellow
- **Bloom Period**: J F M A M J J A S O N D
- **Flower Description**: A reddish-purple basal rosette is evergreen in mild winters. Striking yellow blooms spread rapidly under favorable conditions, but not usually aggressive. Attracts birds, hummingbirds, and native bees.

**Opuntia humifusa, Eastern Prickly-pear**

- **Growth**: 1 ft. ↔ 2 ft.
- **Soil Type**: Loam, sand
- **Bloom Color**: Yellow
- **Bloom Period**: J F M A M J J A S O N D
- **Flower Description**: Clump forming cactus with beautiful showy flowers that attract native bees, each flower lasting a single day. Grows best in open, dry areas, even along rocks. Fruits form at the end of the summer are safe to eat.

**Osmorhiza claytonii, Sweet Cicely**

- **Growth**: 3 ft. ↔ 3 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: White
- **Bloom Period**: J F M A M J J A S O N D
- **Flower Description**: Adaptable, prefers moist shade, no known diseases or pests, part of the carrot family. All parts of plant edible. Produces clusters of small white flowers. Similar appearance to poisonous water hemlock.
**Osmorhiza longistylis, Aniseroot**

Clusters of compound small white flowers rise from hairy stems. Prefers moist shade. Leaves and roots are edible, roots known for strong anise scent. Similar appearance to poisonous water hemlock.

**Packera aurea, Golden Ragwort**

Showy blooming aster with golden yellow flowers above heart-shaped basal leaves. Attracts variety of bees and butterflies. Foliage toxic to herbivores. Good groundcover, adaptable to many growing conditions.

**Panax quinquefolius, American Ginseng**

Small fragrant umbel of flowers arises from palmately compound leaves. Scent is similar to Lily-of-the-valley. Prized for its medicinal qualities, now rare in the wild.

**Parthenium integrifolium, Wild Quinine**

Gorgeous, clump forming, upright plant, with a long bloom time that attracts many pollinators. Tap-rooted plant that thrives in dry conditions. Good accent plant in an informal garden.
Penstemon canescens, Gray Beard-tongue

- **Soil Type:** Loam, sand
- **Bloom Color:** Purple
- **Bloom Period:** J F M A M J J A S O N D

Attractive, clump forming perennial with purple and white blooms. Hosts 8 species of native caterpillars. Thrives in rock gardens. Remove spent flowers to prolong bloom and cut back after blooming to improve appearance.

**Forbs**

Penstemon laevigatus, Smooth Beard-tongue

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Purple, white
- **Bloom Period:** J F M A M J J A S O N D

Flowers are tubular and asymmetrical with a hairy lower lip, hence the common name beard-tongue. Low-maintenance for rock, butterfly or cottage garden, prefers dry soil to avoid root rot. Found in woodlands and fields.

Phacaelia bipinnatfida, Fernleaf Phacelia

- **Soil Type:** Loam
- **Bloom Color:** Blue, purple
- **Bloom Period:** J F M A M J J A S O N D

Open-branched habit and large, light-green, somewhat evergreen leaves. Biennial, blooms its second year, and will self-seed, moving about the garden, without being aggressive. Great plant for delicate spring color.

Phlox carolina, Carolina Phlox

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Pink
- **Bloom Period:** J F M A M J J A S O N D

Excellent flower garden plant with fragrant lavender to pink flowers. Blooms mostly during the hottest part of the summer but will bloom intermittently until frost. Native to forest edges, clearings and roadsides.
**Phlox divaricata**, Woodland Phlox

- **Height**: 2 ft. ↔ 1 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Blue, purple
- **Bloom Period**: J F M A M J J A S O N D
- Blooms are lavender or pink, good for ground cover. Attracts hummingbirds, long-tongued bees, and butterflies. Often fragrant, not rabbit or deer resistant.

**Phlox paniculata**, Fall Phlox

- **Height**: 4 ft. ↔ 3 ft.
- **Soil Type**: Clay, loam
- **Bloom Color**: Pink, white
- **Bloom Period**: J F M A M J J A S O N D
- Showy fragrant pink-purple flowers densely packed in large domed terminal clusters. Blooms from July to September. Loved by butterflies and hummingbirds. Susceptible to powdery mildew, needs good air circulation.

**Phlox stolonifera**, Creeping Phlox

- **Height**: 1 ft. ↔ 18 in.
- **Soil Type**: Loam, sand
- **Bloom Color**: Purple, white
- **Bloom Period**: J F M A M J J A S O N D
- A mat forming perennial, with loose clusters of showy, fragrant, lavender, blue or white flowers which rise above foliage to 8 in. Good for ground cover, the semi-evergreen foliage can spread to form clumps.

**Phlox subulata**, Moss Phlox

- **Height**: 6 in. ↔ 2 ft.
- **Soil Type**: Loam, sand
- **Bloom Color**: Purple, white
- **Bloom Period**: J F M A M J J A S O N D
- Showy Spring flowers with a variety of colors, including a red-purple, violet-purple, pink, and white. Good for ground cover. Less susceptible to powdery mildew than other phlox.
**Physostegia virginiana**, Northern Obedient Plant

- **Height:** 4 ft. ↔ 3 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Pink, white
- **Bloom Period:**
  - JAN F M A M J J A S O N D
- Tubular flowers are long-lasting and can be swivelled into new positions where they stay obediently, hence the common name. Attractive plant is snapdragon-like, easy to grow, and adaptable, but can be aggressive.

**Podophyllum peltatum**, Mayapple

- **Height:** 2 ft. ↔ 1 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  - JAN F M A M J J A S O N D
- Ephemeral, white blossoms in Spring, leaves and flowers toxic. Can spread by roots; new colonies can be started by box turtles, which consume the yellow fruit and thereby spread the seed.

**Polemonium reptans**, Spreading Jacob's Ladder

- **Height:** 2 ft. ↔ 18 in.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Blue
- **Bloom Period:**
  - JAN F M A M J J A S O N D
- Attractive spring ephemeral with a showy pinkish or sky-blue bell-shaped flower clusters appearing on sprawling stems. Delicate, opposite leaves resemble ladder rungs. No serious insect or diseases, deer resistant.

**Polygonatum biflorum**, Solomon's-seal

- **Height:** 3 ft. ↔ 18 in.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  - JAN F M A M J J A S O N D
- Whitish-green bell-shaped flowers along an arching stem, followed by blue berries which are consumed by birds, but poisonous to humans. Great for growing alongside ferns, they thrive in woodland gardens.
**Potentilla canadensis, Dwarf Cinquefoil**

- **Plant:** Potentilla canadensis
- **Height:** 6 in., 4 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow
- **Bloom Period:**
  - J F M A M J J A S O N D

Semi-evergreen plant sends up erect stems that soon become prostrate, often rooting at nodes to form a large silvery-downy mat. Each plant has a single yellow flower with white margin. An indicator of impoverished soils.

**Primula meadia, Eastern Shooting Star**

- **Plant:** Primula meadia
- **Height:** 2 ft., 1 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White, pink
- **Bloom Period:**
  - J F M A M J J A S O N D

Flower colors are quite variable which form unusually in a shooting star-like appearance above a rosette of rounded leaves. Dormant by mid-summer. Great for attracting pollinators.

**Pycnanthemum incanum, Hoary Mountain-mint**

- **Plant:** Pycnanthemum incanum
- **Height:** 6 ft., 4 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  - J F M A M J J A S O N D

Dense white to lavender flower clusters that bloom over long periods of time, adaptable, hardy, and deer resistant. Strong spearmint-like aroma when crushed, leaves can be used to flavor teas.

**Pycnanthemum muticum, Short-toothed Mountain-mint**

- **Plant:** Pycnanthemum muticum
- **Height:** 3 ft.
- **Soil Type:** Loam
- **Bloom Color:** Pink
- **Bloom Period:**
  - J F M A M J J A S O N D

Vigorous grower that may spread by rhizomes in optimum conditions but is not invasive. If naturalizing is unwanted, prune roots in spring with a spade to keep clumps from spreading. Deer tolerant. Very attractive to pollinators.
**Pycnanthemum tenuifolium**, Narrow-leaf Mountain-mint

- **Height**: 3 ft. - 3 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: White

Produces dense clusters of small white to lavender flowers. Compact plant with striking narrow, almost needle-like leaves. Crushed leaves emit minty aroma. Can be used for teas or flavoring. Deer resistant.

Nicole Hersch, New River Chapter VNPS

**Pycnanthemum virginianum**, Virginia Mountain-mint

- **Height**: 3 ft. - 18 in.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: White

Densely packed white flowers, with magenta speckles, good for the herb garden, border, naturalized area, meadow, or near a pond. Consistently attracts large number and diversity of pollinators.

Ian Caton, Wood Thrush Native Nursery

**Rudbeckia fulgida**, Orange Coneflower

- **Height**: 3 ft. - 2 ft.
- **Soil Type**: Clay, loam
- **Bloom Color**: Orange, yellow

Showy yellow flowers blooming later in season, good for cut flowers, adaptable to wide variety of soil conditions. Somewhat shorter than other Rudbeckias.

Ian Caton, Wood Thrush Native Nursery

**Rudbeckia hirta**, Black-eyed Susan

- **Height**: 3 ft. - 2 ft.
- **Soil Type**: Clay, loam
- **Bloom Color**: Yellow

Beautiful large yellow flowers. Can be used for cut flowers. Attracts native pollinators and is host to 16 species of native butterflies. Long blooming, deer resistant, self-seeds.

Gloria Schoenholtz
Rudbeckia laciniata, Cut-leaf Coneflower

A sunflower-like plant, large yellow flowers 3 to 4 in on stalks that can grow 3 to 12 feet high. Able to spread through underground stems, best in large areas. Late summer bloom period. Seed attracts American Goldfinch.

Soil Type: Clay, loam
Bloom Color: Yellow
Bloom Period: J F M A M J J A S O N D
Gloria Schoenholtz

Rudbeckia triloba, Brown-eyed Susan

Produces numerous golden yellow flowers on tall multi-branched stems. Birds are attracted to the seeds, bees and butterflies are attracted to the flowers. Hardy and deer resistant.

Soil Type: Clay, loam
Bloom Color: Yellow
Bloom Period: J F M A M J J A S O N D
Jennifer Lovern, Draper Springs Nursery

Ruellia caroliniensis, Carolina Wild Pentunia

Many light green leaves, give way to a long period of purple blooms, of which only one or two open per day. Seeds readily. Supports the Common Buckeye larvae.

Soil Type: Loam, sand
Bloom Color: Purple, blue
Bloom Period: J F M A M J J A S O N D
Sally & Andy Wasowski, LBJ Wildflower Center

Salvia lyrata, Lyreleaf Sage

Great evergreen groundcover, with somewhat ajuga-like foliage and showy blue flowers in spring. It will reseed easily in loose, sandy soils and can form a solid cover with regular watering. Tolerates mowing.

Soil Type: Clay, loam, sand
Bloom Color: Lavender
Bloom Period: J F M A M J J A S O N D
J. Leighton Reid, Virginia Tech
**Sanguinaria canadensis**, Bloodroot

- **Photo:** J. Leighton Reid, Virginia Tech

1 ft. 6 in.

Soil Type: Clay, loam

Bloom Color: White

Bloom Period: J F M A M J J A S O N D

White flower, bright yellow stamens, kidney shaped leaves. Blooms in early spring. Contains toxic reddish latex in root, has been used for natural dying for baskets by Indigenous people. Threatened by over collection.

---

**Scrophularia lanceolata**, American Figwort

- **Photo:** Irvine Wilson, VA DCR

6 ft. 3 ft.

Soil Type: Sand

Bloom Color: Yellow

Bloom Period: J F M A M J J A S O N D

Small red-brown, yellow, and green flowers. Nectar rich, so is an excellent pollinator supporter. Used by the Haudenosaunee (Iroquois) Tribe to treat sunburn, sunstroke, and frostbite. Supports the Ruby-throated Hummingbird.

---

**Sedum ternatum**, Wild Stonecrop

- **Photo:** Gloria Schoenholtz

6 in. 9 in.

Soil Type: Clay, loam, sand

Bloom Color: Yellow

Bloom Period: J F M A M J J A S O N D

Creeping, rock-loving perennial succulent. Great groundcover for attracting butterflies. Stems break away and die in winter where newly grown plants separate from mother plants and form new plants.

---

**Senna marilandica**, Maryland Wild Senna

- **Photo:** James Francis

7 ft. 3 ft.

Soil Type: Loam, sand

Bloom Color: Yellow

Bloom Period: J F M A M J J A S O N D

Yellow showy pea-like flowers, leaves are feathery and compound. Makes a good border plant at 3 to 6 ft tall. Host plant for Cloudless Sulphur Butterfly larvae. Attracts birds and bumble bees.
**Silene virginica, Fire Pink**

- **Height:** 18 in.
- **Bloom Color:** Red
- **Soil Type:** Clay, loam, sand
- **Bloom Period:** J F M A M J J A S O N D
- Bright red long stemmed flowers with sharp pointed lobes, stems somewhat weak or reclining. Flowers are great for attracting hummingbirds. Flower blooms are often short lived, yet plants freely self-seed.

**Silphium asteriscus, Starry Rosinweed**

- **Height:** 5 ft.
- **Bloom Color:** Yellow
- **Soil Type:** Clay, loam, sand
- **Bloom Period:** J F M A M J J A S O N D
- Often occurs in disturbed areas. Name comes from the resinous sap which, when dried, was used by Indigenous people as a breath-freshening chewing gum. High level of local variability throughout its range.

**Sisyrinchium angustifolium, Blue-eyed-grass**

- **Height:** 2 ft.
- **Bloom Color:** Blue
- **Soil Type:** Clay, loam, sand
- **Bloom Period:** J F M A M J J A S O N D
- Low growing plant in the Iris family. Produces light blue star-shaped flowers on stems up to 18 inches long, rising above attractive grass-like, tufted clumps of light green leaves. Not deer resistant.

**Solidago bicolor, Silverrod**

- **Height:** 3 ft.
- **Bloom Color:** White
- **Soil Type:** Clay, loam, sand
- **Bloom Period:** J F M A M J J A S O N D
- Named because it is the only non-yellow flowered member of this species, having white ray flowers surrounding a yellow disk. Attracts several specialist bees. Tolerates drought; prefers clay soil; deer resistant.
**Solidago caesia**, Blue-stemmed Goldenrod

- **Height**: 3 ft.
- **Spread**: 3 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Yellow

*Bloom Period:*

- **Spring**
- **Summer**

Small, graceful, arching sprays of tiny, yellow flowers. Relatively small goldenrod at 1 to 3 feet, clump-forming but not aggressive spreader. Attractive to bees and butterflies.

**Sharon Burnham, Vital Natives**

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**Solidago flexicaulis**, Zigzag Goldenrod

- **Height**: 3 ft.
- **Spread**: 3 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Yellow

*Bloom Period:*

- **Spring**
- **Summer**
- **Fall**

Small yellow flower heads on somewhat zig zag stalk 8 to 48 in. Spreads rapidly in prime growing conditions. Yellow bloom attractive to bees and butterflies in shady woodland areas.

**Sharon Burnham, Vital Natives**

---

**Solidago odora**, Sweet Goldenrod

- **Height**: 5 ft.
- **Spread**: 2 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Yellow

*Bloom Period:*

- **Spring**
- **Summer**
- **Fall**

Slightly arching plant, produces crowded clusters of yellow flowers. Aromatic leaves smell like anise when bruised. Used in teas and herbal medicines. Goldenrod can be confused with ragweed, but does not cause allergies.

**Kevin Lawless, VA DCR**

---

**Solidago rugosa**, Rough-stemmed Goldenrod

- **Height**: 8 ft.
- **Spread**: 3 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Yellow

*Bloom Period:*

- **Spring**
- **Summer**
- **Fall**

Arching yellow flowers on sturdy stems. Easy plant to grow, can be an aggressive spreader, blooms in late summer. Goldenrods are commonly believed to cause allergies, but pollen is not wind carried.

**Sharon Burnham, Vital Natives**
**Solidago speciosa, Showy Goldenrod**

6 ft. 3 ft.

Soil Type: Clay, loam, sand

Bloom Color: Yellow

Bloom Period: J F M A M J J A S O N D

Foot-long rods of golden yellow flowers are quite showy in the garden. Tolerates drought and clay soil. May become aggressive in moist soil. Supports several specialist bees.

---

**Symphyotrichum cordifolium, Heart-leaved Aster**

5 ft. 2 ft.

Soil Type: Clay, loam, sand

Bloom Color: Blue

Bloom Period: J F M A M J J A S O N D

Great for attracting pollinators, birds, and small mammals. Blooms in fall in a variety of colors. Good for naturalizing in a woodland garden; self-seeds readily. Good cut flower.

---

**Symphyotrichum laeve, Smooth Blue Aster**

3 ft. 2 ft.

Soil Type: Clay, loam, sand

Bloom Color: Purple

Bloom Period: J F M A M J J A S O N D

A showy blue and purple flower that blooms in the fall. Has a high tolerance for droughts. Attracts pollinators and birds. Host plant for Silvery Checkerspot and Pearl Crescent butterflies.

---

**Symphyotrichum novae-angliae, New England Aster**

7 ft. 3 ft.

Soil Type: Clay, loam, sand

Bloom Color: Purple

Bloom Period: J F M A M J J A S O N D

Showy, bright, rose-purple flowers with orange-yellow centers bloom in profusion at the tips. Nice cut flower. Cut back to improve form. Blooms until frost. Divide every several of years to maintain vigor.
**Symphyotrichum oblongifolium**, Aromatic Aster

<table>
<thead>
<tr>
<th>Sun</th>
<th>Water</th>
<th>Height</th>
<th>Soil Type</th>
<th>Bloom Color</th>
<th>Bloom Period</th>
<th>Notes</th>
</tr>
</thead>
</table>

J. Leighton Reid, Virginia Tech

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**Thalictrum thalictroides**, Rue-anemone

<table>
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<tr>
<th>Sun</th>
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<th>Height</th>
<th>Soil Type</th>
<th>Bloom Color</th>
<th>Bloom Period</th>
<th>Notes</th>
</tr>
</thead>
</table>

Gloria Schoenholtz

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**Tiarella cordifolia**, Heart-leaved Foamflower

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<tr>
<th>Sun</th>
<th>Water</th>
<th>Height</th>
<th>Soil Type</th>
<th>Bloom Color</th>
<th>Bloom Period</th>
<th>Notes</th>
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</thead>
</table>

James Reveal, LBJ Wildflower Center

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**Tradescantia virginiana**, Virginia Spiderwort

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<tr>
<th>Sun</th>
<th>Water</th>
<th>Height</th>
<th>Soil Type</th>
<th>Bloom Color</th>
<th>Bloom Period</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3 ft.</td>
<td>Clay, loam</td>
<td>Blue, purple</td>
<td>J F M A M J J A S O N D</td>
<td>Three-petaled flowers, blue to purple, that bloom and are replaced daily in the spring until the heat of summer. Thrives best in moist soil. Useful for borders on landscape or pollinator gardens.</td>
</tr>
</tbody>
</table>

Gloria Schoenholtz
Trillium grandiflorum, Large-flowered Trillium

- **Bloom Period:** J F M A M J J A S O N D
- **Height:** 18 in. ↔ 1 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** White

Very showy three petalled white spring flowers, pink tinged later in the season. Plant dies back by midsummer. Great for pollinator gardens. Fruit and roots are mildly poisonous to people. Not deer resistant.

---

Trillium sulcatum, Southern Red Trillium

- **Bloom Period:** J F M A M J J A S O N D
- **Height:** 2 ft. ↔ 3 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** Purple

Deep maroon-red bloom with three petals that last for a month in the spring. Used as an herbal medicine for its antiseptic astringent qualities. More resistant to deer than Trillium grandiflorum.

---

Uvularia grandiflora, Large-flowered Bellwort

- **Bloom Period:** J F M A M J J A S O N D
- **Height:** 2 ft. ↔ 18 in.
- **Soil Type:** Clay, loam
- **Bloom Color:** Yellow

Dense, vase-shaped clumps of pendulous yellow bells prefer dappled sunlight to part shade. Performs well as mass woodland plantings and borders. Self-seeding offers easy transplants. Deer heavily browse the foliage.

---

Verbena hastata, Blue Vervain

- **Bloom Period:** J F M A M J J A S O N D
- **Height:** 5 ft. ↔ 3 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** Purple

Colonies of purple candelabras rising from moist to wet soils. Flowers on each spike bloom bottom to top, a few at a time. Can be planted near a sunny pond or in a rain garden.
**Vernonia noveboracensis, New York Ironweed**

- **Height:** 8 ft. ↔ 4 ft.
- **Soil Type:** Clay, loam
- **Bloom Color:** Purple
- **Bloom Period:** J F M A M J J A S O N D

Suited for the back of the border, a narrow plant that towers over many other wildflower species of late summer and early fall. Stalks remain standing throughout the winter, providing a perch for early spring migrants.

**Veronicastrum virginicum, Culver’s-root**

- **Height:** 6 ft. ↔ 4 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

While slow to establish, the reward is tall candelabras of 9” spikes of tiny flowers above dark whorls of foliage. Cut back plants after flowering to basal growth to stimulate new growth and a possible second bloom.

**Viola cucullata, Marsh Blue Violet**

- **Height:** 1 ft. ↔ 1 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Purple
- **Bloom Period:** J F M A M J J A S O N D

Moisture-loving violet. Should be planted near ponds or rain gardens. Excels in small spaces or as groundcover. Can be enjoyed it in a spring salad with its blue-centered blooms and leaves rich in Vitamins A and C.

**Viola pedata, Bird’s-foot Violet**

- **Height:** 6 in. ↔ 6 in.
- **Soil Type:** Loam, sand
- **Bloom Color:** Purple
- **Bloom Period:** J F M A M J J A S O N D

Striking violet with birds-foot shaped leaves, sometimes bi-colored flowers, and orange anthers. Requires well-drained and sandy or gravelly soil. Attracts pollinators, small mammals, and songbirds.
**Viola sororia, Common Blue Violet**

<table>
<thead>
<tr>
<th>Sun</th>
<th>Water</th>
<th>Bloom Period</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>🌞</td>
<td>🌦️</td>
<td>J F M A M J J A S O N D</td>
<td>Can grow as a ground cover, in clay soil, under walnut trees, and in lawns. Mowing limits its aggressive spread. Provides an early nectar source. Keep some as larval host plants for fritillary butterflies.</td>
</tr>
</tbody>
</table>

Soil Type: Clay, loam, sand
Bloom Color: Purple

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**Zizia aptera, Heartleaf Alexanders**

<table>
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<th>Bloom Period</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>🌞</td>
<td>🌦️</td>
<td>J F M A M J J A S O N D</td>
<td>Two or more umbel-shaped flowers per plant, each up to 3” across. Bees, pollinating flies, butterflies, beetles, and other insects seek the nectar and pollen. Plant may be short-lived and foliage depleted in late summer.</td>
</tr>
</tbody>
</table>

Soil Type: Clay, loam
Bloom Color: Yellow

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**Zizia aurea, Golden Alexanders**

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<tr>
<th>Sun</th>
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<th>Bloom Period</th>
<th>Description</th>
</tr>
</thead>
</table>

Soil Type: Clay, loam
Bloom Color: Yellow

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Nicole Hersch, New River Chapter VNPS
Sally & Andy Wasowski, LBJ Wildflower Center
Sharon Burnham, Vital Natives
FERNS

There are thousands of species of ferns in the world. Ferns have many parts somewhat similar to flowering plants. The frond, which can vary greatly in size, is the part of the fern that we notice as the leaf. These fronds arise from rhizomes, which are comparable to “stems” in flowering plants. Below the rhizomes are the roots. Modern ferns have no flowers or seeds, which distinguishes them from other plants. Instead, they reproduce by means of miniature sacks or capsules containing dust-like spores. A fern may drop millions of spores, but few find the appropriate conditions to grow into a fern. A fern can die back to the ground in fall and regrow in spring or be evergreen throughout the year. Ferns can grow in a variety of landscapes, climates, and growing conditions. For gardens with some or much shade, they can offer varied texture, shapes, and many shades of green and plant forms. They have also been used to remediate contaminated soils and have been the subject of research for their ability to filter some chemical pollutants from the air. Ferns continue to play a role in mythology, medicine, and art.

*Adiantum pedatum*, Northern Maidenhair Fern

1 ft. ← 2 ft.

Soil Type: Loam, sand

Bloom Color: Non-flowering

Bloom Period:

J F M A M J J A S O N D

Delicate green fans float above the rich forest floor, held aloft by arching black stems. In the spring has burgundy-pink fiddleheads peeping up through the leaf litter. Needs protection from heat and sun.

*Kathy Fell, Plant Southern Piedmont Natives*

*Asplenium platyneuron*, Ebony Spleenwort

1 ft. ← 1 ft.

Soil Type: Clay, loam, sand

Bloom Color: Non-flowering

Bloom Period:

J F M A M J J A S O N D

With good drainage, attentive watering, and some shade, this mostly erect fern will provide four season interest with its evergreen fronds and dramatic black stems. The perfect greenery for dry, rocky, and shady crevices.

*James Francis*

*Athyrium asplenioides*, Southern Lady Fern

3 ft. ← 3 ft.

Soil Type: Loam, sand

Bloom Color: Non-flowering

Bloom Period:

J F M A M J J A S O N D

Waist-high, delicate-looking light-to lime-green fern for moist-to-wet semi-shade. Easy to grow, even aggressive in the right conditions. Requires no maintenance except preventing it from drying out.

*Kathy Fell, Plant Southern Piedmont Natives*
**Botrypus virginianus**, Rattlesnake Fern

- **Soil Type**: Loam, sand
- **Bloom Color**: Non-flowering
- **Bloom Period**: J F M A M J J A S O N D

Presents a challenge to cultivate, yet provides some of the earliest spring fern growth. Its distinctive fertile blade that rises above the parsley-like fronds resembles a rattlesnake tail.

---

**Claytosmunda claytoniana**, Interrupted Fern

- **Soil Type**: Clay, loam
- **Bloom Color**: Non-flowering
- **Bloom Period**: J F M A M J J A S O N D

Shows off its namesake with an obvious gap in its blades left by the fertile portions after they wither away. Its vase-shaped stature ensures an offbeat focal point in woodland garden.

---

**Cystopteris bulbifera**, Bulblet Fern

- **Soil Type**: Loam
- **Bloom Color**: Non-flowering
- **Bloom Period**: J F M A M J J A S O N D

Preferring calcareous (e.g., limestone) soils, its low rosettes feature unique bulblets that drop from beneath the fronds. Under the right conditions quickly develop new plants.

---

**Dryopteris goldieana**, Goldie’s Wood Fern

- **Soil Type**: Clay, Loam, sand
- **Bloom Color**: Non-flowering
- **Bloom Period**: J F M A M J J A S O N D

Large specimen that offers a counterpoint by showing off its handsome dark- to gold-green long, arching fronds. Thrives in bright shade with high humidity levels and protection from strong wind.
Dryopteris intermedia, Evergreen Wood Fern, Fancy Fern

- Full sun
- 3 ft. spread
- Loam soil
- Non-flowering bloom
- J F M A M J J A S O N D

Contrasting with other evergreen ferns, this semi-evergreen, lacy specimen enlivens the soils beneath native oaks. Its vase shape can provide interest in container plantings as well.

Dryopteris marginalis, Marginal Wood Fern

- Partial shade
- 2 ft. spread
- Clay, loam, sand soil
- Non-flowering bloom
- J F M A M J J A S O N D

Tidy evergreen that mixes well with spring wildflowers and provides winter interest. During the warmer months shelters toads and lizards with its leathery blue-green to olive fronds. Beautiful alone or in groups.

Onoclea sensibilis, Sensitive Fern, Bead Fern

- Partial shade
- 3 ft. spread
- Clay, loam, sand soil
- Non-flowering bloom
- J F M A M J J A S O N D

Flourishes in clay soils and makes a stellar ground cover in low, moist areas. The coarse, sea-green fronds lasts until the first frost while the shorter, fertile fronds will stand brown over winter.

Osmunda spectabilis, Royal Fern

- Full sun
- 5 ft. spread
- Clay, loam, sand soil
- Non-flowering bloom
- J F M A M J J A S O N D

Displays its orange to wine-red accents in spring and yellow-bronze fall foliage. Shrub-like fern that makes a lush display. Plant along streams and pond banks for effective erosion control, but avoid fast moving water.
**Osmundastrum cinnamomeum, Cinnamon Fern**

- **Height:** 6 ft. ↔ 3 ft.
- **Soil Type:** Clay, loam
- **Bloom Color:** Non-flowering
- **Bloom Period:** J F M A M J J A S O N D

Birds collect nesting material from fuzz-covered fiddleheads. The namesake cinnamon-colored fertile fronds jet upward within the vase-shaped embrace of contrasting greenery.

---

**Parathelypteris noveboracensis, New York Fern**

- **Height:** 2 ft. ↔ 3 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Non-flowering
- **Bloom Period:** J F M A M J J A S O N D

Can be used as groundcover between spring ephemerals in the dappled shade of woodland gardens. Thrives in highly acidic soils where other plants will not. The wispy foliage provides shelter for toads.

---

**Phegopteris hexagonoptera, Broad Beech Fern**

- **Height:** 2 ft. ↔ 2 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Non-flowering
- **Bloom Period:** J F M A M J J A S O N D

Humbler fern with its broad, low foliage. Will aimlessly fill in the spaces in woodland gardens, resulting in a more casual forest floor. Thrives in acidic soils.

---

**Polystichum acrostichoides, Christmas Fern**

- **Height:** 2 ft. ↔ 2 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** Non-flowering
- **Bloom Period:** J F M A M J J A S O N D

Grows easily in well-drained soils in a tidy clump that can be divided and replanted in early spring. Stays green year round, hence the name Christmas Fern.
Grasses, sedges, and rushes are herbaceous plants; that is, they are non-woody plants. While their leaves and stems are generally narrow, there is a wide variety in their height and spread. Grasses, sedges and rushes are valuable for horticultural, conservation, and ecological purposes. In this varied plant group are species that thrive in many different soils, moisture, and growing conditions. Humans, grazing animals, small mammals, birds, butterflies, and pollinators all find benefits in these plants (from aesthetic to life-sustaining). Though often overlooked, grasses are very useful for wildlife and horticultural purposes.

**Andropogon gerardii, Big Bluestem**

- **Height:** 6 ft. 3 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Purple, red
- **Bloom Period:**
  - **J F M A M J J A S O N D**

Stalwart bunchgrass that displays blue-green spring leaves maturing to red-tinged green in summer. Next, purple plumes push skyward as the leaves morph to reddish bronze. Its final act is to turn a deep purple in winter.

**Andropogon glomeratus, Bushy Bluestem**

- **Height:** 6 ft. 3 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White, pink
- **Bloom Period:**
  - **J F M A M J J A S O N D**

Striking summer through winter, its bushy seed plumes catch the light to provide a glow to your garden. Grows in sunny, low-lying grasslands and roadside ditches.

**Andropogon virginicus, Broomsedge**

- **Height:** 3 ft. 3 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Copper, yellow
- **Bloom Period:**
  - **J F M A M J J A S O N D**

Striking in fall and winter, this bunchgrass glows in pale gold pure stands that blow in the wind, fine hairs catching the sunlight. Allelopathic chemicals inhibit some plants but may help defend against invasive species.
**Bouteloua curtipendula, Side-Oats Grama**

At home in an ornamental landscape, this mounding bunchgrass features seedheads resembling oats dangling from its stems. Its usefulness abounds as erosion control, livestock graze, and even as a turf grass.

**Carex appalachica, Appalachian Sedge**

Thin-leaved sedge with its graceful fountain-like habit does well in dry shade where it will provide texture and movement as it sweeps back and forth in the wind. Also suitable for no-traffic lawns.

**Carex crinita, Long-fringed Sedge**

Transform swampy areas to masses of shining green, arching foliage. Fringed with an abundance of drooping, bristly flower spikelets, this erosion-controlling sedge provides visual interest.

**Carex eburnea, Ebony Sedge**

Soft, thread-like spheres of green show off their form and foliage while not revealing their toughness. Used in place of non-native Liriope, it excels in borders, as a groundcover, or even a casual lawn.
Carex glaucoidea, Blue Sedge

With its bluish cast and loose form, this evergreen sedge is striking when used en masse as a woodland groundcover. Adds depth to dappled shade areas and outcompetes undesirable plants.

Soil Type: Clay, loam, sand
Bloom Color: Green
Bloom Period: J F M A M J J A S O N D

Carex lurida, Sallow Sedge

A yellowish complexion and obvious bottlebrush seed spikes make this a stand-out sedge. A great plant to fill in ditches and wet areas, and keep its soil moist. Goes strong all summer long.

Soil Type: Clay, loam, sand
Bloom Color: Green, yellow
Bloom Period: J F M A M J J A S O N D

Carex pensylvanica, Pennsylvania Sedge

Narrow, low-growing foliage creates a sweep of casual groundcover. Can be used as a no-mow lawn alternative. Requires shade in summer months and no foot traffic.

Soil Type: Sand
Bloom Color: Green
Bloom Period: J F M A M J J A S O N D

Carex plantaginea, Plantain-Leaved Sedge

Bright evergreen that is a striking ornamental. Has broad and puckered leaves that bring texture to the scene.

Soil Type: Clay, loam
Bloom Color: Evergreen
Bloom Period: J F M A M J J A S O N D
**Carex stricta, Tussock Sedge**

- Sun
- Water

- 3 ft. 2 ft.

Soil Type: Clay, loam, sand

Bloom Color: Red, brown

Bloom Period:

J F M A M J J A S O N D

In a wet environment, tussocks form as C. stricta’s decayed foliage accumulates and raises the plant above the water, bringing air to the root system. Absent constant water inundation, it spreads aggressively by rhizome.

**Chasmanthium latifolium, River Oats**

- Sun
- Water

- 5 ft. 2 ft.

Soil Type: Clay, loam, sand

Bloom Color: Green

Bloom Period:

J F M A M J J A S O N D

Clumping perennial grass with blue-green, bamboo-like leaves and large, oat-like flower spikelets drooping from slender, arching branches. Best in moist part-shade, used for soil erosion, can spread aggressively.

**Danthonia spicata, Poverty Oatgrass**

- Sun
- Water

- 2 ft. 1 ft.

Soil Type: Clay, loam, sand

Bloom Color: Green

Bloom Period:

J F M A M J J A S O N D

Common and widespread. Can be used as a turf grass. Grows in many types of habitats but is not invasive. Varies in appearance from short to tall, curls into clumps if it dries out. Attracts butterflies.

**Deschampsia cespitosa, Tufted Hairgrass**

- Sun
- Water

- 3 ft. 2 ft.

Soil Type: Clay, loam, sand

Bloom Color: Purple, green

Bloom Period:

J F M A M J J A S O N D

Highly ornamental grass for part-shade with fine gracefully swaying flowers rising above dense, rounded tussocks. Semi-evergreen turns gold in cold winters, attracts birds, larval host for several butterflies.
**GRASSES**

*Dichanthelium clandestinum*, Deer-Tongue Grass

- Diameter: 4 ft. ↔ 2 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: Green
- Bloom Period: J F M A M J J A S O N D

Broad-leaved bright green grass with a bamboo-type look. Lovely texture when massed, with 5-7 leaves ascending alternately up stems less than 1 ft tall and topped with a bright green spray of seeds in summer.

Nicole Hersch, New River Chapter VNPS

*Elymus hystrix*, Bottlebrush Grass

- Diameter: 4 ft. ↔ 2 ft.
- Soil Type: Loam
- Bloom Color: Green
- Bloom Period: J F M A M J J A S O N D

Loose clumping grass with gray-green to dark green leaves draping from stems. Long bristly flower heads above the foliage resemble bottle brushes. A nice textural accent interplanted in shady prairie or woodland edges.

Nicole Hersch, New River Chapter VNPS

*Eragrostis spectabilis*, Purple Lovegrass

- Diameter: 2 ft. ↔ 2 ft.
- Soil Type: Sand
- Bloom Color: Purple
- Bloom Period: J F M A M J J A S O N D

Warm season bunchgrass is native to dry sandy soils or gravelly loam. Grows low to the ground in dense tufts, then flowers in airy reddish-purple clouds which eventually break off like a tumbleweed. Nice when massed.

Sharon Burnham, Vital Natives

*Juncus effusus*, Common Rush

- Diameter: 4 ft. ↔ 4 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: Green, brown
- Bloom Period: J F M A M J J A S O N D

Soft round grass-like stems grow in bunches, each one bearing clusters of very small, greenish-brown, scaly flowers. Grows exclusively in wetlands. Good for rain gardens.

Philip Merrit
**Muhlenbergia capillaris**, Hair-Awn Muhly

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Pink, red
- **Bloom Period:**
  - January
  - February
  - March
  - April
  - May
  - June
  - July
  - August
  - September
  - October
  - November
  - December

Perennial grass grows grand plumes of airy pink flowers atop impressive grass clumps. Sometimes finnicky, wild conditions suggest mildly acidic, sandy or rocky, dry to medium soils and full sun.

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**Schizachyrium scoparium**, Little Bluestem

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  - January
  - February
  - March
  - April
  - May
  - June
  - July
  - August
  - September
  - October
  - November
  - December

One of the East’s most important native prairie grasses, forming pale bluish green mounds which turn orange-bronze in fall. Provides food for birds, small mammals, and larvae, but deer browse resistant.

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**Scirpus cyperinus**, Woolgrass

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Green, brown
- **Bloom Period:**
  - January
  - February
  - March
  - April
  - May
  - June
  - July
  - August
  - September
  - October
  - November
  - December

Densely tufted, clumping, topped with compound umbels of branching rays bearing nutlets which become woolly in fall and persist in winter. An important wetland rush that provides food and cover for wildlife.

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**Sorghastrum nutans**, Indian Grass

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Purple, red
- **Bloom Period:**
  - January
  - February
  - March
  - April
  - May
  - June
  - July
  - August
  - September
  - October
  - November
  - December

Broad blue-green blades turn deep orange to purple in fall, with plume-like, soft, golden-brown seedheads. Tall sod-forming warm season bunchgrass. An important prairie grass that can overwhelm a small landscape.
VINES

Vines are often rapidly growing, climbing, or twining plants that can offer many benefits to the homeowner. These plants can be trained over walls, pergolas, arches, fences, brick and stones. They can be used for screening and for energy conservation through passive solar heating and cooling in the landscape. Vines can grow by various means to attach themselves to supporting structures. Some, like Clematis, use petioles or twisted stems. Others, like Virginia Creeper, use both petioles and adhesive pads that attach themselves to the support. Still others, like Maypop, use tendrils to attach themselves. In general, vines give shelter to many birds and provide birds with protected areas in which to build their nests.

**Bignonia capreolata, Crossvine**

- Height: 45 ft.
- Spread: 9 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: Orange
- Bloom Period: J F M A M J J A S O N D

Showy, orange-red, trumpet-shaped flowers hang in clusters. Tendrils allow crossvine to cling to any surface without support. Lovely growing up the bark of living or dead trees, and less aggressive than Trumpet Creeper.

**Campsis radicans, Trumpet-creeper**

- Height: 35 ft.
- Spread: 10 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: Red
- Bloom Period: J F M A M J J A S O N D

High climbing, aggressive colonizer. Aerial rootlets can damage wood, stone, and brick. Use caution when planting. Magnificent flowers attract Ruby-throated hummingbirds with yellow fall foliage. Sap can cause irritation.

**Clematis viorna, Northern Leatherflower**

- Height: 12 ft.
- Spread: 6 ft.
- Soil Type: Clay, loam
- Bloom Color: Purple
- Bloom Period: J F M A M J J A S O N D

Low-growing vine, somewhat slow to establish. With consistent moisture and rich soil, will thread through shrubs. Dies to ground in winter and needs to be pruned in spring. Larval host and seedheads eaten by birds.
**Clematis virginiana, Virgin's Bower**

- **Height:** 20 ft. ↔ 6 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  - J F M A M J J A S O N D
- Profuse clusters of small white flowers appear on all plants. However, the showy female seed heads might not appear on a plant that only has male flowers. Can be an aggressive self-seeder. Best grown where it’s allowed to spread. Leaves have jagged edges.

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**Clitoria mariana, Butterfly Pea**

- **Height:** 3 ft. ↔ 3 ft.
- **Soil Type:** Sand
- **Bloom Color:** Pink
- **Bloom Period:**
  - J F M A M J J A S O N D
- Has an ear-like flower appearance. Blooms in the spring into the summer purple/lavender petals. Best used in more woody areas or open areas near forests.

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**Isotrema macrophyllus, Dutchman’s-pipe**

- **Height:** 35 ft. ↔ 20 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Green, burgundy
- **Bloom Period:**
  - J F M A M J J A S O N D
- High-climbing vine with heart shaped leaves and delicately fragrant, pipe-shaped, tan flowers, followed by pods. Host to the Pipevine Swallowtail larvae, which eat the leaves’ poisonous compounds in order to become toxic.

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**Lonicera sempervirens, Trumpet Honeysuckle**

- **Height:** 20 ft. ↔ 6 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Red, yellow
- **Bloom Period:**
  - J F M A M J J A S O N D
**Parthenocissus quinquefolia**, Virginia-creeper

- **Height**: 50 ft.
- **Width**: 10 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: White, green
- **Bloom Period**: J F M A M J J A S O N D

Climber of brick or stone walls, fences, and trees. Only limited by structures to climb on. Most vibrant early fall colors occur in sunnier areas. Birds eat the berries. Can make a great groundcover.

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**Passiflora incarnata**, Purple Passionflower, Maypop

- **Height**: 25 ft.
- **Width**: 6 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Purple
- **Bloom Period**: J F M A M J J A S O N D

Unusual and beautiful flower, with a fringe of wavy, hair-like segments on top of its lavender petals. Will climb or sprawl on the ground. Flowers are followed by a large, orange-yellow berry with edible pulp.

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**Passiflora lutea**, Yellow Passionflower

- **Height**: 20 ft.
- **Width**: 4 ft.
- **Soil Type**: Clay, loam
- **Bloom Color**: Yellow, green
- **Bloom Period**: J F M A M J J A S O N D

Important wildlife plant for its flowers and berries. Pollen source for the passionflower bee. Grow on a trellis, in a container, or can sprawl on the ground. A gentle spreader. Resistant to damage by deer.

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**Vitis rotundifolia**, Muscadine Grape

- **Height**: 60 ft.
- **Width**: 6 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Yellow, green
- **Bloom Period**: J F M A M J J A S O N D

Vigorous vine can sometimes reach lengths in excess of 90 ft. Large leaves are round and shiny with blunt teeth. Shiny purple-black to bronze berries ripen in September and October and make jelly. Bark is not exfoliating.
SHRUBS

Shrubs often form the backbone of our landscapes. They are the transitional zone between lower growing perennials and ground cover and the taller tree canopy. They provide significant habitat for resident and migratory bird populations, especially along the edges of fragmented forests and in places that may not be appropriate for larger trees. As woody plants, shrubs can provide overwintering locations for insects and shelter for birds. Evergreen shrubs in particular can function as living screens in a hedgerow or provide birds respite from harsh winter winds and low temperatures. Many shrubs also offer flowers for pollinators and berries for birds, mammals, and people. It is important to introduce biodiversity into your shrub selections to provide multi-season habitat and visual interest. For example, some shrubs, like Spicebush (*Lindera benzoin*), may begin flowering very early in spring, providing early color in the landscape and a source of pollen for pollinators when they emerge on warmer days. While summer brings a plethora of blooms, birds and mammals need the shade offered by shrubs to escape from the heat on warm, sunny days. Fall starts to bring berries and seeds, many of which persist into winter. This includes the beautiful native Winterberry (*Ilex verticillata*), which provides food for resident mammals and birds as well as migrating species.

### Amorpha fruticosa, False Indigo-Bush

- Sun: Full Sun
- Water: Moderate
- Height: 15 ft.
- Spread: 15 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: Purple

Found in moist, open woodland areas, floodplains, stream banks and swamp margins. Spreads easily by seeds and suckers and can form dense thickets. Host to several species of butterfly larvae.

### Aralia spinosa, Devil’s Walking Stick

- Sun: Full Sun
- Water: Moderate
- Height: 20 ft.
- Spread: 10 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: White

Named Devil’s Walking Stick due to its spiny stems. Has flowers attractive to bees and juicy black fruit hanging in drupes popular with birds. Dark green foliage turns yellow to dull purple-brown in fall.

### Alnus serrulata, Smooth Alder

- Sun: Full Sun
- Water: Average
- Height: 20 ft.
- Spread: 15 ft.
- Soil Type: Clay, loam
- Bloom Color: Yellow

Multi-stemmed, suckering, thicket-forming, large shrub or small tree found in wet areas, including streambanks and bogs. Birds feed on the seeds. Highly susceptible to damage from deer. Canker can be severe.
Aronia arbutifolia, Red Chokeberry

- **Height**: 10 ft. 6 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: White, pink
- **Bloom Period**: J F M M J A S O N D

Multi-stemmed, suckering shrub that has multi-season interest and is found in both wet and dry thickets. Birds tend to leave the berries alone, so they persist through winter. Remove suckers to prevent colonial spread.

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Aronia melanocarpa, Black Chokeberry

- **Height**: 8 ft. 6 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: White
- **Bloom Period**: J F M M J A S O N D

Upright, rounded shrub found in low woods, swamps, bogs and moist thickets, and occasionally dry upland areas. Spreads freely and suckers profusely; may become leggy with age. Berries edible but astringent.

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Calycanthus floridus, Sweet-shrub, Sweet Betsy

- **Height**: 10 ft. 12 ft.
- **Soil Type**: Clay, loam
- **Bloom Color**: Red, brown
- **Bloom Period**: J F M M J A S O N D

Erect to rounded, suckering shrub found in shady woodlands and along streambanks. Showy, fragrant blooms. Withstands cold and heat, insect and disease pests, fire, brief periods of flooding and deer browsing.

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Ceanothus americanus, New Jersey Tea

- **Height**: 4 ft. 5 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: White
- **Bloom Period**: J F M M J A S O N D

Low growing with a rounded crown found in open, deciduous woods, woodland edges, oak savannas, and meadows. Drought tolerant once established and tolerates road salt. Host to several species of butterfly larvae.
**Cephalanthus occidentalis**, Buttonbush

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White, pink
- **Bloom Period:**
  - J F M A M J J A S O N D

Does well in swamps, streambanks, rivers, and lakes. Flowering is poor in shade or in dry soils. Showy fruits persist into winter. Exceptional wildlife benefits. Useful in a rain garden or for erosion control on a wet site.

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**Comptonia peregrina**, Sweet-fern

- **Soil Type:** Loam, sand
- **Bloom Color:** White, green
- **Bloom Period:**
  - J F M A M J J A S O N D

Low maintenance shrub often found along roadsides. Has aromatic foliage that resembles ferns and can fix its own nitrogen. Once established, it can spread rapidly to form colonies. Tolerates drought, wet sites, and wind.

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**Cornus amomum**, Silky Dogwood

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  - J F M A M J J A S O N D

Typically found in swamp borders, wetlands, and near streams and ponds. The leaves and its dark-reddish twigs have silky hairs. It may form thickets if growth is not controlled. Effective for erosion control.

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**Cornus racemosa**, Gray Dogwood

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  - J F M A M J J A S O N D

Found along roadsides, woodlands, meadows, forest margins and riparian zones. Frequently planted for its showy flowers and fruits and colorful fall foliage. Rhizomatous and may form thickets. Effective for erosion control.
**Corylus americana, American Hazelnut**

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White, green
- **Bloom Period:** J F M A M J J A S O N D

Found in rocky woodlands, forests, hillsides, pastures, and thickets. Nuts are edible at maturity in the fall and are typically produced on plants that are 2-3 years old and older. Grow in full sun for best nut production.

**Diervilla lonicera, Northern Bush-honeysuckle**

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow
- **Bloom Period:** J F M A M J J A S O N D

Found in dry, rocky, open woodland areas and thickets. Tolerates drought. May be propagated by transplanting suckers. Noted for small shrubby form, trumpet-shaped flowers, dark green leaves and fall color. Self-sterile.

**Euonymus americanus, Strawberry-bush**

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Green
- **Bloom Period:** J F M A M J J A S O N D

Low maintenance, suckering shrub found on wooded slopes, moist woodland and creek or river areas. Common name derives from the showy warty capsules that split open to reveal red-orange seeds in the fall.

**Gaultheria procumbens, Wintergreen, Teaberry**

- **Soil Type:** Loam, sand
- **Bloom Color:** White, pink
- **Bloom Period:** J F M A M J J A S O N D

Rhizomatous, creeping, woody, evergreen groundcover commonly found in hardwood forests. It’s red berries are a winter food source for a variety of birds and small animals. Leaves and fruit have a wintergreen aroma and taste.
Gaylussacia baccata, Black Huckleberry

- **Height:** 3 ft. ↔ 5 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White, pink
- **Bloom Period:** J F M A M J J A S O N D

Member of the blueberry family, it is found in acidic forests and woodland areas. Bears edible fruits from July to August. It is drought tolerant and can be planted in naturalized areas or on slopes to prevent erosion.

Hamamelis virginiana, Witch Hazel

- **Height:** 20 ft. ↔ 20 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow
- **Bloom Period:** J F M A M J J A S O N D

May be found growing along woodland margins and stream banks. Intolerant of drought, but it does tolerate heavy clay soil, erosion, and browsing by deer. Can have both flowers and fruits at the same time. Low maintenance.

Hydrangea arborescens, Wild Hydrangea

- **Height:** 5 ft. ↔ 5 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** White, green
- **Bloom Period:** J F M A M J J A S O N D

Found on moist or rocky wooded slopes, ravines, streambanks, and bluff bases. Blooms on new wood and can be pruned back close to the ground in late winter to encourage stem growth. Deer, rabbit, and salt resistant.

Hypericum densiflorum, Bushy St. John’s Wort

- **Height:** 7 ft. ↔ 6 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow
- **Bloom Period:** J F M A M J J A S O N D

Adaptable shrub for well-drained moist areas. Can be aggressive in ideal conditions, so allow room for its suckering nature. Blooms on new wood, prune in spring. Like most Hypericums, a favorite of bumblebees.
Hypericum prolificum, Shrubby St. John’s-wort

- **Bloom Color:** Yellow
- **Soil Type:** Clay, loam, sand
- **Bloom Period:** J F M A M J J A S O N D
- Found in open woods, bogs, hedge banks, and grassland. Tolerates some drought. Blooms on new growth. Watch for root rot in hot and humid places. Plants of this genus have been used for healing wounds and inflammation.

Ilex verticillata, Winterberry

- **Bloom Color:** Green, white
- **Soil Type:** Clay, loam, sand
- **Bloom Period:** J F M A M J J A S O N D
- Deciduous, with red berries that are showy and last all winter. Needs acidic soil, damp or wet conditions, can be used in riparian buffers and rain gardens. Attracts and feeds many species of birds and wildlife.

Kalmia latifolia, Mountain Laurel

- **Bloom Color:** Pink
- **Soil Type:** Clay, loam, sand
- **Bloom Period:** J F M A M J J A S O N D
- Evergreen, small shrub, with striking flowers in spring, offers winter cover for wildlife. Produces berries. Entire plant is toxic if ingested. Can attract pests. Pairs well with rhododendrons and azaleas.

Lindera benzoin, Spicebush

- **Bloom Color:** Yellow
- **Soil Type:** Loam, sand
- **Bloom Period:** J F M A M J J A S O N D
- Early larger flowers on male plants, Female plants produce drupes. Can be used in riparian buffers and rain gardens. Fruits attract birds and flowers attract butterflies. Host for spicebush swallowtail.
**Physocarpus opulifolius, Common Ninebark**

- **Height:** 10 ft. 6 ft.
- **Soil Type:** Clay, loam
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

Can grow in harsh conditions, near black walnut trees, and in riparian buffers. Can be planted as live stakes. Bark peels showing inner layers in hues of rust and brown, pretty in winter. Flowers attract pollinators.

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**Prunus alleghaniensis, Allegheny Plum**

- **Height:** 20 ft. 20 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White, pink
- **Bloom Period:** J F M A M J J A S O N D

Shrub or small tree that can be used in riparian buffers. Has plentiful flowers for pollinators and fruits for wildlife. Fruits can be made into jams. If the fruit has gone bitter it may be toxic.

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**Ptelea trifoliata, Hop-tree**

- **Height:** 20 ft. 20 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White, green
- **Bloom Period:** J F M A M J J A S O N D

Adaptable, low maintenance, shrub or small tree effective as an informal hedge or screen. Seeds can be used as a substitute for hops in brewing and provide winter wildlife food.

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**Rhododendron calendulaceum, Flame Azalea**

- **Height:** 12 ft. 10 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Red, yellow
- **Bloom Period:** J F M A M J J A S O N D

Early flowers are lovely shades of orange. Attracts butterflies and bees. Good in open woodland or near patios. Likes partial shade. Like other azaleas. May get diseases and pests. Poisonous to humans, dogs, cats, horses.
**Rhododendron catawbiense**, Catawba Rhododendron

![Image of Catawba Rhododendron]

- **Sun:** ☀
- **Shade:** ☁️
- **Height:** 10 ft. — 12 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** Pink, purple
- **Bloom Period:**
  - **J F M A M J J A S O N D**
- **Beautiful purple blooms mid to late spring attract pollinators. Shade loving and provides dense cover, shelter, and nesting area for birds and other wildlife. Has shallow roots that need acidic mulch to preserve moisture.**

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**Rhododendron maximum**, Great Rhododendron

![Image of Great Rhododendron]

- **Sun:** ☀
- **Shade:** ☁️
- **Height:** 15 ft. — 12 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White, pink
- **Bloom Period:**
  - **J F M A M J J A S O N D**
- **Light pink or white blooms from June to early July for pollinators. Likes shade and acidic, well drained soils. Evergreen, provides cover and shelter. Susceptible to disease and pests. Poisonous.**

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**Rhododendron periclymenoides**, Wild Azalea

![Image of Wild Azalea]

- **Sun:** ☀
- **Shade:** ☁️
- **Height:** 15 ft. — 12 ft.
- **Soil Type:** Loam
- **Bloom Color:** White, pink
- **Bloom Period:**
  - **J F M A M J J A S O N D**
- **Deciduous, more open appearance like flame azalea, but has delicate pink blooms in April. Attracts hummingbirds, bees, and butterflies. Watch for disease and insects. Poisonous.**

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**Rhus aromatica**, Fragrant Sumac

![Image of Fragrant Sumac]

- **Sun:** ☀
- **Shade:** ☁️
- **Height:** 6 ft. — 10 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** Yellow
- **Bloom Period:**
  - **J F M A M J J A S O N D**
- **Low groundcover, good for slope stabilization, spreads easily. Spring blooms attract birds and butterflies, late summer berries attract wildlife. Leaves and twigs are aromatic. Leaves turn orange, red, and purple in fall.**
**Rhus copallinum**, Winged Sumac

- **Height**: 15 ft. to 20 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Yellow, green
- **Bloom Period**: J F M A M J J A S O N D

Good winter food source for wildlife. Spreads aggressively by root suckers, so it is good for slope stabilization. Leaves turn flame red in fall.

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**Rhus glabra**, Smooth Sumac

- **Height**: 15 ft. to 15 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Yellow, green
- **Bloom Period**: J F M A M J J A S O N D

Ornamental features including ferny foliage, hairy stems, fruiting clusters, and bright orange to red fall foliage. Too weedy and aggressive for shrub borders. Fruit is attractive to wildlife.

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**Rosa carolina**, Pasture Rose, Carolina Rose

- **Height**: 6 ft. to 10 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Pink
- **Bloom Period**: J F M A M J J A S O N D

Provides excellent cover year-round. May blooms attract bees, flies, and beetles. In late summer, red hips are eaten by birds and small mammals. Moth larvae feed on the leaves. Browsed by deer and elk.

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**Rosa palustris**, Swamp Rose

- **Height**: 6 ft. to 6 ft.
- **Soil Type**: Clay, loam
- **Bloom Color**: Pink
- **Bloom Period**: J F M A M J J A S O N D

Best to provide boggy soils, full sun, and good air circulation to minimize disease and pests. Will tolerate seasonal flooding, but not standing water. Prune as needed in late winter. Spreads slowly by suckers.
Rubus odoratus, Purple Flowering Raspberry

- Thornless berry plant with large pink flowers that attract butterflies and bees, and fruits that attract birds. Good to use for shade gardens, shrub borders, and wild gardens.
- Soils Type: Loam, sand
- Bloom Color: Pink, purple
- Bloom Period: J F M A M J J A S O N D

Salix humilis, Prairie Willow, Upland Willow

- Good cover and browse for mammals, host for butterflies (viceroy) and moths, flowers have good nectar for bees. Can sprawl. Best placed in drier conditions of native wildflower gardens, meadows and prairies.
- Soil Type: Clay, loam, sand
- Bloom Color: Yellow, green
- Bloom Period: J F M A M J J A S O N D

Salix sericea, Silky Willow

- Good in riparian areas, grows fast, but has a shorter life. Host plant for caterpillars including the Viceroy and Acadian hairstreak larvae. Flowers feed native bees, honey bees, and butterflies.
- Soil Type: Clay, loam, sand
- Bloom Color: Green, brown
- Bloom Period: J F M A M J J A S O N D

Sambucus canadensis, Common Elderberry

- Sprawling shrub. Produces lemon-scented white flowers. Produces black elderberry fruits used to make jams, jellies, pie fillings, and elderberry wine. Attracts birds and butterflies.
- Soil Type: Clay, loam, sand
- Bloom Color: White
- Bloom Period: J F M A M J J A S O N D
**Spiraea alba**, Narrowleaf Meadowsweet

- **Soil Type**: Clay, loam, sand
- **Bloom Color**: White

Grows well in riparian buffer or rain garden. A sprawling shrub for erosion control and wildlife shelter. White flowers attract pollinators and fruits feed birds. Fruit can be used in jams and elderberry wine.

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**Spiraea tomentosa**, Steeplebush

- **Soil Type**: Clay, loam
- **Bloom Color**: Pink, purple

Mound-shaped, deciduous shrub forms a thicket of wand-like stems. Pink to rose-purple flowers occur at the tips on new wood. Orange to reddish-brown bark is exfoliating. Fall foliage is yellow. Prune after flowering.

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**Staphylea trifolia**, Bladdernut

- **Soil Type**: Clay, loam, sand
- **Bloom Color**: White

Good in riparian buffers and rain gardens or as a hedge. A larval host, as well a nectar source for a variety of pollinators. Long-blooming showy flowers. Leaves turn nice yellow in fall.

---

**Vaccinium angustifolium**, Northern Lowbush Blueberry

- **Soil Type**: Loam, sand
- **Bloom Color**: White

Fast growing, small, heavily branched tree that forms thickets, spreading by suckers. Good in riparian areas or rain gardens. Flowers are a pollinator food source; seeds are edible with decorative capsules.
Vaccinium corymbosum, Northern Highbush Blueberry

- Sun (12 ft.)
- Shade (12 ft.)

Soil Type: Loam, sand
Bloom Color: White, pink
Bloom Period: J F M A M J J A S O N D

Berries can be grown as a food crop over a wide geographic range. Attracts mammals, birds, and insects. Bushes like full sun, acidic soils, and can grow in rain gardens.

Vaccinium pallidum, Early Lowbush Blueberry

- Sun (3 ft.)
- Shade (3 ft.)

Soil Type: Clay, loam, sand
Bloom Color: White
Bloom Period: J F M A M J J A S O N D

Rounded form is low maintenance and drought tolerant, with beautiful red to orange fall color. Spreads through underground runners to form clumps. The berries are eaten by many, and the shrub is a host plant.

Viburnum acerifolium, Maple-Leaf Viburnum

- Sun (6 ft.)
- Shade (4 ft.)

Soil Type: Clay, loam, sand
Bloom Color: White
Bloom Period: J F M A M J J A S O N D

Shade-tolerant understory plant that blooms white in June. It is a potential host for the Spring Azure butterfly. Fruits are eaten by birds and squirrels. Can be browsed by deer.

Viburnum dentatum, Southern Arrow-wood Viburnum

- Sun (10 ft.)
- Shade (10 ft.)

Soil Type: Loam, sand
Bloom Color: White, yellow
Bloom Period: J F M A M J J A S O N D

Winter hardy, vigorous and reliable. Lots of white flowers for pollinators then blue-black berries that attract birds and other wildlife. Fall leaf colors can vary from yellow to orange and red. Watch for whiteflies.
The value of trees cannot be overstated. There are many reasons to plant trees in your yard and community. Not only do healthy, mature trees add to a property’s attractiveness and value, trees properly placed around buildings can reduce air conditioning needs and can save energy used for heating. According to the Center for Urban Forest Research, if you plant a tree today on the west side of your home, in 5 years your energy bills should be 3% less. In 15 years, the savings will be nearly 12%. Further, research at Texas A&M University showed that visual exposure to settings with trees produced significant recovery from stress within five minutes. Planting trees improves water quality and quantity. Trees reduce runoff and erosion, and they help recharge ground water supply. Finally, just one acre of forest absorbs six tons of carbon dioxide and puts out four tons of oxygen. This is enough to meet the annual needs of 18 people, states the U.S. Department of Agriculture.

**Acer negundo**, Boxelder

- **Height**: 60 ft. 50 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Green, yellow
- **Bloom Period**: J F M A M J J A S O N D

Small to medium-sized tree, commonly with a short trunk, spreading branches, and light green foliage. Grows quickly and is softwooded. A unique looking member of the Maple family. Fall foliage is usually insignificant.

---

**Acer pensylvanicum**, Striped Maple

- **Height**: 35 ft. 20 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Yellow, green
- **Bloom Period**: J F M A M J J A S O N D

Small understory maple found in moist, rocky forests that thrives best when not in direct sunlight. Greenish bark on young branches and trunks is vertically marked with white stripes. Does best in cooler summer climates.

---

**Acer rubrum**, Red Maple

- **Height**: 70 ft. 50 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Red
- **Bloom Period**: J F M A M J J A S O N D

Prefers slightly acidic conditions. Good as a shade tree, street tree, or in a rain garden. Appreciated for its bright red fall foliage. The most commonly planted street tree in the United States.
Acer saccharum, Sugar Maple

Grows well in slightly acid, moist soil. Intolerant of road salts, compact soil, and pollution. Great for lawns and parks. Striking, multicolored foliage in autumn. Among the leading furniture woods. Used for syrup.

Amelanchier arborea, Downy Serviceberry

Showy flowers and fall color in shades of red and orange. Purplish-black berries give rise to its other common name, Juneberry, are delicious eaten out of hand or preserved. Remove root suckers to avoid shrubby growth.

Amelanchier canadensis, Canada Serviceberry

Showy spring flowers, with red and orange leaves in fall. Purplish-black berries edible to both humans and birds. Looks best in shaded woodland, naturalized, or native plant gardens.
**Amelanchier laevis, Smooth Serviceberry**

- **Height:** 25 ft. / 25 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

Attractive understory tree, commonly called Allegheny serviceberry, with showy spring flowers, bronze-purple tinged leaves in fall, and edible berries. A good plant for bird gardens.

**Betula alleghaniensis, Yellow Birch**

- **Height:** 80 ft. / 80 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Green, yellow
- **Bloom Period:** J F M A M J J A S O N D

One of the larger hardwoods of northeastern North America. Open-grown specimens develop a massive candelabra form, while forest trees are tall and slender. Name comes from the golden yellow bark.

**Asimina triloba, Paw Paw**

- **Height:** 30 ft. / 30 ft.
- **Soil Type:** Loam
- **Bloom Color:** Red, purple
- **Bloom Period:** J F M A M J J A S O N D

Has sweet-flavored fruits that resemble the flavor and consistency of bananas, enjoyed by both humans and wildlife. Need two plants for fruit. Host plant for the Zebra Swallowtail butterfly. Likes wet soils and can grow near ponds or streams.

**Betula lenta, Sweet Birch**

- **Height:** 50 ft. / 50 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Red, yellow
- **Bloom Period:** J F M A M J J A S O N D

Aromatic tree with rounded crown. Odor of wintergreen in crushed twigs and foliage. Catkins appears before leaves. Fall color is golden-yellow. Oil of wintergreen is made from bark and sap can be turned into birch beer.
Betula nigra, River Birch

- **Sunlight Required:**
  - 70 ft. ➔ 60 ft.

- **Soil Type:** Clay, loam, sand

- **Bloom Color:** Green, brown

- **Bloom Period:**
  - J F M A M J J A S O N D

- **Description:**
  - Gracefully branched and often multi-trunked. Silvery bark peels to reveal cinnamon-brown. Fast growing and long-lived. Probably the most trouble-free birch. Do not prune until summer when the sap has stopped flowing.

Carpinus caroliniana, American Hornbeam, Ironwood

- **Sunlight Required:**
  - 35 ft. ➔ 35 ft.

- **Soil Type:** Clay, loam, sand

- **Bloom Color:** White, green

- **Bloom Period:**
  - J F M A M J J A S O N D

- **Description:**
  - Low-maintenance understory tree, typically found in moist woods, ravine bottoms, and along streams. Also known as Musclewood, with muscle-like fluting and extremely hard wood. Low yield limits its commercial value.

Carya cordiformis, Bitternut Hickory

- **Sunlight Required:**
  - 80 ft. ➔ 50 ft.

- **Soil Type:** Loam, sand

- **Bloom Color:** Green

- **Bloom Period:**
  - J F M A M J J A S O N D

- **Description:**
  - Slender shade tree. Attracts birds and butterflies. Produces long, graceful catkins and large, hard-shelled nuts. Fall color is yellow. One of the largest and fastest growing hickory.

Carya glabra, Pignut Hickory

- **Sunlight Required:**
  - 80 ft. ➔ 40 ft.

- **Soil Type:** Loam, sand

- **Bloom Color:** Green, yellow

- **Bloom Period:**
  - J F M A M J A S O N D

- **Description:**
  - One of the most common hickories in the southern Appalachians. An important timber source, with its tall, straight trunk. Attracts, songbirds and small mammals. Serves as a primary host for some magnificent moths.
**Carya ovata, Shagbark Hickory**

- **Height:** 90 ft. ↔ 70 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** Green, yellow
- **Bloom Period:**
  
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Identified by its bark that peels in long, tough curls off the straight trunk. Source of commercial hickory nuts. “Hickory” is from pawcohiccora, an Algonquian word for the oily food removed from pounded kernels.

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**Carya tomentosa, Mockernut Hickory**

- **Height:** 85 ft. ↔ 60 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** Green, yellow
- **Bloom Period:**
  
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Dark bark is rough and thin with shallow and narrow ridges forming a net-like pattern. Slow-growing and long-lived. Very difficult to transplant because of taproot. Grow from fresh seed sown immediately after collection.

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**Castanea pumila, Allegheny Chinquapin**

- **Height:** 30 ft. ↔ 20 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** White
- **Bloom Period:**
  
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Monoecious multi-stemmed, thicket-forming shrub or small tree with spreading lower branches and ascending upper branches. Moderately resistant to chestnut blight. Nuts palatable to humans as well as wildlife.

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**Celtis occidentalis, Common Hackberry**

- **Height:** 60 ft. ↔ 60 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Green
- **Bloom Period:**
  
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Varies greatly in response to habitat. Many birds, including quail, pheasants, woodpeckers, and cedar waxwings, consume the sweetish fruits. Many native uses for the fruit including food, spice and medicine.
**Cercis canadensis**, Eastern Redbud

- **5** (5-7) petals
- **5** (5-7) sepals

30 ft. ↔ 35 ft.

Soil Type: Clay, loam, sand

Bloom Color: Pink

Bloom Period:

J F M A M J J A S O N D

Stunning pea-like rose-purple flowers bloom profusely on bare branches in early spring. Forms a unique relationship with the leaf cutter bee, highlighted in the Plant SWVA logo.

 מסוג: 224x413

**Chionanthus virginicus**, Fringetree

- **5** (5-7) petals
- **5** (5-7) sepals

20 ft. ↔ 20 ft.

Soil Type: Clay, loam

Bloom Color: White

Bloom Period:

J F M A M J J A S O N D

Creamy white fringe-like petals give this plant its common name. Male flowers are showier than female flowers. Tolerant of air pollution and adapts well to urban settings. Intolerant of prolonged dry conditions.

**Cornus alternifolia**, Alternate-leaf Dogwood

- **5** (5-7) petals
- **5** (5-7) sepals

25 ft. ↔ 30 ft.

Soil Type: Clay, loam, sand

Bloom Color: Yellow, white

Bloom Period:

J F M A M J J A S O N D

Found throughout the Appalachians, it is also known as Pagoda Dogwood, due to tiered horizontal branching. Small yellowish-white flowers yield bluish-black fruit attractive to birds. Lovely individually or in groupings.

**Cornus florida**, Flowering Dogwood

- **5** (5-7) petals
- **5** (5-7) sepals

30 ft. ↔ 30 ft.

Soil Type: Clay, loam, sand

Bloom Color: White

Bloom Period:

J F M A M J J A S O N D

Arguably the most beautiful of the native American flowering trees, with tiny yellowish-green flowers surrounded by white bracts, looking like a large white flower. Produces bitter bright red fruits loved by birds.
**Crataegus crus-galli, Cockspur Hawthorne**

All-purpose small tree providing lovely flowers, dense cover and fruit for birds, nectar for insects, and serves as larval host for some butterflies and moths. Susceptible to rusts and fireblight.

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

**Diospyros virginiana, Common Persimmon**

Produces edible persimmon fruits that can be made into jams and syrups. The wood has been used to make golf club heads because it is quite hard.

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White, yellow
- **Bloom Period:** J F M A M J J A S O N D

**Fagus grandifolia, American Beech**

Rounded crown of many long, spreading and horizontal branches, producing edible beechnuts, which is an important food source for wildlife. Distinct, smooth, gray bark and beautiful yellow fall foliage.

- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow
- **Bloom Period:** J F M A M J J A S O N D

**Halesia tetraptera, Common Silverbell**

Also called Carolina Silverbell or silverbell tree, this small understory tree is native to the southern Appalachian Mountains. The drooping clusters of bell-shaped white flowers produce 4-winged nut-like fruits.

- **Soil Type:** Loam, sand
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D
**Ilex opaca, American Holly**

- **Height:** 30 ft. ↔ 20 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White, green
- **Bloom Period:** J F M A M J J A S O N D

Spiny evergreen leaves and bright red berries provide vibrant color in the winter, and cuttings are popular in Christmas decorations. The berries, which only occur on female plants, are a good winter food source for birds.

**Juglans nigra, Black Walnut**

- **Height:** 150 ft. ↔ 100 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow, green
- **Bloom Period:** J F M A M J J A S O N D

One of the scarcest and most coveted native hardwoods, it is used especially for furniture, gunstocks, and veneer. Utilized by Indigenous people for food, syrup, and dye. Nuts may become a nuisance as they litter and stain.

**Juniperus virginiana, Eastern Red Cedar**

- **Height:** 50 ft. ↔ 25 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Evergreen
- **Bloom Period:** J F M A M J J A S O N D

Evergreen, aromatic tree with trunk often angled and buttressed at base and narrow, compact, columnar crown; sometimes becoming broad and irregular. Can be grown to use as Christmas trees. Host for cedar-apple rust.

**Liquidambar styraciflua, Sweetgum**

- **Height:** 100 ft. ↔ 60 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow, green
- **Bloom Period:** J F M A M J J A S O N D

Fall foliage is purple and red. Fruit is a horny one-inch woody ball that persists through January. Attracts many birds. Do not plant near barefeet. Second in production only to oaks among hardwoods.
**Liriodendron tulipifera, Tulip Poplar, Yellow Poplar**

- **Height**: 150 ft. ↔ 50 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Yellow
- **Bloom Period**: J F M A M J J A S O N D

One of the tallest and most beautiful eastern hardwoods, with a long, straight trunk, a narrow crown that spreads with age, and large showy flowers resembling tulips or lilies. Was used by Indigenous people to make canoes.

**Magnolia acuminata, Cucumber Magnolia**

- **Height**: 75 ft. ↔ 35 ft.
- **Soil Type**: Clay, loam
- **Bloom Color**: Green, yellow
- **Bloom Period**: J F M A M J J A S O N D

The hardiest of all magnolias. Petals open to a vertical orientation about two inches across. Many are greenish in color, though showier white- and yellow-flowered forms exist. Has a cucumber-like fruit which turns red.

**Magnolia macrophylla, Big-leaf Magnolia**

- **Height**: 40 ft. ↔ 40 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: White, purple
- **Bloom Period**: J F M A M J J A S O N D

The bigleaf magnolia has the largest simple leaves and flowers of any tree indigenous to North America. It is a rare, deciduous, pyramidal tree with a single trunk and develops a spreading, broad, rounded crown with age.

**Morus rubra, Red Mulberry**

- **Height**: 50 ft. ↔ 40 ft.
- **Soil Type**: Clay, loam, sand
- **Bloom Color**: Green
- **Bloom Period**: J F M A M J J A S O N D

Fruit attracts birds and mammals, including humans. Flowers attract butterflies and moths. Falling fruit can be messy. Prune in late fall to avoid bleeding. Easily grown from seed or cuttings and may self-seed.
**Nyssa sylvatica**, Black Gum

- Soils: Clay, loam, sand
- Bloom Period: J F M A M J J A S O N D
- Good for spots subject to flooding.
- Great source of nectar for bees. A bottle-shaped trunk forms if grown in shallow standing water. Smooth, dark-green foliage changes to fluorescent yellow, orange, scarlet and purple.

**Ostrya virginiana**, Eastern Hop Hornbeam, Ironwood

- Soils: Clay, loam, sand
- Bloom Period: J F M A M J J A S O N D
- Also called ironwood because of its hard and dense wood.
- Attractive in the landscape with shaggy bark, a pyramidal, rounded crown, and ability to grow in almost any location or sun exposure.

**Oxydendrum arboreum**, Sourwood

- Soils: Clay, loam, sand
- Bloom Period: J F M A M J J A S O N D
- Small, lily-of-the-valley-like flowers hang in rows at the tips of branches. Pale yellow fruit capsules darken and remain after leaf drop. Leaves turn a brilliant, deep-red in early fall. Well known for Sourwood honey.

**Pinus echinata**, Shortleaf Pine

- Soils: Loam, sand
- Bloom Period: J F M A M J J A S O N D
- The most hardy and adaptable of the southern yellow pines, with broad, open crown. Provides cover and nesting for birds.
- Important timber tree for the deep South. Quite tolerant of any soil type but prefers sandy loams.
**Pinus rigida**, Pitch Pine

- Height: 70 ft. ↔ 50 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: Evergreen
- Bloom Period: 

Suitable for planting on dry rocky soil that other trees cannot tolerate, becoming open and irregular in shape in exposed situations. Resistant to fire and injury, forming sprouts from roots and stumps.

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**Pinus strobus**, Eastern White Pine

- Height: 150 ft. ↔ 40 ft.
- Soil Type: Loam, sand
- Bloom Color: Evergreen
- Bloom Period: 

Gracefully plume-like in outline, white pine is very distinctive when compared to other conifers. Its branches are horizontal and tiered. The largest conifer and formerly the most valuable tree of the Northeast.

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**Pinus virginiana**, Virginia Pine

- Height: 40 ft. ↔ 20 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: Evergreen
- Bloom Period: 

A straggling, scrubby evergreen, becomes flat-topped with age. Outstretched limbs spring irregularly from the reddish-brown trunk. Cones are sharp. Grows rapidly and forms thickets before being replaced by hardwoods.

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**Platanus occidentalis**, American Sycamore

- Height: 100 ft. ↔ 100 ft.
- Soil Type: Clay, loam, sand
- Bloom Color: Yellow, red
- Bloom Period: 

The bark peels off in patches revealing the whitened inner bark on a sometimes massive trunk with an open crown of huge, crooked branches. Songbirds including the Juncos and the Carolina Chickadee enjoy eating the seeds.
**Populus deltoides, Eastern Cottonwood**

- **Bloom Period:** J F M A M J J A S O N D
- **Soil Type:** Clay, loam sand
- **Bloom Color:** Red, yellow
- Eastern cottonwood is a large-canopied tree with upright limbs, becoming arching at the tips creating a vase-shape outline. Catkins appear before leaf emergence. The common name refers to the abundant cottony seeds.

**Prunus americana, American Wild Plum**

- **Bloom Period:** J F M A M J J A S O N D
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- Usually grown for ornamental value and not for fruit production. Has white unpleasantly aromatic flowers, which produce small low-quality edible plums good for preserves and jellies.

**Prunus serotina, Wild Black Cherry**

- **Bloom Period:** J F M A M J J A S O N D
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- Crowded trees grow tall and slender. The dark red fruit changes to black from August through October. Aromatic tree, crushed foliage and bark have distinctive cherry-like odor and bitter taste. Fall foliage is yellow.

**Prunus virginiana, Chokecherry**

- **Bloom Period:** J F M A M J J A S O N D
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- Fragrant white flowers attract butterflies and give way to clusters of astringent dark purple/black pea-sized berries which are enjoyed by wildlife. Also commonly called Virginia bird cherry.
**Quercus alba, White Oak**

- **Sun:** 
- **Water:** 
- **100 ft.** ↔ **80 ft.**
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow, red
- **Bloom Period:**
  - J F M A M J J A S O N D

Popular, long-lived, shade tree, with a wide spreading rounded crown. Large, horizontal limbs are picturesque. Catkins appear just before or with new leaves. Round-lobed leaves turn burgundy in fall and remain into winter.

- **Ed Coleman, SW Piedmont, VA Master Naturalist**

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**Quercus bicolor, Swamp White Oak**

- **Sun:** 
- **Water:** 
- **100 ft.** ↔ **60 ft.**
- **Soil Type:** Clay, loam
- **Bloom Color:** Yellow
- **Bloom Period:**
  - J F M A M J J A S O N D

Large, wide, round-topped, deciduous tree. Leaves, with their silvery undersides, are similar of those of Quercus alba, yet Swamp white oak leaves lack deeply cut lobes. Fall color is brown to red.

- **John Peterson, Virginia Tech Dendrology**

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**Quercus coccinea, Scarlet Oak**

- **Sun:**
- **Water:**
- **70 ft.** ↔ **50 ft.**
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow
- **Bloom Period:**
  - J F M A M J J A S O N D

Popular and handsome shade and street tree. Catkins appear just before or with the appearance of new leaves. Leaves turn rich, scarlet-red in the fall. The lumber is marketed as Red Oak. Very susceptible to fire damage.

- **Sharon Burnham, Vital Natives**

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**Quercus falcata, Southern Red Oak**

- **Sun:**
- **Water:**
- **75 ft.** ↔ **50 ft.**
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Green, red
- **Bloom Period:**
  - J F M A M J J A S O N D

Often called Spanish Oak, possibly because it commonly occurs in areas of the early Spanish colonies. Moderately fast growing. Like all oaks, an important wildlife plant. The lumber is marketed as Red Oak.

- **Dot Field, VA DCR**
**Quercus montana, Chestnut Oak**

- **Sun:**
- **Water:**
- **Height:** 70 ft. ↔ 70 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** Yellow, green
- **Bloom Period:**
  - J F M A M J J A S O N D

Broad open and irregular crown, chestnut like foliage. Acorns provide a food source for turkey, rough grouse, songbirds, deer, and small mammals. Bark was used for tanning leather because of its high tannin content.

**Quercus muehlenbergii, Chinkapin Oak**

- **Sun:**
- **Water:**
- **Height:** 70 ft. ↔ 70 ft.
- **Soil Type:** Loam, sand
- **Bloom Color:** Yellow, green
- **Bloom Period:**
  - J F M A M J J A S O N D

Common name refers to the resemblance of the foliage to chinkapins. Attractive fall color. Excellent habitat trees providing support to more species than almost any plant.

**Quercus palustris, Pin Oak**

- **Sun:**
- **Water:**
- **Height:** 70 ft. ↔ 60 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow, green
- **Bloom Period:**
  - J F M A M J J A S O N D

Straight-trunked tree with spreading to horizontal branches, very slender pin-like twigs, and a broadly conical crown. A strongly pyramidal tree with a distinct central leader. Leaves turn a deep red in fall.

**Quercus rubra, Northern Red Oak**

- **Sun:**
- **Water:**
- **Height:** 100 ft. ↔ 75 ft.
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow, green
- **Bloom Period:**
  - J F M A M J J A S O N D

Dark bark is striped with long, smooth, deeply furrowed plates. Leaf lobes are bristle-tipped. Fall color can be crimson, golden-orange, or russet. Rapid-growing, transplants easily, and is hardy in city conditions.
**Quercus velutina**, Black Oak

- **60 ft.** ↔ **60 ft.**
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow, green
- **Bloom Period:** J F M A M J J A S O N D

Large, spreading branches form an open crown that is often quite irregular. Easily distinguishable by the yellow or orange inner bark, formerly a source of tannin, medicine, and a yellow dye.

---

**Rhus typhina**, Staghorn Sumac

- **25 ft.** ↔ **30 ft.**
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow, green
- **Bloom Period:** J F M A M J J A S O N D

Name derived from the reddish-brown hairs on the young branchlets similar to the way velvet covers the horns of a stag (male deer). Ornamental fruiting clusters, and excellent fall foliage color.

---

**Robinia pseudoacacia**, Black Locust

- **70 ft.** ↔ **35 ft.**
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** White
- **Bloom Period:** J F M A M J J A S O N D

Often considered a garden thug, it spreads rapidly by root sprouts and copious seeds. Its wood, renowned for its toughness, belies its habit of shedding branches in high winds. Flowers are a favorite of pollinators.

---

**Salix nigra**, Black Willow

- **60 ft.** ↔ **60 ft.**
- **Soil Type:** Clay, loam, sand
- **Bloom Color:** Yellow, green
- **Bloom Period:** J F M A M J J A S O N D

Valued as a quality soil binder, providing excellent erosion control in consistently wet locations. Not recommended for residential locations, as its roots may seek out water/sewer pipes.
**Sassafras albidum, Sassafras**

*Sun*  
75 ft. ↔ 40 ft.  
Soil Type: Clay, loam, sand  
Bloom Color: Yellow, green  
Bloom Period:

![Woman's hand holding a leaf](image)

*Roots and root bark supply oil of sassafras (used to perfume soap) and sassafras tea, and have been used to flavor root beer. Flowers on the female trees can produce blue berries if pollinated.*

Jennifer Lovern, Draper Springs Nursery

---

**Thuja occidentalis, American Arborvitae, White Cedar**

*Sun*  
60 ft. ↔ 15 ft.  
Soil Type: Clay, loam, sand  
Bloom Color: Evergreen  
Bloom Period:

![Man holding a branch](image)

*Can be single- or multi-trunked and columnar or conical in shape. Evergreen. Indigenous people used it to prevent scurvy because of the high vitamin C in the sap. Giving rise to the name arborvitae, or “tree of life”.*

Irvine Wilson, VA DCR

---

**Tilia americana, American Basswood**

*Sun*  
80 ft. ↔ 50 ft.  
Soil Type: Clay, loam, sand  
Bloom Color: Yellow  
Bloom Period:

![Woman holding a leaf](image)

*Northernmost basswood species, a handsome shade and street tree. Grows at a medium to fast rate. Favored by bees over others and produces a strongly flavored honey.*

Stephanie Brundage, LBJ Wildflower Center

---

**Viburnum prunifolium, Black Haw Viburnum**

*Sun*  
30 ft. ↔ 12 ft.  
Soil Type: Clay, loam  
Bloom Color: White  
Bloom Period:

![Birds on a branch](image)

*Small tree with high wildlife value and three seasons of interest. Berries are edible for humans and wildlife. Easy to grow, OK in urban areas, tolerant to diseases and insects, easily purchased.*

Ian Caton, Wood Thrush Native Nursery
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Height</th>
<th>Width</th>
<th>Light</th>
<th>Moisture</th>
<th>page #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer negundo</td>
<td>Boxelder</td>
<td>60 ft.</td>
<td>50 ft.</td>
<td>☀️</td>
<td>☀️</td>
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<tr>
<td>Acer pensylvanicum</td>
<td>Striped Maple</td>
<td>35 ft.</td>
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<tr>
<td>Acer rubrum</td>
<td>Red Maple</td>
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<td>Acer saccharum</td>
<td>Sugar Maple</td>
<td>80 ft.</td>
<td>60 ft.</td>
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<td>☀️</td>
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<td>Achillea borealis</td>
<td>American Yarrow</td>
<td>3 ft.</td>
<td>3 ft.</td>
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<td>Actaea racemosa</td>
<td>Common Black Cohosh</td>
<td>6 ft.</td>
<td>4 ft.</td>
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<tr>
<td>Adiantum pedatum</td>
<td>Northern Maidenhair Fern</td>
<td>1 ft.</td>
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<td>Aesculus flava</td>
<td>Yellow Buckeye</td>
<td>75 ft.</td>
<td>50 ft.</td>
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<td>Yellow Giant Hyssop</td>
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<td>Agastache scrophularifolia</td>
<td>Purple Giant Hyssop</td>
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<td>Ageratina altissima</td>
<td>White Snakeroot</td>
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<td>Allium cernuum</td>
<td>Nodding Onion</td>
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<td>6 in.</td>
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<td>☀️</td>
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<td>Ramps, Wild Leek</td>
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<td>Smooth Alder</td>
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<td>15 ft.</td>
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<td>25 ft.</td>
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<td>☀️</td>
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<td>Amelanchier canadensis</td>
<td>Canada Serviceberry</td>
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<td>Amelanchier laevis</td>
<td>Smooth Serviceberry</td>
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<td>Amorpha fruticosa</td>
<td>False Indigo-Bush</td>
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<td>15 ft.</td>
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<td>Andropogon gerardii</td>
<td>Big Bluestem</td>
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<td>Broomsedge</td>
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<td>3 ft.</td>
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<td>☀️</td>
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<td>Anemone quinquefolia</td>
<td>Wood Anemone</td>
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<td>1 ft.</td>
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<td>☀️</td>
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<tr>
<td>Anemone virginiana</td>
<td>Tall Thimbleweed</td>
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<td>Antennaria neglecta</td>
<td>Field Pussytoes</td>
<td>1 ft.</td>
<td>1 ft.</td>
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<td>☀️</td>
<td>34</td>
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<td>Antennaria plantaginifolia</td>
<td>Plantain-Leaved Pussytoes</td>
<td>1 ft.</td>
<td>18 in.</td>
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<tr>
<td>Aquilegia canadensis</td>
<td>Wild Columbine</td>
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<td>Aralia racemosa</td>
<td>Spikenard</td>
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<td>5 ft.</td>
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<td>Red Chokeberry</td>
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<td>Aronia melanocarpa</td>
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<td>Aruncus dioicus</td>
<td>Goat's Beard</td>
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<tr>
<td>Asclepias incarnata</td>
<td>Swamp Milkweed</td>
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<td>Asclepias syriaca</td>
<td>Common Milkweed</td>
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<td>Asclepias tuberosa</td>
<td>Butterfly Weed</td>
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<td>18 in.</td>
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<td>Common Name</td>
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<td><strong>Asimina triloba</strong></td>
<td>Paw Paw</td>
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<td><strong>Asplenium platyneuron</strong></td>
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<td><strong>Athyrium asplenioides</strong></td>
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<td>Blue Wild Indigo</td>
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<td>4 ft.</td>
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<td><strong>Baptisia tinctoria</strong></td>
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<td>3 ft.</td>
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<td><strong>Betula alleghaniensis</strong></td>
<td>Yellow Birch</td>
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<td>80 ft.</td>
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<td><strong>Betula lenta</strong></td>
<td>Sweet Birch</td>
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<td><strong>Betula nigra</strong></td>
<td>River Birch</td>
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<td>60 ft.</td>
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<td><strong>Bignonia capreolata</strong></td>
<td>Crossvine</td>
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<td><strong>Blephilia ciliata</strong></td>
<td>Downy Wood Mint</td>
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<td><strong>Botrypus virginianus</strong></td>
<td>Rattlesnake Fern</td>
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<td><strong>Bouteloua curtipendula</strong></td>
<td>Side-Oats Grama</td>
<td>3 ft.</td>
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<td><strong>Caltha palustris</strong></td>
<td>Marsh Marigold</td>
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<td><strong>Calycanthus floridus</strong></td>
<td>Sweet-shrub, Sweet Betsy</td>
<td>10 ft.</td>
<td>12 ft.</td>
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<td><strong>Campsis radicans</strong></td>
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<td><strong>Carex appalachica</strong></td>
<td>Appalachian Sedge</td>
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<td>18 in.</td>
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<td><strong>Carex crinita</strong></td>
<td>Long-fringed Sedge</td>
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<td>Ebony Sedge</td>
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<td><strong>Carex glaucodea</strong></td>
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<td>Sallow Sedge</td>
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<td><strong>Carex stricta</strong></td>
<td>Tussock Sedge</td>
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<td><strong>Carpinus caroliniana</strong></td>
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<td><strong>Carya cordiformis</strong></td>
<td>Bitternut Hickory</td>
<td>80 ft.</td>
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<td><strong>Carya glabra</strong></td>
<td>Pignut Hickory</td>
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<td>40 ft.</td>
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<td><strong>Carya ovata</strong></td>
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<td><strong>Caulophyllum thalictroides</strong></td>
<td>Blue Cohosh</td>
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<td><strong>Ceanothus americanus</strong></td>
<td>New Jersey Tea</td>
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<td>5 ft.</td>
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<td><strong>Celtis occidentalis</strong></td>
<td>Common Hackberry</td>
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<td>60 ft.</td>
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<td>12 ft.</td>
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<td>Eastern Redbud</td>
<td>30 ft.</td>
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<td><strong>Chamaecrista fasciculata</strong></td>
<td>Common Partridge Pea</td>
<td>3 ft.</td>
<td>3 ft.</td>
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<td><strong>Chamaelirium luteum</strong></td>
<td>Devil’s Bit</td>
<td>4 ft.</td>
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<td>38</td>
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<td>Scientific Name</td>
<td>Common Name</td>
<td>Height</td>
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<tr>
<td><em>Chasmanthium latifolium</em></td>
<td>River Oats</td>
<td>5 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
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<tr>
<td><em>Chelone glabra</em></td>
<td>White Turtlehead</td>
<td>3 ft.</td>
<td>3 ft.</td>
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<td>☀</td>
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<td><em>Chionanthus virginicus</em></td>
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<td>20 ft.</td>
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<td>☀</td>
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<td><em>Chrysogonum virginianum</em></td>
<td>Green-and-Gold</td>
<td>1 ft.</td>
<td>18 in.</td>
<td>☀</td>
<td>☀</td>
<td>39</td>
</tr>
<tr>
<td><em>Chrysopsis mariana</em></td>
<td>Maryland Golden Aster</td>
<td>3 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>39</td>
</tr>
<tr>
<td><em>Claytonia virginica</em></td>
<td>Spring Beauty</td>
<td>8 in.</td>
<td>8 in.</td>
<td>☀</td>
<td>☀</td>
<td>39</td>
</tr>
<tr>
<td><em>Claytomsunda claytoniana</em></td>
<td>Interrupted Fern</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td>☀</td>
<td>☀</td>
<td>67</td>
</tr>
<tr>
<td><em>Clematis viorna</em></td>
<td>Northern Leatherflower</td>
<td>12 ft.</td>
<td>6 ft.</td>
<td>☀</td>
<td>☀</td>
<td>76</td>
</tr>
<tr>
<td><em>Clematis virginiana</em></td>
<td>Virgin’s Bower</td>
<td>20 ft.</td>
<td>6 ft.</td>
<td>☀</td>
<td>☀</td>
<td>77</td>
</tr>
<tr>
<td><em>Clitoria mariana</em></td>
<td>Butterfly Pea</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td>☀</td>
<td>☀</td>
<td>77</td>
</tr>
<tr>
<td><em>Comptonia peregrina</em></td>
<td>Sweet-fern</td>
<td>5 ft.</td>
<td>8 ft.</td>
<td>☀</td>
<td>☀</td>
<td>81</td>
</tr>
<tr>
<td><em>Conoclinium coelestinum</em></td>
<td>Blue Mistflower</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td>☀</td>
<td>☀</td>
<td>39</td>
</tr>
<tr>
<td><em>Convallaria pseudomajalis</em></td>
<td>American Lily-of-the-Valley</td>
<td>1 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>40</td>
</tr>
<tr>
<td><em>Coreopsis major</em></td>
<td>Woodland Coreopsis</td>
<td>3 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>40</td>
</tr>
<tr>
<td><em>Coreopsis tripteris</em></td>
<td>Tall Coreopsis</td>
<td>8 ft.</td>
<td>8 ft.</td>
<td>☀</td>
<td>☀</td>
<td>40</td>
</tr>
<tr>
<td><em>Coreopsis verticillata</em></td>
<td>Threadleaf Coreopsis</td>
<td>3 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>40</td>
</tr>
<tr>
<td><em>Cornus alternifolia</em></td>
<td>Alternate-leaf Dogwood</td>
<td>25 ft.</td>
<td>30 ft.</td>
<td>☀</td>
<td>☀</td>
<td>96</td>
</tr>
<tr>
<td><em>Cornus amomum</em></td>
<td>Silky Dogwood</td>
<td>12 ft.</td>
<td>12 ft.</td>
<td>☀</td>
<td>☀</td>
<td>81</td>
</tr>
<tr>
<td><em>Cornus florida</em></td>
<td>Flowering Dogwood</td>
<td>30 ft.</td>
<td>30 ft.</td>
<td>☀</td>
<td>☀</td>
<td>96</td>
</tr>
<tr>
<td><em>Cornus racemosa</em></td>
<td>Gray Dogwood</td>
<td>15 ft.</td>
<td>15 ft.</td>
<td>☀</td>
<td>☀</td>
<td>81</td>
</tr>
<tr>
<td><em>Corylus americana</em></td>
<td>American Hazelnut, American Filbert</td>
<td>18 ft.</td>
<td>12 ft.</td>
<td>☀</td>
<td>☀</td>
<td>82</td>
</tr>
<tr>
<td><em>Crataegus crus-galli</em></td>
<td>Cockspur Hawthorne</td>
<td>35 ft.</td>
<td>35 ft.</td>
<td>☀</td>
<td>☀</td>
<td>97</td>
</tr>
<tr>
<td><em>Cystopteris bulbifera</em></td>
<td>Bulblet Fern</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td>☀</td>
<td>☀</td>
<td>67</td>
</tr>
<tr>
<td><em>Danthonia spicata</em></td>
<td>Poverty Oatgrass</td>
<td>2 ft.</td>
<td>1 ft.</td>
<td>☀</td>
<td>☀</td>
<td>73</td>
</tr>
<tr>
<td><em>Deschampsia cespitosa</em></td>
<td>Tufted Hairgrass</td>
<td>3 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>73</td>
</tr>
<tr>
<td><em>Dicentra canadensis</em></td>
<td>Squirrel Corn</td>
<td>1 ft.</td>
<td>1 ft.</td>
<td>☀</td>
<td>☀</td>
<td>41</td>
</tr>
<tr>
<td><em>Dicentra cucullaria</em></td>
<td>Dutchman’s Breeches</td>
<td>1 ft.</td>
<td>1 ft.</td>
<td>☀</td>
<td>☀</td>
<td>41</td>
</tr>
<tr>
<td><em>Dicentra exima</em></td>
<td>Wild Bleeding Heart</td>
<td>2 ft.</td>
<td>18 in.</td>
<td>☀</td>
<td>☀</td>
<td>41</td>
</tr>
<tr>
<td><em>Dichanthelium clandestinum</em></td>
<td>Deer-Tongue Grass</td>
<td>4 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>74</td>
</tr>
<tr>
<td><em>Diervilia lonicera</em></td>
<td>Northern Bush-honeysuckle</td>
<td>5 ft.</td>
<td>5 ft.</td>
<td>☀</td>
<td>☀</td>
<td>82</td>
</tr>
<tr>
<td><em>Diospyros virginiana</em></td>
<td>Common Persimmon</td>
<td>55 ft.</td>
<td>35 ft.</td>
<td>☀</td>
<td>☀</td>
<td>97</td>
</tr>
<tr>
<td><em>Dryopteris goldieana</em></td>
<td>Goldie’s Wood Fern</td>
<td>4 ft.</td>
<td>6 ft.</td>
<td>☀</td>
<td>☀</td>
<td>67</td>
</tr>
<tr>
<td><em>Dryopteris intermedia</em></td>
<td>Evergreen Wood Fern, Fancy Fern</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td>☀</td>
<td>☀</td>
<td>68</td>
</tr>
<tr>
<td><em>Dryopteris marginalis</em></td>
<td>Marginal Wood Fern</td>
<td>2 ft.</td>
<td>1 ft.</td>
<td>☀</td>
<td>☀</td>
<td>68</td>
</tr>
<tr>
<td><em>Elymus hystrix</em></td>
<td>Bottlebrush Grass</td>
<td>4 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>74</td>
</tr>
<tr>
<td><em>Endodeca serpantaria</em></td>
<td>Virginia Snakeroor</td>
<td>2 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>41</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Height</td>
<td>Width</td>
<td>Light</td>
<td>Moisture</td>
<td>page #</td>
</tr>
<tr>
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</tr>
<tr>
<td><em>Eragrostis spectabilis</em></td>
<td>Purple Lovegrass</td>
<td>2 ft.</td>
<td>2 ft.</td>
<td></td>
<td></td>
<td>74</td>
</tr>
<tr>
<td><em>Erigeron pulchellus</em></td>
<td>Robin's Plantain</td>
<td>2 ft.</td>
<td>2 ft.</td>
<td>●</td>
<td></td>
<td>42</td>
</tr>
<tr>
<td><em>Erythronium americanum</em></td>
<td>Yellow Trout Lily</td>
<td>6 in.</td>
<td>6 in.</td>
<td>●</td>
<td></td>
<td>42</td>
</tr>
<tr>
<td><em>Euonymus americanus</em></td>
<td>Strawberry-bush</td>
<td>6 ft.</td>
<td>6 ft.</td>
<td>●</td>
<td></td>
<td>82</td>
</tr>
<tr>
<td><em>Eupatorium perfoliatum</em></td>
<td>Common Boneset</td>
<td>6 ft.</td>
<td>4 ft.</td>
<td>●</td>
<td></td>
<td>42</td>
</tr>
<tr>
<td><em>Eurybia divaricata</em></td>
<td>White Wood Aster</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td>●</td>
<td></td>
<td>42</td>
</tr>
<tr>
<td><em>Eutrochium fistulosum</em></td>
<td>Hollow Joe-Pye-weed</td>
<td>7 ft.</td>
<td>4 ft.</td>
<td>●</td>
<td></td>
<td>43</td>
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<tr>
<td><em>Fagus grandifolia</em></td>
<td>American Beech</td>
<td>120 ft.</td>
<td>80 ft.</td>
<td>●</td>
<td></td>
<td>97</td>
</tr>
<tr>
<td><em>Fragaria virginiana</em></td>
<td>Wild Strawberry</td>
<td>6 in.</td>
<td>1 ft.</td>
<td>●</td>
<td></td>
<td>43</td>
</tr>
<tr>
<td><em>Gaultheria procumbens</em></td>
<td>Wintergreen, Teaberry</td>
<td>6 in.</td>
<td>1 ft.</td>
<td>●</td>
<td></td>
<td>82</td>
</tr>
<tr>
<td><em>Gaylussacia baccata</em></td>
<td>Black Huckleberry</td>
<td>3 ft.</td>
<td>5 ft.</td>
<td>●</td>
<td></td>
<td>83</td>
</tr>
<tr>
<td><em>Geranium maculatum</em></td>
<td>Wild Geranium</td>
<td>2 ft.</td>
<td>18 in.</td>
<td>●</td>
<td></td>
<td>43</td>
</tr>
<tr>
<td><em>Halesia tetraptera</em></td>
<td>Common Silverbell</td>
<td>40 ft.</td>
<td>35 ft.</td>
<td>●</td>
<td></td>
<td>97</td>
</tr>
<tr>
<td><em>Hamamelis virginiana</em></td>
<td>Witch Hazel</td>
<td>20 ft.</td>
<td>20 ft.</td>
<td>●</td>
<td></td>
<td>83</td>
</tr>
<tr>
<td><em>Helenium autumnale</em></td>
<td>Common Sneezeweed</td>
<td>5 ft.</td>
<td>3 ft.</td>
<td>●</td>
<td></td>
<td>43</td>
</tr>
<tr>
<td><em>Helianthus decapetalus</em></td>
<td>Thin-leaved Sunflower</td>
<td>6 ft.</td>
<td>3 ft.</td>
<td>●</td>
<td></td>
<td>44</td>
</tr>
<tr>
<td><em>Helianthus divaricatus</em></td>
<td>Woodland Sunflower</td>
<td>5 ft.</td>
<td>3 ft.</td>
<td>●</td>
<td></td>
<td>44</td>
</tr>
<tr>
<td><em>Heliopsis helianthoides</em></td>
<td>Oxeye</td>
<td>5 ft.</td>
<td>4 ft.</td>
<td>●</td>
<td></td>
<td>44</td>
</tr>
<tr>
<td><em>Hepatica acutiloba</em></td>
<td>Sharp-lobed Hepatica</td>
<td>9 in.</td>
<td>8 in.</td>
<td>●</td>
<td></td>
<td>44</td>
</tr>
<tr>
<td><em>Hepatica americana</em></td>
<td>Round-Lobed Hepatica</td>
<td>1 ft.</td>
<td>1 ft.</td>
<td>●</td>
<td></td>
<td>45</td>
</tr>
<tr>
<td><em>Heuchera americana</em></td>
<td>American Alumroot</td>
<td>3 ft.</td>
<td>18 in.</td>
<td>●</td>
<td></td>
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<tr>
<td><em>Heuchera villosa</em></td>
<td>Hairy Alumroot</td>
<td>3 ft.</td>
<td>2 ft.</td>
<td>●</td>
<td></td>
<td>45</td>
</tr>
<tr>
<td><em>Hibiscus moscheutos</em></td>
<td>Swamp Rose-mallow</td>
<td>8 ft.</td>
<td>4 ft.</td>
<td>●</td>
<td></td>
<td>45</td>
</tr>
<tr>
<td><em>Hydrangea arborescens</em></td>
<td>Wild Hydrangea, Smooth Hydrangea</td>
<td>5 ft.</td>
<td>5 ft.</td>
<td>●</td>
<td></td>
<td>83</td>
</tr>
<tr>
<td><em>Hydrastis canadensis</em></td>
<td>Golden-seal</td>
<td>2 ft.</td>
<td>2 ft.</td>
<td>●</td>
<td></td>
<td>46</td>
</tr>
<tr>
<td><em>Hypericum densiflorum</em></td>
<td>Bushy St. John’s Wort</td>
<td>7 ft.</td>
<td>6 ft.</td>
<td>●</td>
<td></td>
<td>83</td>
</tr>
<tr>
<td><em>Hypericum prolificum</em></td>
<td>Shrubby St. John’s-wort</td>
<td>5 ft.</td>
<td>4 ft.</td>
<td>●</td>
<td></td>
<td>84</td>
</tr>
<tr>
<td><em>Ilex opaca</em></td>
<td>American Holly</td>
<td>30 ft.</td>
<td>20 ft.</td>
<td>●</td>
<td></td>
<td>98</td>
</tr>
<tr>
<td><em>Ilex verticillata</em></td>
<td>Winterberry</td>
<td>12 ft.</td>
<td>12 ft.</td>
<td>●</td>
<td></td>
<td>84</td>
</tr>
<tr>
<td><em>Impatiens capensis</em></td>
<td>Orange jewelweed</td>
<td>5 ft.</td>
<td>3 ft.</td>
<td>●</td>
<td></td>
<td>46</td>
</tr>
<tr>
<td><em>Impatiens pallida</em></td>
<td>Yellow Jewelweed</td>
<td>5 ft.</td>
<td>3 ft.</td>
<td>●</td>
<td></td>
<td>46</td>
</tr>
<tr>
<td><em>Iris cristata</em></td>
<td>Dwarf Crested Iris</td>
<td>2 ft.</td>
<td>1 ft.</td>
<td>●</td>
<td></td>
<td>46</td>
</tr>
<tr>
<td><em>Iris versicolor</em></td>
<td>Northern Blue Flag Iris</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td>●</td>
<td></td>
<td>47</td>
</tr>
<tr>
<td><em>Isotrema macrophyllus</em></td>
<td>Dutchman’s Pipe</td>
<td>35 ft.</td>
<td>20 ft.</td>
<td>●</td>
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<td>77</td>
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<tr>
<td><em>Jeffersonia diphylla</em></td>
<td>Twinleaf</td>
<td>3 ft.</td>
<td>2 ft.</td>
<td>●</td>
<td></td>
<td>47</td>
</tr>
<tr>
<td><em>Juglans nigra</em></td>
<td>Black Walnut</td>
<td>150 ft.</td>
<td>100 ft.</td>
<td>●</td>
<td></td>
<td>98</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Height</td>
<td>Width</td>
<td>Light</td>
<td>Moisture</td>
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</tr>
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<td>-------</td>
<td>----------</td>
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</tr>
<tr>
<td>Juncus effusus</td>
<td>Common Rush</td>
<td>4 ft.</td>
<td>4 ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniperus virginiana</td>
<td>Eastern Red Cedar</td>
<td>50 ft.</td>
<td>25 ft.</td>
<td></td>
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</tr>
<tr>
<td>Kalmia latifolia</td>
<td>Mountain Laurel</td>
<td>15 ft.</td>
<td>15 ft.</td>
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</tr>
<tr>
<td>Liatris spicata</td>
<td>Dense Blazing Star</td>
<td>4 ft.</td>
<td>18 in.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lilium canadense</td>
<td>Canada Lily</td>
<td>8 ft.</td>
<td>18 in.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lilium superbum</td>
<td>Turk’s-cap Lily</td>
<td>8 ft.</td>
<td>1 ft.</td>
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</tr>
<tr>
<td>Lindera benzoin</td>
<td>Spicebush</td>
<td>12 ft.</td>
<td>12 ft.</td>
<td></td>
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</tr>
<tr>
<td>Liquidambar styraciflua</td>
<td>Sweetgum</td>
<td>100 ft.</td>
<td>60 ft.</td>
<td></td>
<td></td>
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<tr>
<td>Liriodendron tulipifera</td>
<td>Tulip Poplar, Yellow Poplar</td>
<td>150 ft.</td>
<td>50 ft.</td>
<td></td>
<td></td>
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<tr>
<td>Lobelia cardinalis</td>
<td>Cardinal Flower</td>
<td>4 ft.</td>
<td>2 ft.</td>
<td></td>
<td></td>
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<tr>
<td>Lobelia siphilitica</td>
<td>Great Blue Lobelia</td>
<td>3 ft.</td>
<td>18 in.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lonicera sempervirens</td>
<td>Trumpet Honeysuckle</td>
<td>20 ft.</td>
<td>6 ft.</td>
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</tr>
<tr>
<td>Magnolia acuminata</td>
<td>Cucumber Magnolia</td>
<td>75 ft.</td>
<td>35 ft.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Magnolia macrophylla</td>
<td>Big-leaf Magnolia</td>
<td>40 ft.</td>
<td>40 ft.</td>
<td></td>
<td></td>
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<tr>
<td>Maianthemum racemosum</td>
<td>False Solomon’s-seal</td>
<td>3 ft.</td>
<td>2 ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mertensia virginica</td>
<td>Virginia Bluebell</td>
<td>2 ft.</td>
<td>18 in.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mitchella repens</td>
<td>Partridgeberry</td>
<td>4 in.</td>
<td>1 ft.</td>
<td></td>
<td></td>
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<tr>
<td>Mitella diphylla</td>
<td>Two-leaved Miterwort</td>
<td>2 ft.</td>
<td>1 ft.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Monarda didyma</td>
<td>Scarlet Beebalm</td>
<td>3 ft.</td>
<td>3 ft.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Monarda fistulosa</td>
<td>Wild Bergamot</td>
<td>5 ft.</td>
<td>3 ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morus rubra</td>
<td>Red Mulberry</td>
<td>50 ft.</td>
<td>40 ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muhlenbergia capillaris</td>
<td>Hair-Awn Muhly</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nyssa sylvatica</td>
<td>Black Gum</td>
<td>95 ft.</td>
<td>30 ft.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Oenothera fruticosa</td>
<td>Narrow-leaf Sundrops</td>
<td>2 ft.</td>
<td>2 ft.</td>
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</tr>
<tr>
<td>Onoclea sensibilis</td>
<td>Sensitive Fern, Bead Fern</td>
<td>3 ft.</td>
<td>3 ft.</td>
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</tr>
<tr>
<td>Opuntia humifusa</td>
<td>Eastern Prickly-pear</td>
<td>1 ft.</td>
<td>2 ft.</td>
<td></td>
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<tr>
<td>Osmorhiza claytonii</td>
<td>Sweet Cicely</td>
<td>3 ft.</td>
<td>3 ft.</td>
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<tr>
<td>Osmorhiza longistylis</td>
<td>Anisroot</td>
<td>3 ft.</td>
<td>3 ft.</td>
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<tr>
<td>Osmunda spectabilis</td>
<td>Royal Fern</td>
<td>5 ft.</td>
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<tr>
<td>Osmundastrum cinnamomeum</td>
<td>Cinnamon Fern</td>
<td>6 ft.</td>
<td>3 ft.</td>
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<tr>
<td>Ostrya virginiana</td>
<td>Eastern Hop Hornbeam, Ironwood</td>
<td>40 ft.</td>
<td>30 ft.</td>
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<tr>
<td>Oxydendrum arboreum</td>
<td>Sourwood</td>
<td>70 ft.</td>
<td>25 ft.</td>
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<tr>
<td>Packera aurea</td>
<td>Golden Ragwort</td>
<td>4 ft.</td>
<td>18 in.</td>
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<tr>
<td>Panax quinquefolius</td>
<td>American Ginseng</td>
<td>2 ft.</td>
<td>1 ft.</td>
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</tr>
<tr>
<td>Parathelypteris noveboracensis</td>
<td>New York Fern</td>
<td>2 ft.</td>
<td>3 ft.</td>
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<tr>
<td>Parthenium integrifolium</td>
<td>Wild Quinine</td>
<td>4 ft.</td>
<td>2 ft.</td>
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</tr>
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<td>Scientific Name</td>
<td>Common Name</td>
<td>Height</td>
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<td>Light</td>
<td>Moisture</td>
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</tr>
<tr>
<td>Parthenocissus quinquefolia</td>
<td>Virginia-creeper</td>
<td>50 ft.</td>
<td>10 ft.</td>
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<td>78</td>
</tr>
<tr>
<td>Passiflora incarnata</td>
<td>Purple Passionflower, Maypop</td>
<td>25 ft.</td>
<td>6 ft.</td>
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</tr>
<tr>
<td>Passiflora lutea</td>
<td>Yellow Passionflower</td>
<td>20 ft.</td>
<td>4 ft.</td>
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<td>78</td>
</tr>
<tr>
<td>Penstemon canescens</td>
<td>Gray Beard-tongue</td>
<td>2 ft.</td>
<td>18 in.</td>
<td></td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>Penstemon laevigatus</td>
<td>Smooth Beard-tongue</td>
<td>4 ft.</td>
<td>2 ft.</td>
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<td>52</td>
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<tr>
<td>Phacelia bipinnatifida</td>
<td>Fernleaf Phacelia</td>
<td>2 ft.</td>
<td>2 ft.</td>
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<td></td>
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<tr>
<td>Phegopteris hexagonoptera</td>
<td>Broad Beech Fern</td>
<td>2 ft.</td>
<td>2 ft.</td>
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</tr>
<tr>
<td>Philox carolina</td>
<td>Carolina Phlox</td>
<td>3 ft.</td>
<td>2 ft.</td>
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<td></td>
<td>52</td>
</tr>
<tr>
<td>Philox divaricata</td>
<td>Woodland Phlox</td>
<td>2 ft.</td>
<td>1 ft.</td>
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<td></td>
<td>53</td>
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<tr>
<td>Philox paniculata</td>
<td>Fall Phlox</td>
<td>4 ft.</td>
<td>3 ft.</td>
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<tr>
<td>Philox stolonifera</td>
<td>Creeping Phlox</td>
<td>1 ft.</td>
<td>18 in.</td>
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<tr>
<td>Philox subulata</td>
<td>Moss Phlox</td>
<td>6 in.</td>
<td>2 ft.</td>
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<tr>
<td>Physocarpus opulifolius</td>
<td>Common Ninebark</td>
<td>10 ft.</td>
<td>6 ft.</td>
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<tr>
<td>Physostegia virginiana</td>
<td>Northern Obedient Plant</td>
<td>4 ft.</td>
<td>3 ft.</td>
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<tr>
<td>Pinus echinata</td>
<td>Shortleaf Pine</td>
<td>60 ft.</td>
<td>35 ft.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Pinus rigida</td>
<td>Pitch Pine</td>
<td>70 ft.</td>
<td>50 ft.</td>
<td></td>
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</tr>
<tr>
<td>Pinus strobus</td>
<td>Eastern White Pine</td>
<td>150 ft.</td>
<td>40 ft.</td>
<td></td>
<td></td>
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<tr>
<td>Pinus virginiana</td>
<td>Virginia Pine</td>
<td>40 ft.</td>
<td>20 ft.</td>
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<tr>
<td>Platanus occidentalis</td>
<td>American Sycamore</td>
<td>100 ft.</td>
<td>100 ft.</td>
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<tr>
<td>Podophyllum peltatum</td>
<td>Mayapple</td>
<td>2 ft.</td>
<td>1 ft.</td>
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<td>Polemonium reptans</td>
<td>Spreading Jacob’s Ladder</td>
<td>2 ft.</td>
<td>18 in.</td>
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<td>Polygonatum biflorum</td>
<td>Solomon’s-seal</td>
<td>3 ft.</td>
<td>18 in.</td>
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<tr>
<td>Polystichum acrostichoides</td>
<td>Christmas Fern</td>
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<td>Populus deltoides</td>
<td>Eastern Cottonwood</td>
<td>100 ft.</td>
<td>60 ft.</td>
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<tr>
<td>Potentilla canadensis</td>
<td>Dwarf Cinquefoil</td>
<td>6 in.</td>
<td>4 ft.</td>
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<tr>
<td>Primula meadia</td>
<td>Eastern Shooting Star</td>
<td>2 ft.</td>
<td>1 ft.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Prunus alleghaniensis</td>
<td>Allegheny Plum</td>
<td>20 ft.</td>
<td>20 ft.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Prunus americana</td>
<td>American Wild Plum</td>
<td>25 ft.</td>
<td>25 ft.</td>
<td></td>
<td></td>
<td>102</td>
</tr>
<tr>
<td>Prunus serotina</td>
<td>Wild Black Cherry</td>
<td>110 ft.</td>
<td>60 ft.</td>
<td></td>
<td></td>
<td>102</td>
</tr>
<tr>
<td>Prunus virginiana</td>
<td>Chokecherry</td>
<td>30 ft.</td>
<td>20 ft.</td>
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<td></td>
<td>102</td>
</tr>
<tr>
<td>Ptelea trifoliata</td>
<td>Hop-tree</td>
<td>20 ft.</td>
<td>20 ft.</td>
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</tr>
<tr>
<td>Pycnanthemum incanum</td>
<td>Hoary Mountain-mint</td>
<td>6 ft.</td>
<td>4 ft.</td>
<td></td>
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</tr>
<tr>
<td>Pycnanthemum muticum</td>
<td>Short-toothed Mountain-mint</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td></td>
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<tr>
<td>Pycnanthemum tenuifolium</td>
<td>Narrow-leaf Mountain-mint</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td></td>
<td></td>
<td>56</td>
</tr>
<tr>
<td>Pycnanthemum virginianum</td>
<td>Virginia Mountain-mint</td>
<td>3 ft.</td>
<td>18 in.</td>
<td></td>
<td></td>
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<tr>
<td>Quercus alba</td>
<td>White Oak</td>
<td>100 ft.</td>
<td>80 ft.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Height</td>
<td>Width</td>
<td>Light</td>
<td>Moisture</td>
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</tr>
<tr>
<td>Quercus bicolor</td>
<td>Swamp White Oak</td>
<td>100 ft.</td>
<td>60 ft.</td>
<td>☀</td>
<td>☀</td>
<td>103</td>
</tr>
<tr>
<td>Quercus coccinea</td>
<td>Scarlet Oak</td>
<td>70 ft.</td>
<td>50 ft.</td>
<td>☀</td>
<td>☀</td>
<td>103</td>
</tr>
<tr>
<td>Quercus falcata</td>
<td>Southern Red Oak</td>
<td>75 ft.</td>
<td>50 ft.</td>
<td>☀</td>
<td>☀</td>
<td>103</td>
</tr>
<tr>
<td>Quercus montana</td>
<td>Chestnut Oak</td>
<td>70 ft.</td>
<td>70 ft.</td>
<td>☀</td>
<td>☀</td>
<td>104</td>
</tr>
<tr>
<td>Quercus muehlenbergii</td>
<td>Chinkapin Oak</td>
<td>70 ft.</td>
<td>70 ft.</td>
<td>☀</td>
<td>☀</td>
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</tr>
<tr>
<td>Quercus palustris</td>
<td>Pin Oak</td>
<td>70 ft.</td>
<td>60 ft.</td>
<td>☀</td>
<td>☀</td>
<td>104</td>
</tr>
<tr>
<td>Quercus rubra</td>
<td>Northern Red Oak</td>
<td>100 ft.</td>
<td>75 ft.</td>
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<td>☀</td>
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</tr>
<tr>
<td>Quercus velutina</td>
<td>Black Oak</td>
<td>60 ft.</td>
<td>60 ft.</td>
<td>☀</td>
<td>☀</td>
<td>105</td>
</tr>
<tr>
<td>Rhododendron calendulaeum</td>
<td>Flame Azalea</td>
<td>12 ft.</td>
<td>10 ft.</td>
<td>☀</td>
<td>☀</td>
<td>85</td>
</tr>
<tr>
<td>Rhododendron catawbiense</td>
<td>Catawba Rhododendron</td>
<td>10 ft.</td>
<td>12 ft.</td>
<td>☀</td>
<td>☀</td>
<td>86</td>
</tr>
<tr>
<td>Rhododendron maximum</td>
<td>Great Rhododendron</td>
<td>15 ft.</td>
<td>12 ft.</td>
<td>☀</td>
<td>☀</td>
<td>86</td>
</tr>
<tr>
<td>Rhododendron periclymenoides</td>
<td>Pinxterflower, Wild Azalea</td>
<td>15 ft.</td>
<td>12 ft.</td>
<td>☀</td>
<td>☀</td>
<td>86</td>
</tr>
<tr>
<td>Rhus aromatica</td>
<td>Fragrant Sumac</td>
<td>6 ft.</td>
<td>10 ft.</td>
<td>☀</td>
<td>☀</td>
<td>86</td>
</tr>
<tr>
<td>Rhus copallinum</td>
<td>Winged Sumac</td>
<td>15 ft.</td>
<td>20 ft.</td>
<td>☀</td>
<td>☀</td>
<td>87</td>
</tr>
<tr>
<td>Rhus glabra</td>
<td>Smooth Sumac</td>
<td>15 ft.</td>
<td>15 ft.</td>
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</tr>
<tr>
<td>Rhus typhina</td>
<td>Staghorn Sumac</td>
<td>25 ft.</td>
<td>30 ft.</td>
<td>☀</td>
<td>☀</td>
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</tr>
<tr>
<td>Robinia pseudoacacia</td>
<td>Black Locust</td>
<td>70 ft.</td>
<td>35 ft.</td>
<td>☀</td>
<td>☀</td>
<td>105</td>
</tr>
<tr>
<td>Rosa carolina</td>
<td>Pasture Rose, Carolina Rose</td>
<td>6 ft.</td>
<td>10 ft.</td>
<td>☀</td>
<td>☀</td>
<td>87</td>
</tr>
<tr>
<td>Rosa palustris</td>
<td>Swamp Rose</td>
<td>6 ft.</td>
<td>6 ft.</td>
<td>☀</td>
<td>☀</td>
<td>87</td>
</tr>
<tr>
<td>Rubus odoratus</td>
<td>Purple Flowering Raspberry</td>
<td>6 ft.</td>
<td>12 ft.</td>
<td>☀</td>
<td>☀</td>
<td>88</td>
</tr>
<tr>
<td>Rudbeckia fulgida</td>
<td>Orange Coneflower</td>
<td>3 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>56</td>
</tr>
<tr>
<td>Rudbeckia hirta</td>
<td>Black-eyed Susan</td>
<td>3 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>56</td>
</tr>
<tr>
<td>Rudbeckia laciniata</td>
<td>Cut-leaf Coneflower</td>
<td>9 ft.</td>
<td>3 ft.</td>
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<td>☀</td>
<td>57</td>
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<tr>
<td>Rudbeckia triloba</td>
<td>Brown-eyed Susan</td>
<td>3 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>57</td>
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<tr>
<td>Ruellia caroliniensis</td>
<td>Carolina Wild Pentunia</td>
<td>3 ft.</td>
<td>1 ft.</td>
<td>☀</td>
<td>☀</td>
<td>57</td>
</tr>
<tr>
<td>Salix humilis</td>
<td>Prairie Willow, Upland Willow</td>
<td>10 ft.</td>
<td>10 ft.</td>
<td>☀</td>
<td>☀</td>
<td>88</td>
</tr>
<tr>
<td>Salix nigra</td>
<td>Black Willow</td>
<td>60 ft.</td>
<td>60 ft.</td>
<td>☀</td>
<td>☀</td>
<td>105</td>
</tr>
<tr>
<td>Salix sericea</td>
<td>Silky Willow</td>
<td>12 ft.</td>
<td>12 ft.</td>
<td>☀</td>
<td>☀</td>
<td>88</td>
</tr>
<tr>
<td>Salvia lyrata</td>
<td>Lyreleaf Sage</td>
<td>2 ft.</td>
<td>1 ft.</td>
<td>☀</td>
<td>☀</td>
<td>57</td>
</tr>
<tr>
<td>Sambucus canadensis</td>
<td>Common Elderberry</td>
<td>12 ft.</td>
<td>12 ft.</td>
<td>☀</td>
<td>☀</td>
<td>88</td>
</tr>
<tr>
<td>Sanguinaria canadensis</td>
<td>Bloodroot</td>
<td>1 ft.</td>
<td>6 in.</td>
<td>☀</td>
<td>☀</td>
<td>58</td>
</tr>
<tr>
<td>Sassafras albidum</td>
<td>Sassafras</td>
<td>75 ft.</td>
<td>40 ft.</td>
<td>☀</td>
<td>☀</td>
<td>106</td>
</tr>
<tr>
<td>Schizachyrium scoparium</td>
<td>Little Bluestem</td>
<td>4 ft.</td>
<td>2 ft.</td>
<td>☀</td>
<td>☀</td>
<td>75</td>
</tr>
<tr>
<td>Scirpus cyperinus</td>
<td>Woolgrass</td>
<td>6 ft.</td>
<td>4 ft.</td>
<td>☀</td>
<td>☀</td>
<td>75</td>
</tr>
<tr>
<td>Scorophalaria lanceolata</td>
<td>American Figwort</td>
<td>6 ft.</td>
<td>3 ft.</td>
<td>☀</td>
<td>☀</td>
<td>58</td>
</tr>
<tr>
<td>Sedum ternatum</td>
<td>Wild Stonecrop</td>
<td>6 in.</td>
<td>9 in.</td>
<td>☀</td>
<td>☀</td>
<td>58</td>
</tr>
<tr>
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<tr>
<td><em>Senna marilandica</em></td>
<td>Maryland Wild Senna</td>
<td>7 ft.</td>
<td>3 ft.</td>
<td></td>
<td></td>
<td>58</td>
</tr>
<tr>
<td><em>Silene virginica</em></td>
<td>Fire Pink</td>
<td>18 in.</td>
<td>18 in.</td>
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<td>59</td>
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<tr>
<td><em>Silphium asteriscus</em></td>
<td>Starry Rosinweed</td>
<td>5 ft.</td>
<td>3 ft.</td>
<td></td>
<td></td>
<td>59</td>
</tr>
<tr>
<td><em>Sisyrinchium angustifolium</em></td>
<td>Narrow-leaved Blue-eyed-grass</td>
<td>2 ft.</td>
<td>1 ft.</td>
<td></td>
<td></td>
<td>59</td>
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<tr>
<td><em>Solidago bicolor</em></td>
<td>Silverrod</td>
<td>3 ft.</td>
<td>1 ft.</td>
<td>●</td>
<td></td>
<td>59</td>
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<tr>
<td><em>Solidago caesia</em></td>
<td>Blue-stemmed Goldenrod</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td>●</td>
<td></td>
<td>59</td>
</tr>
<tr>
<td><em>Solidago flexicaulis</em></td>
<td>Zigzag Goldenrod</td>
<td>3 ft.</td>
<td>3 ft.</td>
<td>●</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td><em>Solidago odora</em></td>
<td>Sweet Goldenrod</td>
<td>5 ft.</td>
<td>2 ft.</td>
<td></td>
<td></td>
<td>60</td>
</tr>
<tr>
<td><em>Solidago rugosa</em></td>
<td>Rough-stemmed Goldenrod</td>
<td>8 ft.</td>
<td>3 ft.</td>
<td></td>
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<td>60</td>
</tr>
<tr>
<td><em>Solidago speciosa</em></td>
<td>Showy Goldenrod</td>
<td>6 ft.</td>
<td>3 ft.</td>
<td></td>
<td></td>
<td>61</td>
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<tr>
<td><em>Sorghastrum nutans</em></td>
<td>Indian Grass</td>
<td>6 ft.</td>
<td>2 ft.</td>
<td>●</td>
<td></td>
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<tr>
<td><em>Spiraea alba</em></td>
<td>Narrowleaf Meadowsweet</td>
<td>4 ft.</td>
<td>4 ft.</td>
<td>●</td>
<td></td>
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</tr>
<tr>
<td><em>Spiraea tomentosa</em></td>
<td>Steeplebush</td>
<td>4 ft.</td>
<td>5 ft.</td>
<td>●</td>
<td></td>
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</tr>
<tr>
<td><em>Staphylea trifolia</em></td>
<td>Bladdernut</td>
<td>15 in.</td>
<td>20 ft.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><em>Symphyotrichum cordifolium</em></td>
<td>Heart-leaved Aster</td>
<td>5 ft.</td>
<td>2 ft.</td>
<td>●</td>
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</tr>
<tr>
<td><em>Symphyotrichum laeve</em></td>
<td>Smooth Blue Aster</td>
<td>3 ft.</td>
<td>2 ft.</td>
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<tr>
<td><em>Symphyotrichum novae-angliae</em></td>
<td>New England Aster</td>
<td>7 ft.</td>
<td>3 ft.</td>
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<tr>
<td><em>Symphyotrichum oblongifolium</em></td>
<td>Aromatic Aster</td>
<td>3 ft.</td>
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<td>●</td>
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</tr>
<tr>
<td><em>Thalictrum thalictroides</em></td>
<td>Rue-anemone</td>
<td>9 in.</td>
<td>9 in.</td>
<td></td>
<td>●</td>
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</tr>
<tr>
<td><em>Thuja occidentalis</em></td>
<td>American Arborvitae, White Cedar</td>
<td>60 ft.</td>
<td>15 ft.</td>
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<td></td>
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</tr>
<tr>
<td><em>Tiarella cordifolia</em></td>
<td>Heart-leaved Foamflower</td>
<td>1 ft.</td>
<td>2 ft.</td>
<td></td>
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<td>62</td>
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<tr>
<td><em>Tilia americana</em></td>
<td>American Basswood</td>
<td>80 ft.</td>
<td>50 ft.</td>
<td></td>
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<tr>
<td><em>Tradescantia virginiana</em></td>
<td>Virginia Spiderwort</td>
<td>3 ft.</td>
<td>18 in.</td>
<td>●</td>
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<td>62</td>
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<tr>
<td><em>Trillium grandiflorum</em></td>
<td>Large-flowered Trillium</td>
<td>18 in.</td>
<td>1 ft.</td>
<td>●</td>
<td></td>
<td>63</td>
</tr>
<tr>
<td><em>Trillium sulcatum</em></td>
<td>Southern Red Trillium</td>
<td>2 ft.</td>
<td>3 ft.</td>
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<td></td>
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</tr>
<tr>
<td><em>Uvularia grandiflora</em></td>
<td>Large-flowered Bellwort</td>
<td>2 ft.</td>
<td>18 in.</td>
<td>●</td>
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</tr>
<tr>
<td><em>Vaccinium angustifolium</em></td>
<td>Northern Lowbush Blueberry</td>
<td>2 ft.</td>
<td>2 ft.</td>
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<tr>
<td><em>Vaccinium corymbosum</em></td>
<td>Northern Highbush Blueberry</td>
<td>12 ft.</td>
<td>12 ft.</td>
<td>●</td>
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<tr>
<td><em>Vaccinium pallidum</em></td>
<td>Early Lowbush Blueberry</td>
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<td>3 ft.</td>
<td>●</td>
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</tr>
<tr>
<td><em>Verbena hastata</em></td>
<td>Blue Vervain</td>
<td>5 ft.</td>
<td>3 ft.</td>
<td>●</td>
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</tr>
<tr>
<td><em>Vernonia noveboracensis</em></td>
<td>New York Ironweed</td>
<td>8 ft.</td>
<td>4 ft.</td>
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<tr>
<td><em>Veronicastrum virginicum</em></td>
<td>Culver’s-root</td>
<td>6 ft.</td>
<td>4 ft.</td>
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</tr>
<tr>
<td><em>Viburnum acerifolium</em></td>
<td>Maple-Leaf Viburnum</td>
<td>6 ft.</td>
<td>4 ft.</td>
<td>●</td>
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<td><em>Viburnum dentatum</em></td>
<td>Southern Arrow-wood Viburnum</td>
<td>10 ft.</td>
<td>10 ft.</td>
<td>●</td>
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<td><em>Viburnum prunifolium</em></td>
<td>Black Haw Viburnum</td>
<td>30 ft.</td>
<td>12 ft.</td>
<td>●</td>
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<tr>
<td><em>Viola cucullata</em></td>
<td>Marsh Blue Violet</td>
<td>1 ft.</td>
<td>1 ft.</td>
<td>●</td>
<td></td>
<td>64</td>
</tr>
</tbody>
</table>
### RESOURCES

Blue Ridge PRISM: www.blueridgeprism.org

Center for Invasive Species and Ecosystem Health: www.invasive.org/species/weeds.cfm

Department of Conservation and Recreation Natural Heritage: https://www.dcr.virginia.gov/natural-heritage/nativeplants


Plant Virginia Natives: https://www.plantvirginianatives.org


Virginia Department of Conservation and Recreation, Invasive Plants: www.dcr.virginia.gov/natural-heritage/invspinfo

Virginia Native Plant Society: www.vnps.org


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<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Height</th>
<th>Width</th>
<th>Light</th>
<th>Moisture</th>
<th>page #</th>
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<tr>
<td>Viola pedata</td>
<td>Bird’s-foot Violet</td>
<td>6 in.</td>
<td>6 in.</td>
<td>☀</td>
<td>☀</td>
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<tr>
<td>Viola sororia</td>
<td>Common Blue Violet</td>
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<tr>
<td>Vitis rotundifolia</td>
<td>Muscadine Grape</td>
<td>60 ft.</td>
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<tr>
<td>Zizia aptera</td>
<td>Heartleaf Alexanders</td>
<td>3 ft.</td>
<td>18 in.</td>
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<td>☀</td>
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<tr>
<td>Zizia aurea</td>
<td>Golden Alexanders</td>
<td>2 ft.</td>
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<td>☀</td>
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</tbody>
</table>

---

Sharon Burnham, Vital Natives, Red Bud • Cercis canadensis, Fragrant Sumac • Rhus aromatica, Switchgrass • Panicum virgatum, Ironweed • Vernonia altissima, Bergamot • Monarda fistulosa, Black-eyed Susan • Rudbeckia hirta, False Sunflower • Heliopsis helianthoides, Common Violet • Viola sororia