

Elaine Mills, presenter

Master Gardeners of Northern Virginia (MGNV) is the non-profit support group for the Arlington County/Alexandria City Unit of Virginia Cooperative Extension. Our fact sheets on Tried & True Native Plants and the plants we cover more frequently in our presentations are generally native throughout Virginia and the Mid-Atlantic region.

Registrants from Massachusetts, Ohio, Louisiana, and Florida should see my notes at the end of this addendum for comments on plants native to their respective states.

Many participants expressed frustration about predation by deer, especially on Viburnums and Spicebush, and asked about control techniques or protection for their shrubs and trees.

- Plants that tend to be more resistant to deer include ferns, grasses, and sedges, as well as those with a strong taste (mints), prickly leaves (cactus), or latex sap (milkweeds), although our Extension Agent Kirsten Conrad states, “Deer-resistant plants are those that some deer don’t eat some of the time.”
- We have compiled a list of [Native Plants Rarely Damaged by Deer](#) that you may find helpful in making plant selections.
- I also strongly recommend a thoroughly researched presentation by Master Gardener Kathie Clements on [“Browsers of the Garden Buffet: Strategies for Living with Deer,”](#) which covers deer biology and behavior, scare tactics, repellents, barriers, landscaping tips, and deer-resistant plants.
- For folks with larger properties where deer are completely destroying the understory, MG Alyssa Ford Morel suggests trying deer “enclosures” around young trees until they are large enough not to be damaged by deer.

Questions on Non-Native Plants, Straight Species, and Cultivars

Non-native plants in the context of this presentation are plants that are native to Europe or Asia rather than the United States, such as Bigleaf Hydrangea, Boxwood, and Forsythia. Many of these are not beneficial for our wildlife, but their behavior is benign when grown in our gardens.

Some non-native plants have become invasive since being introduced to the United States from Asia and Europe. Examples I referred to in the talk were Nandina, Burning Bush, and Liriope. Invasiveness is strictly defined in two Executive Orders and refers to plants that:

- Have been introduced and are not native to the area in which they are growing
- Can escape cultivation in our gardens (by roots, fruit, seeds)
- Cause harm to the environment by suppressing and outcompeting native plants in natural areas

Straight species or wild type are terms I used to refer to the natural form of native plants found growing in nature.

Cultivars (sometimes referred to as nativars) are cultivated varieties of these native plants that have been modified for certain traits to make them more appealing to gardeners.

Studies show that cultivars modified for height or disease resistance still serve wildlife.

- Examples include the ‘Gro-Low’ cultivar of Fragrant Sumac, which I described as a good woody ground cover, and ‘Low Scape Mound’ Black Chokeberry
- ‘Gem Box’ is a petite cultivar of inkberry that could grow under a window.

There are many cultivars of native trees, but as with the shrubs, it is probably most beneficial for wildlife to opt for the straight species.

If you’re interested in learning more about the topic of cultivars, please plan to attend my upcoming presentation on “Native Plants and Cultivars” when I will discuss a number of plant trials comparing species and cultivars in detail. (Scheduled for May 10, 2024.) It will be announced on [this page](#) when registration is open.

Questions on Specific Native Plants

A participant asked for recommendations on growing native Dogwood (*Cornus florida*).

- Remember that this is a forest understory plant. It will do best at a woodland edge where it can receive some sunlight but is shaded by taller trees.
- Use mulch to keep roots cool and provide supplemental water during any dry spells.

Regarding the use of Oakleaf Hydrangea which has especially attractive fall foliage:

- This shrub is native to the Southeast and is found indigenously in NC, SC, MS, AL, and parts of TN, LA, and FL. It is very popular in the horticulture trade and can be grown successfully in Virginia.

- We have a [fact sheet and short video](#) on this plant on the MGNV website.

Two participants inquired about sun requirements for Mountain Laurel (*Kalmia latifolia*).

- This shrub naturally grows in the forest understory in partial shade. It does best in morning or dappled sun in open woods.
- It can grow in a range of soil moisture, but the soil must be well-drained with a pH of 4.5 to 6.0 in the acidic range. (Do a [soil test](#) to make certain the pH is correct!)
- See [Native Plants for Wildlife Habitat](#) for recommended pH levels for many plants

In response to a question about Trumpet Honeysuckle, this vine can be grown either vertically on an arbor or trellis or horizontally as a ground cover. It will put down roots where it touches the ground, helping to control erosion.

In response to a question about reducing mildew in Beebalm:

- Provide good air circulation by spacing plants 2 to 2 ½ feet apart.
- Divide the plants every 2 to 3 years to prevent overcrowding.
- Remove about a quarter of the stems in the spring to increase light penetration and air flow.

Regarding a heavily-pruned American Beauty-berry:

- *Callicarpa americana* is one of the native shrubs that can take heavy pruning, which should be done in late winter/very early spring as it blooms on new wood in June to July.
- While the attractive fruit will be lost for this season, the plant will very likely regrow.
- Some gardeners purposefully do this kind of severe cutting back as a renewal type of pruning. See this [blog post](#) from Clemson Cooperative Extension for details.
- For additional information on when to prune various native shrubs, see the resources for my presentation on [“Caring for Your Native Plants Garden.”](#)

In response to an inquiry regarding Sourwood (*Oxydendrum arboreum*):

- Sourwood has a limited native range in the Mid-Atlantic and is found mostly from the southern half of Virginia into the Southeast.

- It is an attractive mid-sized tree with multi-season interest: lily-of-the-valley-like flowers, brilliant fall foliage, and persistent fruit capsules.
- While the tree has no serious diseases or pests and is seldom severely damaged by deer, it is intolerant of dense shade, lime and compacted soil, root disturbance, flooding, drought, and air pollution, making it more challenging to use in urban/suburban settings.

Regarding native Goldenrod species:

- The Goldenrods (*Solidago* species) are important keystone plants to include in the garden because they are so supportive of Lepidoptera and they also provide late-season nectar and pollen for bees, including some that rely exclusively on the pollen of this genus in provisioning nests for their young. The seeds are a good winter food source for birds.
- When selecting a Goldenrod species for the garden, you should select one that is suited to the sun and soil conditions of the site.
- Those that spread by rhizomes (Canada Goldenrod and Tall Goldenrod) are best reserved for wilder areas and large fields.
- Pollinator Pathway recommends clump-forming species (Anise-scented, Gray, Seaside, and Showy Goldenrod) for a more controlled appearance suitable for garden beds.
- Blue-stemmed Goldenrod (*Solidago caesia*) mentioned in the talk is another clump-forming species that is nice for shadier area. While the 'Fireworks' cultivar of Rough-stemmed Golden (*S. rugosa*) multiplies by rhizomes, its spread is more controlled. 'Golden Fleece,' a naturally-occurring cultivar of False Goldenrod (*S. sphacelata*), is more compact and has basal rosettes of heart-shaped leaves that make a nice ground cover.
- Master Gardener Alyssa Ford Morel recommends cutting back the taller Goldenrods to encourage a shorter, denser habit. This can be done as often as three times during the growing season up until July 4.

Regarding the sun exposure preferences of the native lawn/specimen trees in the talk:

- Eastern Redcedar grows in full sun.
- Serviceberry, Bald Cypress, River Birch, Black Gum, and Sweetbay Magnolia prefer sun to part-shade.
- Fringetree can grow in a range of exposures from sun to shade.
- American Hornbeam requires partial to full shade.

With regard to a question on native shrubs with winter interest for foundation plantings:

- Native shrubs can provide winter interest in a number of ways: evergreen foliage (Arborvitae, Inkberry, Mountain Laurel, Coastal Doghobble, Rosebay Rhododendron), bark (Red Twig Dogwood), late-season flowers (Witch Hazel), fruit (Winterberry), or persisting seed heads (Sweet Pepperbush).
- A [short video](#) on “Beautiful Native Plants: Stars of Winter” and a presentation on [“Native Plants for Winter Interest”](#) offer more ideas.
- You may also want to register for the upcoming class on “Native Alternatives to Overused Foundation Plants” (scheduled for March 1, 2024) for more information.

Regarding growing conditions for ‘Royal Purple’ Smoke Tree, a non-native tree:

- *Cotinus coggygria* is not native to the U.S. but comes from Europe and Temperate Asia. ‘Royal Purple’ is a compact cultivar. The NC State Extension website indicates that this shrub prefers moist soil but can tolerate drought once established.
- American Smoke Tree (*Cotinus obovatus*) has a limited and scattered native range in a number of southern states (KY, TN, AL, MO, AK, OK, and TX).

Questions on Invasive Species

Someone asked if the invasive insect Spotted Lanternfly is attracted to Fringetree.

- Fringetree is in the Olive Family (Oleaceae), the same family as Ash trees (*Fraxinus* spp.), and may be bothered by another invasive insect, the Emerald Ash Borer, although no conclusive studies on this have been conducted to date.
- The preferred host for [Spotted Lanternfly](#) is Tree of Heaven (*Ailanthus altissima*), a tree species that is also highly invasive.
- Per the USDA, plants most at risk from Spotted Lanternfly destruction include grapes and fruit- and nut-bearing trees as well as maples, oaks, pines, sycamores, and willows.

Regarding replacements for invasive Burning Bush:

- See a [variety of resources](#) on the MGNV website, including a fact sheet, articles, and a short video with information on removal and many possible native alternatives.

For information on removing and replacing invasive Pachysandra:

- See a [variety of resources](#) on the MGNV website, including a fact sheet and short video.

In response to a question on removing or controlling invasive Nandina:

- The problems posed by Nandina can be limited somewhat by removing the berries, but the plant is still invasive and can spread by the roots.
- See a [variety of resources](#) on the MGNV website, including a fact sheet, a short video, and an article on attractive replacements that will benefit wildlife.

Handy garden tools that can be used for removing invasive plants include:

- Hand tools: the Hori Hori soil knife, the pick-mattock, and the “mini tiller” that has a wide straight blade on one end three claw-like tines on the other end
- Larger tools: the toothed “super shovel” and the full-size pick axe.
- See [“Invasive Plants & Native Alternatives”](#) at 1:07:05 for control techniques.
- Register for an upcoming class on [“Tips, Tricks, and Tools”](#) which is scheduled for January 19, 2024. A recording of an earlier presentation on this topic is [also available](#).

Questions on Planting

A few general notes on planting:

- It’s best to site plants in locations where the moisture will be consistent throughout the growing season to avoid having to provide supplemental water. Of course, new plantings, especially shrubs and trees, will need careful monitoring for the first several years, and all plants may require supplemental water during extended drought.
- To determine the moisture level of your soil, you can do a “finger test” by sticking your finger as far down as possible. If your finger comes out clean, the soil is dry. If some soil sticks to your finger, that means the soil is moist.
- Dry soil will also feel hard and crumbly and may form cracks, while moist soil will look dark and damp and will hold its form when squeezed. Wet soil can be identified when puddles remain in the yard after rain and take days to be absorbed or to evaporate.
- See [“Soil Health and the Sustainable Landscape”](#) for more details on soil and soil tests.

Regarding the presence of neonicotinoid insecticides in nursery plants:



Selecting Native Plants Addendum

- There is no way to tell if plants have been treated simply by looking at them. The best way to assure that plants are non-toxic is to buy from reputable native-only sellers.
- Some of the large retail garden centers are now requiring a label in each pot of species that are treated with the insecticide.

For those interested in growing native plants from seed:

- See [tips](#) on the Plant NoVA Natives website, along with a link to a presentation on “Sowing Winter Seeds.”
- The Ladybird Johnson Wildflower Center’s [database](#) of native plants includes a section on propagation toward the end of the individual descriptions of most plants.
- This information on [native seed propagation methods](#) from Missouri Botanical Garden may also be helpful.
- Some members of the audience for this talk recommend winter sowing in milk jugs.

In response to a question on problems growing seedlings:

- I am not familiar with the Fairfax County sale and without knowing the type of seedlings (woody plants, perennials), it is difficult to offer constructive advice.
- Plan to consult with the organizers of the sale as to how the seedlings were grown and what recommendations they have to assure their success when planted in the garden.

For managing erosion:

- Shrubs and small trees that sucker, form colonies, or have deep root systems, such as Sassafras, Witch Hazel, or New Jersey Tea, could be helpful for controlling erosion.
- See [Native Plants for Controlling Erosion](#) for many more recommended plants.

Plants to combine with ephemerals:

- A classic pairing with ephemeral plants uses deciduous ferns that will emerge as the ephemerals are declining. Examples are Lady, Maidenhair, Ostrich, and Royal Ferns.
- Ephemerals can also be combined with the evergreen ferns, such as the Christmas Fern and Marginal Wood Fern that were mentioned in the talk.

Regarding plants for a very shaded area:

- It can be tricky to plant in deep shade. Sweet Pepperbush (*Clethra alnifolia*) was mentioned in the talk as a shrub that blooms even in shade. Species suggested in the chat included Wild Ginger, White Wood Aster, Mistflower, and native sedges (*Carex*).
- See a list of [Native Plants for Partially Shady or Shady Locations](#) and the presentation on [“Native Plants for Shade”](#) for more suggestions.

For planting in an area adjacent to a rain garden:

- See a presentation and fact sheet on [Native Plants for Wet Conditions](#).

When adding plants around the roots of trees:

- It is best to install the smallest plant size available. Plant plugs are ideal for this situation.
- Use a hand tool, such as a Hori Hori soil knife, rather than a shovel to create small openings that will minimize disturbance to tree roots.
- Note that some trees are more tolerant of root disturbance than others.
- Be aware that plants in this location will need to cope with dry soil, shade, and root competition. You may need to spot-water plants if the tree is absorbing rainwater before the surrounding plants can benefit from it.
- See [How and What to Plant Under a Tree](#) for very helpful details on all the points above.

In answer to the question about growing native plants on a drain field:

- Herbaceous plants, such as annuals, perennials, bulbs, and grasses are generally the best choices for planting on a septic drain field. Shrubs and trees are not recommended over any part of a septic system.
- See a [blog](#) from Michigan State University Extension for recommendations on native plants to install on a drain field.
- The publication [“Landscaping Over Septic Systems with Native Plants”](#) from Purdue University Extension describes the use of native shrubs for concealing aboveground system components away from the soil absorption field. New Jersey Tea is one of the species recommended.

In response to a question about tough native plants for a utility strip:

- Few native plants can withstand heavy foot traffic, but some will survive in a median or “hell strip” if stepped on infrequently.

- The Plant NoVA Natives website suggests Golden Ragwort, Moss Phlox, Pussytoes, and some sedges as possibilities. See [Streetside Gardens](#) for details.

With regard to planting trees in a field with springs:

- Any wetland species of tree (or shrubs and perennials that prefer moister conditions) would likely do well being planted close to a spring.
- See the presentation [“Native Plants for Wet Conditions”](#) for suggestions.

Questions on Mulching under Trees and Shrubs

- Using native ground covers under woody plants is actually preferable to using mulch since these additional plants will protect the roots of the larger plants and help to retain moisture without the need to be replenished every year. In addition, they may also provide support to wildlife.
- Organic mulches, such as leaves, shredded bark, and wood chips, are best at keeping soil moist and moderating its temperature during periods of hot and cold weather. They will also add nutrients and improve soil structure as they break down.
- Arborists chips are recommended by a local forester as an excellent mulch.
- Mulching materials to stay away from are landscape fabric, rubber mulch, gravel, or colored wood mulch which prevent the proper flow of water and oxygen to roots, allow weeds to grow through, or leach chemicals into the soil.

Miscellaneous Questions

- Leaves that pile up too much on the lawn in wet clumps could harm the grass but leaves that are chopped up by several passes of a mower will add beneficial organic matter to the soil.

With regard to treatments for termites in the soil around the home:

- Chemicals used in soil-drenching treatments for termites are highly toxic to bees and other pollinators. If flowering plants are grown in the contaminated soil, they will take up the poison and both their nectar and pollen will be affected.
- Leaving several feet around the perimeter of the house free of plants will remove the risk of poisoning the pollinators.
- If the Sentricon baiting system is used to control the termites, in theory it is consumed by the termites rather than permeating the soil, and it should not pose as high a risk to bees.

To deal with plant damage resulting from exterior home improvements:

- It would be best to minimize any further disturbance to the soil by walking on it, digging in it, or aerating it.
- If a light layer of mulch can be applied without stepping in the area too much, that could provide some protection until the spring when regrowth can be assessed.

For more information on creating forest layers, see [“Creating a Well-Layered Landscape.”](#)

For sources of native plants in Northern Virginia see the list of [Native-Only Sellers](#) on the Plant NoVA Natives website. The websites for state native plant societies are good sources of information on native plant nurseries and seasonal sales.

A participant inquired about landscape designers who specialize in native plants. For those in the Washington metropolitan area, see a [list of professionals](#) on the Plant NoVA Natives site.

For Participants from Outside the Mid-Atlantic Region

Massachusetts

- The Gardenia.net site has an excellent list of [Massachusetts Native Plants](#) with photos, detailed textual descriptions, and charts of basic growing requirements.
- A quick check of the alphabetical listing shows that there are many East Coast plants in common between MA and the Mid-Atlantic region.
- Some trees, such as Sugar Maple, the firs and spruces, are much better suited to the cooler climate of New England.

Ohio

- The Ohio Native Plant Month website has links to [several lists of native plants](#) that are suited for homeowners, including six from the Department of Natural Resources.
- A quick survey of the species for upland woods, for example, shows many trees, shrubs, and herbaceous plants that are also common in the Mid-Atlantic.

Louisiana

- The listing of [Louisiana Native Plants](#) appears to be very comprehensive and provides photos, textual descriptions, and basic growing requirements for each plant.
- A brief survey at the beginning of the alphabet shows that there are many native plants in common between Virginia and Louisiana (Adiantum pedatum, Amelanchier, Antennaria, Aronia, Asarum canadense, Asclepias, Asimina triloba ...)

Florida

- The Gardening Solutions website for UF has a helpful list of [Florida Native Plants](#).
- We have some trees in common (Bald Cypress, Flowering Dogwood, Fringetree, Sweetbay Magnolia), although the preferred Oak species will be different.
- Flame Azalea and Pink Pinxter Azalea are the species native to FL, rather than Pinxterbloom, and Yaupon Holly will be preferred over Inkberry and Winterberry.
- The red-flowered Hibiscus is native to your region rather than the white, and there are many Coreopsis species indigenous to Florida, but not the Threadleaf species I discussed.