Trumpet Vine

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Loudoun County Extension Master Gardener

IN PERSON LECTURES

Planting Rain Gardens with Native Plants
by Sandy Smallwood
Wed. Jan. 14, 7 p.m.
at Rust Library

15th Annual Gardening Symposium
Sat. Mar. 21, 9 a.m. to 3 p.m.
Registration opens on Jan 8

RECOMMENDED VIRTUAL LECTURES

Jan. 21, Session I: Starting Plants Indoors/Winter Seed Sowing. Register here.

Plant Virginia Natives partners collaboration offers a series of 12 Landscaping with Virginia Natives webinars.
Free and on demand.

Master Gardeners of Northern Virginia Virtual Classroom
A library of on-demand videos.

Check the event calendar on our website for virtual lecture links and updates on topics and speakers.

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Trumpet Vine

Knowledge for the Community from
Loudoun County Extension Master Gardeners

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Message From the Editor

Take Advantage of Stick Season

Carol Ivory, Loudoun County Extension Master Gardener

In New England, this time of year is called the stick season—the time between leaf fall and snow blanket. Trees, shrubs, and plants are just simple sticks now. Here in Northern Virginia, the entire winter is mostly stick season with some intermittent snow but mostly sticks. While it sounds glum, this is a wonderful opportunity to get a close look at your plants, appreciate what you have, identify problems to remedy, and plan opportunities for improvement. Can you add paths, walls, and stepping stones to improve structure and access? Without leafy obstructions, erosion and drainage problems are more visible, and spaces that need to be filled are more obvious.

Top: Shelf fungus. Bottom: Holes created by pileated woodpeckers. Photos by Steve Willson

Look at your yard from the perspective of wildlife seeking shelter and food. Do you see small limbs and debris that can be piled for a winter shelter? Are trees and shrubs bearing fruit and nuts available? Are fall fruit-bearing trees and shrubs a gap in your landscape that you can fill when you plant in the spring?

Free of leaves, trees can be closely examined for broken, hanging, dead, or rotting limbs. The presence of fungus such as this shelf fungus indicates rotting wood. Tree trunks should be examined for cracks and any signs of structural damage, and the bases of trees should be examined for rot. Use a stick to probe any holes to see how deep they may be and if they are an indication of base and root rot. Depending on the location of the tree, these problems suggest different remedies. Trees in the woods and some distance from paths or structures such as benches can be left alone. Trees that pose a danger to life and property should be checked out by an arborist. This tree assessment should be repeated after any bad wind or ice storm that could cause damage.

Standing dead trees (snags) serve as homes for woodpeckers. When the woodpeckers leave, the abandoned cavities will be used by a host of other wildlife species that also rely on cavities as nest or den sites but have no way to create their own. Birds who inhabit woodpecker nests when they are abandoned include bluebirds, tree swallows, owls, wood ducks, and many of our backyard birds such as chickadees, tufted titmice, nuthatches, and wrens. Mammals that inhabit woodpecker nests include bats, flying squirrels, and, of course, raccoons. When possible, retain these dead trees; they are also valuable to insects, microbes, and reptiles.

Sweeps of Plants: More Is Always Better

Barbara De Rosa-Joynt, Loudoun County Extension Master Gardener

Oenothera lindheimeri

I have never met anyone who did not want their garden to look nice, whether it is a large piece of property or the tiniest apartment balcony. And it is fantastic that more and more people are interested in adding native plants to their gardens to support native pollinators and other wildlife. But sometimes that good intention manifests itself into a single native plant surrounded by a sea of mulch. And unless that single native plant is an oak tree--oak trees support over one thousand species of butterfly and moth caterpillars and countless other wildlife species--you can do better. More is definitely better for pollinators. My challenge to you in the new gardening year is to create sweeps of plants in your garden and avoiding planting onesies or twosies of your perennial plants. And if you already have small clusters of the same species of plants in your garden, I encourage you to make those clusters even bigger and ideally ensure that at least some of your clusters are composed of native species.

What do we mean by sweeps of plants?

This phrase typically refers to a relaxed drift of a single plant species in a massed planting, while avoiding arranging the plants in straight lines. This look is generally naturalistic and works with nature, letting the plants decide how to mingle instead of having hard edges where one species ends and another begins. This low-key approach to gardening is intended to be low maintenance and provides an opportunity to showcase plants in all their seasons, from early spring new growth to frost-covered seed heads in winter.

A great illustration of sweeps of plants is found in the incredible gardens created by Dutch plantsman and designer Piet Oudolf. Oudolf is credited as a leader of the "New Perennial" movement, and he uses sweeps of plants for what many describe as a painterly effect. Some of his work in the United States includes the fabulous Lurie Garden in Chicago pictured here and the amazing High Line in New York City.

Lurie Garden. Photos on this page by Barbara De Rosa-Joynt.

What is the point of drifts?

Here are a couple of practical examples of why planting multiples of the same kind of plants matters. One monarch butterfly caterpillar can eat one mature milkweed plant, and each mama monarch can lay around 400 eggs in a season, generally laying one egg per plant. And that is just one adult of one species of butterfly. You don't need to have 400 mature milkweed plants in your garden (unless you want to!), but one plant isn't going to cut it for that mama monarch. Another example is that a mama native bee may visit hundreds of flowers on a single foraging trip to collect nectar to feed herself and pollen to feed her offspring. And that is just one trip of many she makes in a day, so a single plant is not going to be enough for that mama bee to support her growing family. And that is just one adult of one species of bee.

Bumblebee on *Solidago rugosa*

This article focuses on the needs of pollinators whose adults eat nectar and whose larvae eat pollen, as in my second example above. However, the same concepts and benefits described below generally apply to pollinators like butterflies and moths whose adults eat nectar and whose larvae eat the host plants themselves as well as wasps, flies, and other insects that consume nectar and/or pollen. More is always better.

Photos on this page by Barbara De Rosa-Joynt.

This house I drove by in Manassas is a wonderful example of drifts of native plants in a home landscape that would surely make Piet Oudolf proud. That said, while I personally think it looks really cool, I have an HOA and a husband who would not be happy if I removed all our lawn and planted it with perennials, so this look is not in the cards for me, and I recognize that this is a bit much for most people. Though this kind of garden is what comes to mind for some people when you talk about drifts of plants, it is not the only way to create sweeps of plants in a residential setting, and my intention is not to scare you off by including this photo! Most of us will need to aim for a much more scaled down version of drifts than this, namely to create sweeps of plants solely within our flower beds and not across our entire property. But I bet this yard hosts a lot of very happy pollinators, and if you want to recreate this kind of look on your own property, I certainly encourage you to go for it--and let me know so I can come visit you and enjoy it too!

What are the benefits of sweeps of plants?

There are many benefits to this approach to gardeners, pollinators, and the plants themselves:

Benefits to gardeners

- Planting in groups is appealing to the human eye, and odd numbers of plants in drifts are considered more pleasing to the eye than even numbers. This approach creates informal, asymmetrical clusters that are more natural and visually dynamic than rows of symmetrical plants lined up like little soldiers.

- This approach is infinitely scalable--from a group of three to five plants on a balcony or patio to 25 or 50 plants or more in a cluster in a larger space.
- This technique can create a soft, cohesive, unified look, and it lends itself well to repetition around the garden, further enhancing the visual and wildlife impact of your design.
- Focusing on just a few species, repeated in clusters, simplifies planting design and avoids the visual chaos that can occur in designs featuring one of each species of plant.

Benefits to pollinators

- Foraging for food is a very energy intensive exercise for pollinators, so they have evolved strategies to be as efficient as possible when foraging for food. Groups of plants of the same species help them save critical energy reserves and maximize the benefits, whether they are a specialist bee seeking specific kinds of pollen or any adult pollinator seeking nectar.
- Some bees practice "flower constancy" where they prefer to feed on the nectar of a single species before switching to another kind of flower for efficiency and/or other reasons, and they benefit from having large drifts of the same species available to them.
- Larger groups of flowering plants are easier for pollinators to spot from a distance, further contributing to pollinators' efficiency as they navigate your garden and the surrounding area.
- Sweeps of the same species can make a big difference for some of our smaller native bees that may forage only dozens or perhaps a few hundred yards from where they lay their eggs. Your property may be their entire universe.

Benefits to plants

- Drifts of plants of the same species can improve plant pollination.
- Because of the aforementioned efficiency benefits to pollinators, when pollinators encounter a large cluster of the same species of flower, they are more likely to stay on the same species for a while instead of traveling to other plant species elsewhere in the garden.
- The more pollinators stay within a cluster, the more likely that pollen is transferred between flowers of the same species instead of to other species where it cannot be used for pollination and is wasted.
- The more pollen is transferred among plants of the same species, the more likely fertilization will occur, increasing the chances for successful seed and fruit production and potentially enhancing genetic diversity. Shown here is a drift of about seven hyssop-leaved thoroughwort (Eupatorium hyssopifolium) in my garden. They are hard to see, but numerous species of pollinators collect nectar on this drift of plants.

***Rudbeckia laciniata* and *Monarda fistulosa*.**
Photo by Toni Genberg.

***Eupatorium hyssopifolium*.**
Photo by Barbara De Rosa-Joynt.

What kind of plants work best in drifts?

***Symphyotrichum novae-angliae* and *Doellingeria umbellata*.** Photo by Toni Genberg.

In theory, you can use pretty much any flowering plant to create a drift--native or non-native, though it is always important to avoid invasive alien species. In general, most flowering plants have the potential to support a wide range of species of adult pollinators since their diet is largely nectar. However, in addition to nectar, adult bees also need pollen, some to eat, but for female bees, it is typically used to feed offspring. Roughly 400 native bee species live in Virginia, and I emphasize the importance of planting native plants because about a quarter of those bee species are plant specialists, called oligolectic bees; the rest are generalists, known as polylactic bees. Oligolectic bees evolved over millions of years to rely on just a few native plant species--some are dependent on a single species--to provide the pollen their larvae evolved to eat. While generalist bees can feed their larvae pollen from many different plants, the specialists cannot. When you provide the nectar and pollen needed by the specialist bees, that same nectar and pollen can also feed the nonspecialist bees and often lots of other pollinator species as well. Focusing on the specialist bees inherently helps many other species. According to pollinator expert Heather Holm, the plant family Asteraceae--which includes goldenrods, asters, sunflowers, and black-eyed Susans--supports the most pollen specialist bee species in all regions of the United States.

Want to take this up another level?

So, if you are now convinced or already were convinced of the benefits of planting in sweeps, are you ready to take it to the next level? How about not only planting in drifts, not only planting in drifts of native plants, but planting in drifts of keystone species? Keystone species are native plants that are important to the health of our ecosystem because they support outsized numbers of native species. Noted entomologist Dr. Doug Tallamy of the University of Delaware found that just 14 percent of our native plants support 90 percent of caterpillars, and he calls those plants keystone species. Many of the top keystone species in the Eastern temperate forest region where we live are trees and shrubs like oaks (Quercus spp.), cherry (Prunus spp.) and willows (Salix spp.), which support 436, 340, and 289 butterfly and moth species respectively--willows also support 14 bee species. But we would most likely plant sweeps using herbaceous plants, and the four most important genera of herbaceous plants in our region are: goldenrods (Solidago spp.), asters (Symphyotrichum spp.), sunflowers (Helianthus spp.), and black-eyed Susans (Rudbeckia spp.), some of which support more than 100 butterfly and moth species and as many as 50 bee species--specifics below. Source: NWF.org. It is no coincidence that those four genera are the same as the four most important genera to specialist bees as described above. Compare these numbers to chrysanthemums, which host three moth species. Source: Natural History Museum. Bees can pollinate some single-flowered chrysanthemum species, but I could not find reliable data indicating that butterflies can use them as a host plant.

Pick me!

A few of my favorites from the aforementioned four keystone genera that would make good candidates for creating sweeps of plants are listed below. All are native to Loudoun County per the Digital Atlas of the Virginia Flora. Note that additional keystone plants are highlighted in the Fall 2025 issue of Trumpet Vine article entitled “Great Late-Blooming Native Plants.”

Goldenrods (*Solidago spp.*) It is generally known by now that goldenrods do not cause allergies because their sticky pollen needs pollinators to move it, so I will not go into that here. Fifty species of goldenrod are native to Virginia, 17 of which are native to Loudoun County. Goldenrods support 104 butterfly and moth species and 42 bee species. Two excellent goldenrod options for planting in drifts are:

Wrinkle-leafed or rough-stemmed goldenrod (*Solidago rugosa*) I have the cultivar "fireworks" planted in a few 10-foot-long drifts along a fenceline, and it is absolutely stunning when it is in bloom. The pollinators love it, and the plants are covered with dozens and dozens of pollinators at a time when the plants are flowering. I highly recommend it! It can be assertive, but in my garden, S. rugosa does not spread as aggressively as other goldenrods, growing 1 to 6½ feet tall in full sun to part shade.

Zigzag goldenrod (*Solidago flexicaulis*) is an even more modest spreader in my garden and also stays shorter, growing 1 to 2 feet tall, but it is wonderfully versatile, growing in multiple locations in my yard including full sun and full shade. It is another favorite of pollinators and one I definitely recommend.

***Solidago rugosa* 'fireworks'**

Solidago flexicaulis

Asters (*Symphyotrichum spp.*) Thirty-four species of aster are native to Virginia, and 16 of them are native to Loudoun County. Asters support 100 butterfly and moth species and 33 bee species. Two great options for planting in sweeps are:

New England Aster (*Symphyotrichum novae-angliae*) is a lovely late season bloomer, growing 3 to 6 feet tall in full sun. This species has brightly colored flowers that make a strong visual impact when planted in drifts, and in my garden these mid-sized beauties are a pollinator magnet.

Calico aster (*Symphyotrichum lateriflorum*) Calico aster is petite by aster standards, growing 1 to 4 feet in full sun--mine usually max out around 2 feet. It teems with tiny flowers and lends itself well to creating drifts that are compact in height, though they punch above their weight in the numbers of pollinators--mostly tiny--they will attract.

Left: *Symphyotrichum novae-angliae*

Right: *Symphyotrichum lateriflorum.*

Photos on this page by Barbara De Rosa-Joynt.

Sunflowers (*Helianthus spp.*) Twenty sunflower species are native to Virginia, and five of those are native to Loudoun County. Sunflowers support 66 butterfly and moth species and 50 bee species. Two suggestions for planting in clusters are:

Giant sunflower (*Helianthus giganteus*) These stately plants can grow 3 to 10 feet tall in full sun to shade with clusters of 2- to 3-inch flowers. This species will spread aggressively in ideal conditions, so site it carefully.

Pale-leaved sunflower (*Helianthus strumosus*) This sunflower grows 3 to 9 feet tall and prefers full sun to part shade. This species will also spread aggressively in ideal conditions, so site it carefully.

Black-eyed Susans (*Rudbeckia spp.*) Eleven black-eyed Susans are native to Virginia, and five are native to Loudoun County. Black-eyed Susans support 20 butterfly and moth species and 29 bee species. Two stellar picks for planting in drifts are:

Orange coneflower (*Rudbeckia fulgida*) This beauty grows 2 to 3 feet tall and prefers full sun. Here it is shown in drifts on the High Line in New York City.

Brown-eyed Susan (*Rudbeckia triloba*) This cutie with its dainty 1- to 2-inch flowers grows 2 to 3 feet tall and prefers full sun.

Native grasses can also make for dramatic sweeps, but--though some are host plants for butterfly and moth caterpillars--they cannot match the pollen and nectar provided by the keystone species listed above. That said, they do look pretty cool.

I encourage you to let your inner artist come out and play with creating sweeps of plants in your garden. See what works for you aesthetically and what scale and plant material make the most sense for your space, ideally including some natives, particularly keystone plants. Your pollinators will thank you!

Photo by Barbara De Rosa-Joynt.

Helianthus giganteus.
Photo by Don Henise.

Helianthus strumosus.
Photo by Doug McGrady.

Rudbeckia fulgida. Photo by Barbara De Rosa-Joynt.

Rudbeckia triloba. Photo by Toni Genberg

Photo by Barbara De Rosa-Joynt.

Two-Lined Chestnut Borer (TLCB)

Loudoun County Extension Master Gardener Tree Steward

Of course, you remember the emerald ash borer (*Agrilus planipennis*). Loudoun County was infested and officially quarantined in 2008. Few ash trees survived after the metallic green beetles from Asia marched through the area attacking every ash tree and many fringe trees. You may still have some dead ash trees nearby. Now we have another borer in our midst, and it is attacking our oak trees. The two-lined chestnut borer (*Agrilus bilineatus*) has some commonalities with the emerald ash borer and some critically important differences. But first, let's put this in perspective. *Agrilus* is a large genus of metallic wood-boring beetles (jewel beetles) notable for having the largest number of species (about 3,000) of any single genus in the animal kingdom. There's a metallic wood-boring beetle for just about every kind of tree!

Adult two-lined chestnut borer on an oak leaf. Photo by Robert A. Haack, USDA Forest Service, Bugwood.org.

The two-lined chestnut borer is a black metallic beetle with a bluish iridescence and two pale golden stripes running down its back, one on each wing cover. It is native to North America east of the 100th meridian. It attacks several major species of oak (*Quercus*), notably red oak (*Quercus rubra*), white oak (*Q. alba*), and bur oak (*Q. macrocarpa*). It also attacks beech (*Fagus*) trees, and, in the past, has attacked American chestnut (*Castanea dentata*), which is now rare because of the destruction caused by chestnut blight. But this borer only attacks trees that are already weakened. It does not attack healthy trees. It attacks trees that are stressed by drought, excessive heat, fire, age, pollution, and defoliation by leaf-feeding insects such as spongy moths or forest tent caterpillars. This is not a new pest, but oak trees are increasingly stressed by climate change and so the damage done by this borer is becoming more apparent.

This chestnut borer attacks trees by laying eggs in bark crevices of stressed trees. Once the larvae hatch, like most flathead borers, these grubs burrow under the bark making serpentine feeding galleries beneath the bark. They also feed in the phloem, cambium, and outer sapwood or xylem, filling them with sawdust and frass, disrupting the tree's vascular system, and impeding the flow of water and nutrients. They weaken the tree and cause the death of branches girdled by those tunnels. Branch death occurs first in the upper canopy and progresses lower to the main trunk of the tree. Oak trees are "ring porous," meaning they conduct water through only a few growth rings in the sapwood. Once this conduit is severed by feeding larvae, the entire branch above the girdling tunnels dies. Trees usually die after two to three years of attack. Other insects then attack dying trees, accelerating tree mortality.

Galleries formed by two-lined chestnut borer larvae under the bark of an oak tree. Photo by James Solomon, USDA Forest Service, Bugwood.org.

Signs of infestation may not be immediately apparent, but common symptoms include:

- **Crown Dieback:** Leaves in a tree's upper branches turn brown and wilt. The dieback will continue downward toward lower branches and into the main stem.
- **Winding Galleries:** Peeling back the bark reveals meandering tunnels created by the larvae. When the bark is removed, frass--a mixture of sawdust and larvae feces--can be seen packed in these tortuous, interlacing s-shaped galleries.

- **Epicormic Sprouting:** New shoots or sprouts appear along the trunk or lower branches as the tree tries to recover.
- **1/8" D-Shaped Exit Holes:** Adult borers leave distinctive 1/8-inch D-shaped holes on the trunk and branches when they emerge from the tree.

Life Cycle

TLCBs typically have a one-year life cycle but the cycle may extend to a second year in vigorous hosts or cooler climates. They overwinter as final (fourth) instar larvae in wood chambers excavated under the bark. Peak emergence of adults occurs in early summer. Adult beetles may be present for most of the summer, because they are relatively long-lived and considerable variation in larval development time is associated with the vigor of infested hosts. Adults feed on leaves during their maturation period. Mated females locate stressed trees suitable for egg-laying, detected through chemicals (volatiles) emitted by the trees. They lay eggs in bark crevices and hatch in mid- to late summer. Larvae complete development in late summer and autumn, feeding through the fall. They burrow into the outer bark to construct individual chambers for overwintering. Pupation occurs in this chamber the following spring. Adults begin to emerge in late spring and early summer.

Two-Lined chestnut borer larva feeding inside an oak tree. Photo by Steven Katovich, Bugwood.org

Prevention and Management

TLCBs are a natural component of oak and chestnut forests in eastern North America. Larvae under the bark are invulnerable to most interventions short of felling the tree. Management should rely on prevention. The close association between attacks and stressed trees suggests that removing less vigorous overstory could benefit the remaining trees. Mulching, watering, and fertilizing urban trees helps maintain tree vigor and reduce susceptibility. Removal of infected trees should be carried out in early autumn. Bark must be removed before spring to kill larvae prior to emergence. Do not transfer any wood with bark to new areas, because it could harbor fully grown larvae that are ready to emerge. TLCBs can also be transported via firewood.

The best practice to prevent TLCB attack is to promote tree health by mitigating stress. To prevent water and nutrient deficiencies, water during droughts, add organic mulch, fertilize when needed (but avoid fertilizing an already stressed tree because this will increase the tree's need for water), and plant oak species that will thrive in the soil and climate conditions of a site. Treat trees to prevent exfoliation by tent caterpillars and spongy moths.

As with emerald ash borer prevention, high value trees can be treated by an arborist with preventative systemic insecticides such as imidacloprid, dinotefuran, or Emamectin Benzoate. These are used via soil drench, basal bark spray, or trunk injection on healthy, high-value oaks before adult beetles emerge (in spring or early summer).

Unfortunately, most of these vulnerable trees, especially the chestnut oaks, occur in forests. They are often the dominant species in craggy, hilly areas. They can't receive preventive care or treatment. We hope nature produces a remedy.

Resource: https://content.ces.ncsu.edu/twolined-chestnut-borer

Fire Prevention and Protection in the Home Landscape

(First article in a series on Landscaping for Climate Change)

Gaye Mara, Loudoun County Extension Master Gardener

For many of us, the ideal home is one that looks out on wild lands for the beauty, peace, and privacy they give us. That ideal is achievable in much of Loudoun County.

Unfortunately, we humans have not been good neighbors to nature. We've dumped our yard waste there, and we've indulged in careless burning on our own properties.

As a result, wildfires are a growing problem in our woodlands. And with the higher temperatures and longer droughts of our changing climate, wildfires are getting larger, more frequent, and more damaging. Each year, the small fire-fighting crew of Virginia's Department of Forestry fights about 700 fires that burn almost 9,500 acres and more than 60 homes. Careless outdoor burning is the major cause. (See https://dof.virginia.gov/wildland-prescribed-fire/learn-about-wildland-and-prescribed-fire/wildfire-in-virginia/.)

In the Mid-Atlantic states, unlike the western states, our peak wildfire season is in spring and fall. The humidity is lower, leaves are off the trees letting sunlight hit the ground, new green growth has not yet emerged, and the fallen leaves and other dead plant material dry out, creating highly flammable fuel for fires. Then sporadic warm weather and winds create the conditions for fires to spread. Fortunately, most wildfires in the Mid-Atlantic are ground fires, spreading on fallen leaves and other dead undergrowth, rather than canopy fires, which are much more dangerous and harder to control, as in the tall evergreen forests of the West.

Plants–both live plants and dead plant material like dead trees and shrubs, fallen branches and leaves, frost-killed annuals and the dead foliage of dormant perennials, wood and bark mulches, brush piles, and other yard waste–are the main fuel for wildfires.

Growing Wildfire Risk from Invasive Species

Invasive plants pose a particular fire risk in our wild lands. Invasive vines have overrun and killed many trees; dead trees are one of the largest and most highly flammable sources of wildfire fuel. Besides killing trees, Japanese honeysuckle itself is a highly flammable vine. The dried, dead foliage of invasive annuals like Japanese stiltgrass and beefsteak plant (Perilla) that dominate many woodland floors in our region provide masses of fuel on the ground.

As noted in a 2022 memorandum urging federal action from the National Invasive Species Council, "In many cases, climate change is accelerating this invasive species-wildfire cycle, impacting wildfire frequency, size, intensity, and characteristics."

See https://www.doi.gov/invasivespecies/wildland-fire-and-invasives for more on invasives.

Firewise Landscaping

In our own landscapes, which plants we choose, where we put them, and how we maintain them, play a large part in how vulnerable our homes and properties are to being damaged in a fire.

Choosing Plants: Flammability Ratings

All plants will burn in extreme fire conditions, but some are more flammable than others. Evergreens, including both conifers and broad-leaved evergreens like mountain laurel, rhododendrons, and Southern magnolias, are the most highly flammable plants. There's a good list of plants with their flammability ratings (High, Medium, or Low) in the Virginia Cooperative Extension (VCE) brochure "Virginia Firescapes: Firewise Landscaping for Woodland Homes."

The brochure is downloadable at https://vtechworks.lib.vt.edu/server/api/core/bitstreams/0908eccc-cced-4b5d-92f7-9f010fd16d71/content.

In fire-prone areas, the plants with low flammability ratings are the ones to choose. As a general rule, the plant characteristics to select for are:

- "Juicy" plants with high moisture content (for example, sedums and other succulents)
- Broad and thick leaves with low chemical content (broad-leaved evergreens have flammable oils and resins in their leaves)
- Drought resistance
- Open and loose branching patterns (not dense)
- Deciduousness (many hardwoods have fire-resistant bark and, in their dormant state without leaves, provide little fuel for a fire)
- Little or no dead material; minimal litter potential
- Low height to provide less fuel and less possibility of "laddering up" a fire to tree crowns or rooftops, where they become much more dangerous and harder to control.

Placing Plants: Firescaping Zones

The Virginia Department of Forestry (DOF) has published a useful brochure for homeowners, "Firewise Communities for Virginia," downloadable at https://dof.virginia.gov/wp-content/uploads/Firewise-Communities-for-VA_2021-12_pub.pdf?x11713. Besides plant location and maintenance, it covers fire-resistant construction materials and access for emergency vehicles.

The VCE publication referenced above introduces the concept of landscaping zones for fire protection, with the most fire-resistant landscaping closest to the home and the least resistant farthest from the home. The Maryland Department of Forestry also has a publication on "Firewise Landscaping," available at https://dnr.maryland.gov/forests/Documents/fire/Firewise_LandscapingFactsheet.pdf.

The following blends the landscaping zone advice from all three publications.

Zone 1: To 5 feet from house — Prevent direct flame contact

There should be nothing highly flammable under, over, or next to the house: no firewood, flammable mulch (bark, pine straw, cocoa shells, etc.), evergreens, overhanging limbs, fallen leaves in gutters or on roofs and other surfaces, other dead plant material, propane or other fuel tanks, filled gas cans, etc. Use small, fire resistant plants and nonflammable mulch in foundation beds. Decks, porches, stairs, and fences adjoining the house are best built with brick, stone, concrete, or metal; wood or composite material should be treated for fire resistance. Decks and porches should either be closed underneath to keep out flammable debris or the ground beneath them kept clean and bare.

Left: Stone mulch on a foundation bed. Right: Bare ground under a deck. Photos by Gaye Mara.

Zone 2: To 12 feet from house — Stop fire spread

Minimize the availability of fuel. Use only low-flammability plants here: no evergreens, and only small trees that are at least 10 feet from the house, limbed up 10 feet from the ground, and with at least 10 feet of space between tree crowns. Create fuel breaks to stop an advancing fire: a pool, a low-cut and well-watered lawn, an area of bare earth, or stone/brick/concrete patios, walls, walkways, or driveways.

Zone 3: 30-100 feet from house — Slow down or stop fire and provide space for firefighters to work

A house at the top of a slope is at particular risk from an advancing fire, which will race up the slope by convection. Terracing the slope can reduce the risk.

Clean out yard debris and thin vegetation in this zone for at least 30 feet from the house, up to 100 feet on the downhill side. Plantings should be kept small, widely spaced, and cleared of dead material, with regular removal of brush and weeds. Tops of trees should be pruned at least 15 feet away from roofs and chimneys. As DOF advises, keep this area "lean, clean, and green," removing enough fuel to slow a fire down and move it down from the treetops in neighboring woodlands to the ground.

Trees limbed up and widely spaced, with the ground underneath cleared of leaves and other plant material. Photo by Gaye Mara.

Mowed lawn areas and wide spacing of woody plants also provides firefighters with space to move their equipment around.

Zone 4: The surrounding area--Minimize the intensity of an approaching fire

If this area is part of your property, keep the ground cleared of debris and the trees limbed up 10 feet or more as far back from the house as you can. If it is not, provide fire breaks at the edge as suggested above, and do not dump yard waste there.

Maintaining Plants: Hydration and Fuel Reduction

As stated before, plants that are high in moisture content are the most fire resistant. Choose mostly "juicy" plants and keep all your plants well-watered. If you don't have in-ground irrigation you can turn on at will, keep 100-foot hoses and sprinklers hooked up and ready to go in fire season.

Keep dead and excess plant material off your property: Rake up dead leaves, and compost—don't burn—them. Clear leaves out of gutters in late fall. Prune dead branches from trees and shrubs, and thin live branches as well to reduce the fuel load. Limb up taller trees at least 10 feet from the ground. Keep other plantings low and grass mowed.

Observe Virginia's fire laws: From February 15 through April 30, no outdoor burning is allowed until after 4 p.m. when temperatures are typically lower, humidity is higher, and winds have died down. At all times of year, all individuals burning outdoors must stay with their fires and totally extinguish them before leaving them. For more information, see https://dof.virginia.gov/wildland-prescribed-fire/learn-about-wildland-and-prescribed-fire/wildfire-in-virginia/.

Increased Fire Risk at the Holidays

The holiday season poses a special fire risk, with Christmas trees and other decorative plant material in and outside of the house and with electric lighting or lit candles on those decorations. According to the National Fire Protection Association (NFPA.org), 43 percent of Christmas tree fires are started by electric cords and lighting, and 12 percent

by candles. In December, 50 percent of home decoration fires overall are started by candles. See the NFPA website at https://www.nfpa.org/education-and-research/home-fire-safety/winter-holidays for advice on having fire-safe holidays.

As I noted earlier, evergreens are the most flammable of all the trees. A dead, dried-out Christmas tree is even more flammable. Keep your Christmas tree well-watered. Also have one or more working fire extinguishers in your home, and make sure everyone in the household knows where they are and how to operate them.

Helping Firefighters Do Their Job

For many woodland homes and communities, the only access is via a single narrow road or a long driveway, often with a narrow entrance gate, tight turns, sharp dips, and overhanging tree limbs. There is little or no turnaround space, and house numbers are poorly marked if they're marked at all. And there are no fire hydrants.

If firefighters are going to get to your house and community and get around there to fight a forest fire, and then get out again, here is what they need:

- An entrance or driveway gate at least 10 feet wide. If it is locked, have a key box that is approved by your local fire department or a chain loop with the lock that can be cut in an emergency.
- Culverts and bridges that will support the weight of a fire truck (minimum 10,000 pounds).
- Either an access road that is at least 20 feet wide to allow for two-way traffic or a second exit road, so that evacuating residents are not blocking entering fire trucks and vice versa.
- Roads and driveways to within 50 feet of homes and other structures that are at least 10 feet wide with 13.5 feet of vertical clearance and no sharp curves or deep dips.
- A gravel or hard-surface turnaround area at dead ends that is big enough for a fire truck to turn around in.
- Highly visible house numbers (at least 4 inches tall) on your home or at the entrance to your driveway, made of nonflammable material.
- If there is a water source like a lake, pond, river, or large creek, an adequate access road and turn-around area.

For more information, see the article on "Fire Apparatus Access Roads" on the NFPA website at https://www.nfpa.org/news-blogs-and-articles/blogs/2021/01/08/fire-apparatus-access-roads and "Take Action to Be Firewise" on the DOF website at https://dof.virginia.gov/wildland-prescribed-fire/wildfire-preparation/take-action-to-be-firewise/.

NFPA has a Firewise USA community program that provides information and resources to help neighborhoods improve their fire safety infrastructure and landscaping. See https://www.nfpa.org/Education-and-Research/Wildfire/Firewise-USA. You can also meet with your local fire chief to learn how to make firefighters' job easier in your neighborhood.

A Final Note for Gardeners

Fire safety requires us to garden differently next to woodlands. As you might have noticed, much of the landscaping advice for wildfire-prone areas conflicts with traditional principles of garden design and environmental care:

- Evergreens next to the house to decorate for the holidays: Out!
- Large areas of mowed turfgrass, bare soil, and impermeable surfaces: In!
- Dense groves of trees and swathes of perennials and/or tall grasses to feed and shelter pollinators and other wildlife: Sorry, no!
- Dead stems left standing and fallen leaves left on the ground for overwintering bee and butterfly larvae: Fuhgeddaboudit!

If your home borders on wild lands, this is an excellent time of year to think about your current landscaping and make a long-term plan to improve it for the safety of yourself and your family.

Plan a Visit to Keukenhof

Wendy Hiller, Loudoun County Extension Master Gardener

This past spring I crossed an item off my bucket list with a visit to Keukenhof, an amazing garden in the Netherlands. I am excited to tell you about it.

What is Keukenhof?

Keukenhof advertises itself as "The most beautiful spring garden in the world!" and I have to agree. It is brimming with seven million flowering bulbs of all kinds, plus other perennials, water features, sculptures, cafes, and live entertainment. It is truly amazing and so pretty! If you've been to the Philadelphia Flower Show, think that times one thousand, plus it's outside

How did Keukenhof come to be?

Today's Keukenhof gardens were originally part of the estate of the Keukenhof Castle built in 1641. Sitting on the site of the castle gardens, Keukenhof benefits from the fundamentals of the English landscape style garden designed by landscape architects Jan David Zocher and his son Louis Paul Zocher way back in 1857. They also designed Amsterdam's Vondelpark.

In 1949 after World War II, Keukenhof was reimagined as a way to showcase the wares of a group of 20 flower bulb growers and exporters, and the Keukenhof festival was born. Beginning in 1950, Keukenhof was opened as a spring park and has since become a world-famous destination. 2026 will be the festival's 77th year.

Visiting Keukenhof is akin to viewing a living catalog of bulbs.

Photo by courtesy of Keukenhof.

These days, 100 Dutch floricultural companies and growers exhibit their bulbs in breathtaking plantings created for each company by Keukenhof's landscape design experts. Bulb displays are augmented by additional potted and cut flower displays, some of which are indoors. During my visit, I experienced an amazing display of orchids.

Keukenhof also includes large flower bulb fields that are viewable from the road as you approach the entrance. Operated by the various growers, they are not part of the "landscaping," but are striking nonetheless as a series of long rectangles of the same type of bulbs, such as all red tulips. While you cannot walk through those areas, you may take pictures from the road.

When should I go?

The garden is open to the public each spring. In 2026, Keukenhof will be open from March 19 to May 10. Of course, peak bloom times will vary with the weather. Similar to D.C.'s Cherry Blossom Festival, you can see estimates online for peak bloom and plan your trip accordingly. For reference, I was there on April 23, and everything was in full bloom. Only the daffodils were past their prime, and they were a very small portion of the garden, mostly concentrated near the entrance.

What sort of weather is common?

Be prepared for rain and chilly temperatures. The festival occurs in the spring, and we all know that April showers bring May flowers. I wore layers with a raincoat on top, just in case, but luckily did not experience any rain that day. The following day in Amsterdam was a different story.

To fortify you, the Keukenhof cafes offer a variety of food and drink, including hearty soups and hot drinks. A nice local beer may help warm you up, too, and you are welcome to stroll about with beverages.

How do I purchase tickets?

Tickets for Keukenhof 2026 are available now at https://keukenhof.nl/en/ . Tickets are for specific dates and entry times, so you are ensured entry on your date of choice. Tourism groups also provide package deals that include event tickets and transportation. I booked with a group based in Amsterdam that ensured I arrived during my ticketed timeslot and provided flexible return transportation to Amsterdam up to and including the end of the day. It was super easy.

What type of payments are accepted?

Please note that Keukenhof is completely cashless. This means you can only pay with a debit or credit card for any purchases made in the restaurants and shops within the park. Your United States credit card should be fine; however, when traveling internationally, it is always wise to notify the card company in advance so they do not flag your card for potential fraud.

Where should I stay?

The Netherlands is known for its spring tulips, and hotel prices are definitely higher during the spring. I stayed in Amsterdam and really enjoyed the city. Keukenhof is to the southwest, near the North Sea, about a 45-minute drive from Amsterdam. Another option is the area around Keukenhof, known as the Dune and Flowerbulb Region (Duin end Bollen Streek). Their tourism information can be found at https://www.visitduinenbollenstreek.nl/en .

Sounds great, but how crowded is it?

It's crowded, but it never felt overwhelming to me. Being outside makes a huge difference, and Keukenhof is very large with numerous paths. Visitors were well-behaved and no bicycles or animals are allowed. Photo opportunities are endless. While other visitors were often in my photos, I was pleased with my cell phone's editing options that allowed me to easily remove people from my photos when desired.

Conclusion

When you go to Keukenhof, take your umbrella, your camera, and your love of nature. You will not be disappointed.

All photos by Wendy Hiller except where indicated.

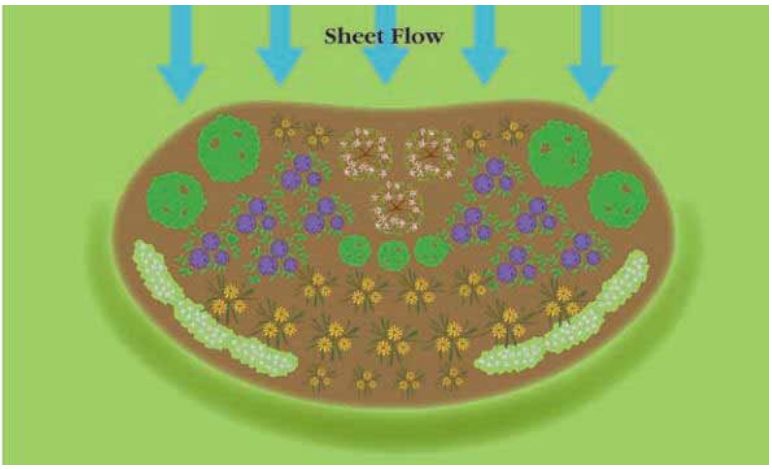
Map by courtesy of Keukenhof.

Constructing a Rain Garden

Sandy Smallwood, Loudoun County Extension Master Gardener

As you spend your winter days winding down after the holidays and your gardens are put to bed, this is a great time to start planning a new garden for the spring. Consider a rain garden.

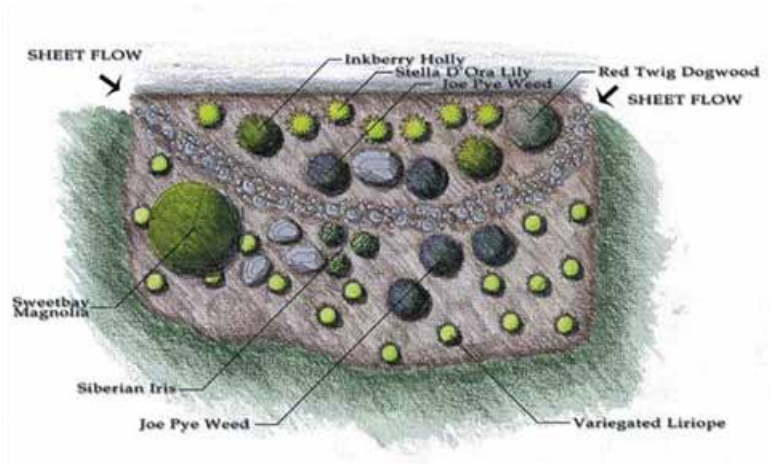
A rain garden is one way to protect the water quality of the watershed we live in. Loudoun County is part of the Chesapeake Bay watershed. Retaining rainwater runoff (sheet flow) from our roofs, lawns, and driveways within our properties is an important step in keeping pollutants out of our streams, ponds, and rivers that all ultimately feed into the Potomac River and then into the Chesapeake Bay. Using your browser, type in https://river-runner.samlearner.com/ and then enter your address into the search line. You will then see from your property's location each body of water that your stormwater runoff is traveling through all the way to the Chesapeake Bay.



The Basic Concept of a Rain Garden. https://www.fairfaxcounty.gov/soil-water-conservation/sites/soil-water-conservation/files/assets/documents/raingardenbk.pdf p.11

How it Works

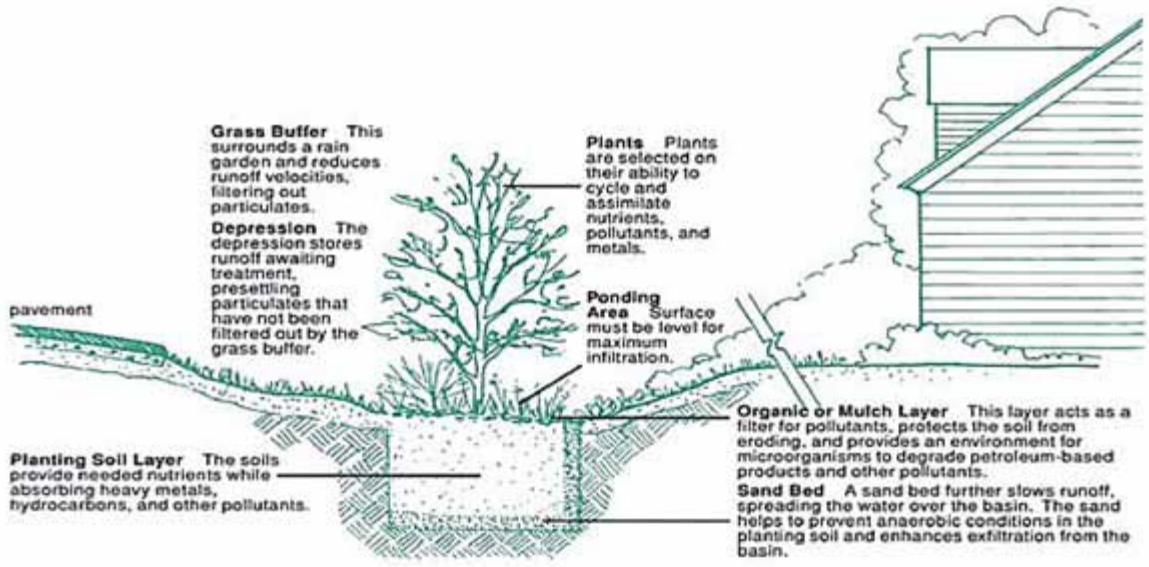
The rain garden is a garden designed to capture the sheet flow of a rain storm. It is copying the functions of a forest, enabling the absorption of rain, filtering pollutants from the water, and restoring the water table. Many forests and meadows have disappeared due to urbanization so a rain garden would be a benefit almost anywhere. Planting trees, shrubs, and any deep-rooted plants on your property is beneficial to absorbing water, but a rain garden is a strategically placed garden that forms a "bioretention area" by collecting water runoff and storing it, permitting it to be filtered and slowly absorbed by the soil. A filtering process takes place as the water comes in contact with the soil and the roots of the trees, shrubs, and vegetation. The rain water follows the plant roots deep into the soil rather than running off. This process aids in improving water quality. The first flush of rainwater is ponded in the depression of the rain garden.



How It Works. https://dof.virginia.gov/wp-content/uploads/Rain-Gardens-Technical-Guide_pub.pdf p.19

Positioning the Garden

A rain garden should be placed so that impervious surfaces (pavement) will drain into the depression area. Its purpose is to slow down the rate of runoff, filter out impurities, allow water to soak into the soil water, and improve the quality of water entering conventional storm drains and nearby streams. These layers serve to filter the runoff naturally. The plants and organisms in the soil remove the pollutants, and in the end, cleaner water is deposited into the Chesapeake Bay.

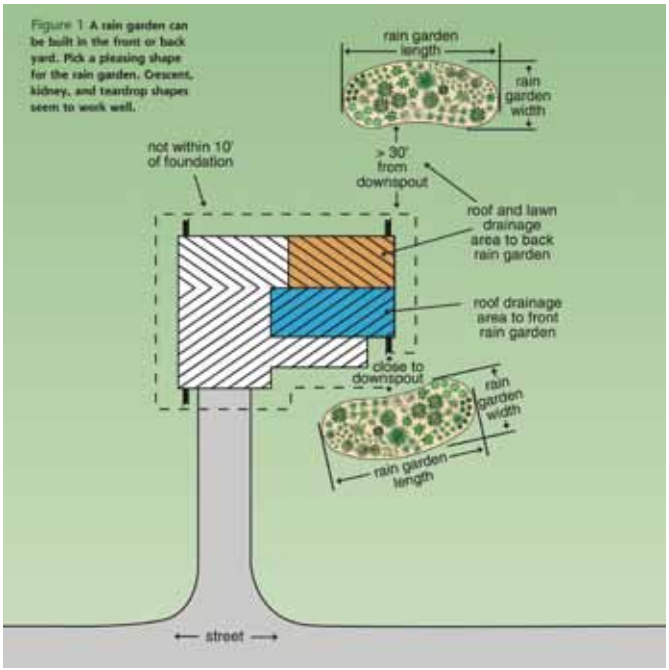


Cross section of a rain garden. https://dof.virginia.gov/wp-content/uploads/Rain-Gardens-Technical-Guide_pub.pdf p 6

Guidelines for locating the rain garden:

- Don't disturb existing trees; they are already doing their part to absorb water.
- Do not plant where water currently pools as this is where the soil is compacted and will not aid in infiltration unless the soil is amended.
- Note where you have underground utility lines (call Miss Utility before digging).
- Place the garden at least 10 feet from your home.
- Slope must be less than 12 percent.

Get outside and walk your property. Note high and low points. Where does the water flow? Note existing trees and plan to protect them--they are already doing their job! The garden needs to be 10 feet from your home because you do not want your basement to flood! If the slope is greater than 12 percent, then the design of the garden will be more difficult, and it just may not filter the water effectively. So, 12 percent is a cutoff point for effectiveness. You will not want to dig into your water table, so know its approximate level. And finally, for the rain garden to be most effective, it should be designed perpendicular to the water flow.



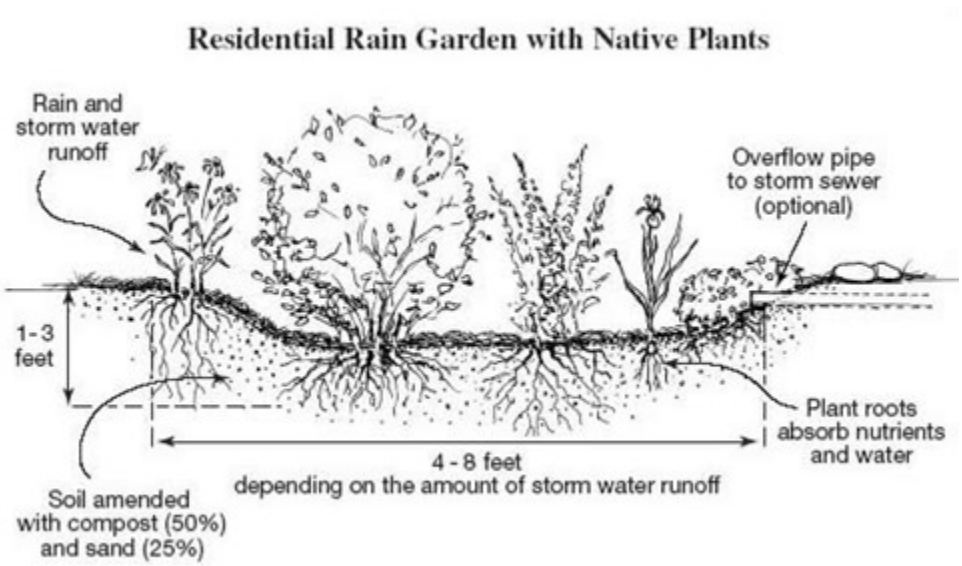
Positioning the Garden. https://pbswisconsin.org/news-item/rain-gardens-provide-a-healthy-corrective-to-runoff-flooding/

Locating the Garden https://www.lakesuperiorstreams.org/stormwater/toolkit/raingarden.html

Garden Size

On average if you have good infiltration (dig a small hole; fill with water. If the water drains in less than one hour, then you have good infiltration). If not, you will need to amend the soil.

If your soil passes the infiltration test and you do not need to amend it, then the garden ponding depth should be no more than six inches deep. Do not make it deeper because it may retain water longer than 96 hours. In that case, the water is sitting too long and may attract mosquitos and other insects.



Planting Example. https://www.slideshare.net/slideshow/rain-gardens-for-the-rouge-river/7877567

If your soil needs to be amended, then the ponding depth can be anywhere from six inches to three feet. It is recommended to excavate to three feet to obtain optimal infiltration, root growth, and moisture control. Do not go to three feet if your water table is at that point. You do not want to disturb the water table.

The overall shape of your rain garden should be twice as long as it is wide so it will catch the water flow and support a variety of plants.

Make sure you place your plants in the right light (sun or shade) and conditions, "right plant, right place." Native plants grow best in our Virginia soil and with our Virginia rain patterns, so be wise in your investment and enjoy your garden!

Resources

The following publications provide detailed step-by-step instructions on creating a rain garden, including plant lists:

- https://dof.virginia.gov/wp-content/uploads/Rain-Gardens-Technical-Guide_pub.pdf
- Rain Garden Design and Construction: A Northern Virginia Homeowner's Guide

Suggested rain garden plants:

- Tried and True Native Plants for Rain Gardens in Northern Virginia
- Native Plants for Rain Gardens

The Amazing Saguaro Cactus

Dave Torraca, Loudoun County Extension Master Gardener

As the temperature drops in our region and our Christmas cacti start to bloom, I'm reminded of warmer days in the desert southwest of the United States and northwestern Mexico, home to the stately saguaro cactus, Carnegiea gigantea. More broadly known as the Sonoran Desert Region, this area consists of the Sonoran Desert itself, surrounding biological communities, and the Gulf of California. All the world's major vegetation types (biomes) are found here, making it one of the most biologically diverse deserts in the world and the only maritime desert in North America.

Winters here are mild with two rainy seasons annually, though annual rainfall in the region varies from 3 to 12 inches. The terrain is scoured by water during times of intense rainfall feeding the four main rivers: Gila, Colorado, Santa Cruz, and San Pedro Rivers. Riparian habitats make up less than one percent of the total region's area.

Young saguaros often sprout beneath a nurse plant, such as a Triangle Leaf Bursage or Blue Palo Verde tree. These cacti are slow growers, often taking 20 years to grow one foot tall. Their root system is extensive and close to the surface. A 2-foot-tall cactus may have roots that extend 30 feet. At 40 years and 3 feet tall they reach their peak growing years until they are 50 to 60 years old, having reached 7 to 9 feet. They then begin to flower. The State of Arizona has claimed it as its state flower. Flowering season is generally mid-February to mid-June. The cacti start to form arm buds at 60 to 100 years and 12 to 15 feet. They can live for 200 years or more.

Saguaros store moisture in their stems to stay hydrated during drought. The plant tissue resembles a damp, slimy sponge. The waxy covering on the stem keeps the moisture inside. Fully hydrated, these plants can weigh 80 pounds per foot, which requires a woody inner skeleton for support. When it rains, specialized roots grow to absorb water from the soil; the pleated stem expands and contracts as water is absorbed and used.

It isn't until they are more than 100 years old and stand nearly 25 feet tall that they resemble the armed cacti we often associate with this region.

Saguaros visually dominate the landscape. Photos by Dave Torraca.

Left: Spines and thick skin provide protection from hungry animals.
Middle: A woody inner skeleton supports the saguaro.
Right: The stately saguaro is the largest cactus in the United. States.
Photos by Dave Torraca.

The saguaro provides habitat for many animals. The flowers provide nectar for white-winged doves, lesser long-nosed bats, bees, and moths. The bright red fruit, known as bahidaj, ripens in early summer and is an essential food for many with its sweet pulp. Humans also harvest it to make jams, syrup, and wine. It is rich in sugar, vitamin C, fiber, and protein. The Tohono O'odham people use long poles with hooks to dislodge the fruit from high up on the cactus arms. The woody stem also provides homes chiseled in the stem by Gila woodpeckers and gilded flickers.

So, as you sit beside your potted cacti, think of the stately saguaro, the largest cactus in the United States.

Dirt Crimes and Good Times

Sharon Murphy, Loudoun County Extension Master Gardener

On December 3, 2025, I officially became a Loudoun County Master Gardener—a title I've worked hard to earn and am genuinely proud of. Yet, like many gardeners, I sometimes feel like I'm just pretending to have all the answers. Imposter Syndrome thrives in my head as reliably as mint will take over garden given the chance. Yet despite the new title, I still make my fair share of questionable gardening decisions each year. You'd think becoming a Master Gardener would grant immunity from missteps, but in truth, the garden remains an excellent and humbling teacher.

Here are a few of my greatest hits (or misses)—proof that even seasoned gardeners are fully capable of making mistakes that cause nearby plants to lean in and whisper, "Are you seeing this?"

1. Tilling Wet Clay Soil: The Gardening Equivalent of Baking With Wet Cement

I know better. You know better. Every soil science book, every extension class, every wizened gardener at the farmers market says the same thing: Never till wet clay.

And yet I did it—heroically, foolishly—wrestling a 5-hp Honda tiller through a post-rain quagmire of clay and rocks, churning that gooey mess like I was auditioning for a butter-making competition. The clay clung to the tines with malicious spite. I was trying to convert a field formerly used to graze horses into a vegetable garden, and tilling seemed to be the best choice for breaking through the intensely matted root system of the existing grasses.

Why did I do this despite a forecast that called for rain and forbiddingly low, gray clouds overhead? Because the tiller was too big to fit in my compact SUV, I'd arranged for delivery and pickup. But primarily it was because I was paying by the day, so the moment raindrops started falling, I didn't see water—I saw money evaporating. My common sense vanished right along with my money.

"Garden Tools Still Life Art Print" released by Linnaea Mallette under Public Domain license.

2. Installing Plants Without Planning Irrigation

This is a classic example: the new landscape looked fantastic on planting day. The spacing was right, the combinations thoughtful, and I took more than a few victory laps around the yard admiring the result. Then summer arrived with heat and drought. Suddenly I was racing around with a hose, trying to keep 12 shrubs and a small orchard alive, all while wondering why I hadn't thought about irrigation before installing an entire landscape. Nothing says "seasoned gardener" quite like dragging 200 feet of hose across fresh mulch while the neighbors observe from a safe distance, tsk-tsking.

3. The Pumpkin Vine That Tried to Take the House

Pumpkin vines begin innocently enough. However, within a few months, mine had turned into a sprawling mass that swallowed garden beds, blueberries, asparagus, and any sense of order. They climbed fences and trellises and stretched confidently across the lawn. By midsummer, the yard resembled a squash-based nature preserve--beautiful in its own way, but prickly and unmanageable. Accessing the garden became an exercise in acrobatics and risk tolerance. The squash bugs and vine borers grew fat and content, apparently believing they'd joined the household.

4. Native Plants: Not Invasive…But Highly Motivated

I'm a devoted supporter of native plants for all the usual—and excellent—reasons. But some natives bring a level of enthusiasm that would impress a colonizing empire.

Enter Obedient Plant, which proved anything but. Labeled "clump-forming," it quickly developed expansion plans of its own, spreading through beds with admirable confidence. When neighbors asked what the striking flowers were, I'd smile and say, "a native perennial," while silently acknowledging it now has its own strategic plan--Lambs Ear has entered the chat.

Gardeners Are Lifelong Students

Here's the truth: gardening mastery doesn't mean precision or perfection. It simply means you've made—and survived—enough mistakes to recognize new ones forming on the horizon. Each season brings fresh lessons. Some plants thrive for years and then abruptly decide they're done. Others surprise me with vigor I wasn't expecting. Gardening is, at its heart, one long experiment—equal parts triumph and lesson. The important part isn't avoiding mistakes; it's learning from them, laughing about them, and sharing them so the rest of us feel a little less alone as we navigate our own dirt crimes and good times.

Common Five-Lined Skinks in Northern Virginia

Heather Keith Swanson, Loudoun County Extension Master Gardener

Have you ever seen a lizard run across your sidewalk or bask in the sun on a nearby wall? If you live in Virginia, this lizard in your yard is most likely a five-lined skink (*Plestiodon fasciatus*). Also found in Virginia are broad-headed skinks and southeastern five-lined skinks, but these lizards are shy and tend to remain in the woods. So that skink that lives under your downspout is most likely a five-lined skink.

Adult male Photo by Steve Waller Northern Virginia Bird Alliance.

Skinks belong to the most diverse families of lizards, Scincidae, comprising more than 1,500 species worldwide. They can be found from Australia's Barrier Reef islands to African savannas, North American woodlands, and Southeast Asian forests. They like to live in humid environments that provide loose soil for burrowing, abundant insects to eat, and cover from predators.

Skinks are characterized by their streamlined, cylindrical bodies, no pronounced neck, smooth glossy scales, and short limbs. They have a small, curved claw at the end of each toe that allows them to climb. The scales are bony plates that provide both flexibility and protection during burrowing or with predator encounters. Skinks in this part of North America are completely harmless and pose no health risks to humans or pets through contact or bites, although a large skink can deliver a powerful nip. Five-lined skinks are about 5 to 8.5 inches in length including their tails. The males are usually larger than the females. A mature male loses most of its stripes and displays a bright orange-red wash over its head and neck. Mature females have faded tan stripes and blue or grayish tails, retaining some juvenile traits.

Skinks have keen senses, quick reflexes, and sharp eyesight that allows them to catch insects, spiders, slugs, crickets, caterpillars, millipedes, worms, young mice, and other lizards along with some berries and fruit to satisfy their voracious appetites. Having a skink in your yard will definitely help with insect control. And, they are fun to watch.

Juvenile five-lined skink. Photo by Nathaniel Sharp Northern Virginia Bird Alliance.

Young American five-lined skinks are dark brown to black with five distinctive white to yellowish stripes running along the body and a bright blue tail. The blue color fades to light blue with age, and the stripes also may slowly disappear. Females however, are more likely to retain the some blue tail coloration as they age.

The blue tail plays an important defense role. Skinks have three basic defense mechanisms: run away and hide, bite, or, as a last resort, drop their tail. How is that a defense? Skinks and some other lizards can detach from their tail when it's been caught by a predator or simply drop it, leaving the blue tail to twitch and distract the predator while the skink runs away and hides. To do that, skinks have specific weak points between their tail vertebrae. When threatened, the skink's muscles contract violently at these fracture points, pulling the tail away from the body, and the muscles contract to stop bleeding. Then the tail regenerates in about five weeks for juveniles, and in up to four months for adults, but the new tail is made of cartilage and muscle, not bone, and is usually smaller and different in color. It's never as lovely, long, and agile as the original tail, and regrowth takes a toll on the health of the skink. Skink predators include snakes, crows, hawks, shrews, opossums, skunks, raccoons, and domestic cats.

Young five-lined skinks, with a potential life span of up to six years, attain sexual maturity and begin reproducing within two to three years of hatching. Adult male American five-lined skinks exhibit complex courtship rituals and aggressive behavior. Although males tolerate juveniles and females in their territories, they actively defend these areas against other males.

During courtship, male and female skinks communicate with each other through body language and chemical signals. Body language includes male head-bobbing to the female with the female responding with tail flicking. The males rely on contact pheromones to identify females. Females carry 6 to18 eggs that are fertilized internally. Females build nests in secluded, moist areas such as rotting logs and stumps or under rocks. Soil moisture is an important factor in the selection of the site because eggs can't survive drying out. About a month after mating in May, females lay their eggs in June or July.

While skinks generally live solitary lives, females often establish communal nurseries. Multiple females may share a single nesting site, alternating between foraging and guarding to ensure the eggs are never left unattended. This high level of parental care reduces egg mortality. Females will bask in the sun to warm up and then return to the nest and wrap their bodies around the eggs to keep them warm. Females may also urinate in the nests and turn eggs to maintain humidity. Any eggs displaced from the nest are retrieved by head or snout rolling, and rotten eggs are eaten.

After staying with the clutch of eggs and carefully brooding and caring for the eggs, the female leaves abruptly when the eggs hatch and the young skinklets are on their own. A hatchling is tiny, about 2 to 2.5 inches long, including its bright blue tail. Hatchlings rely on their speed and instincts to survive.

If you want to make your property friendly to skinks and other beneficial critters, follow these basic rules:

- Create a native garden to attract native insects with native wildflowers, grasses and sedges, and shrubs.
- Place a few old logs and rocks around the edge of the garden. Where more space is available, create rock piles, brush piles, and leaf piles to provide shelter.
- Place some rocks and logs in sunny areas for sunbathing.
- Eliminate or reduce the use of pesticides.

May next summer bring you skinks!

A Hearty Soup for Cold Weather

Cream of Pumpkin Soup

6 servings

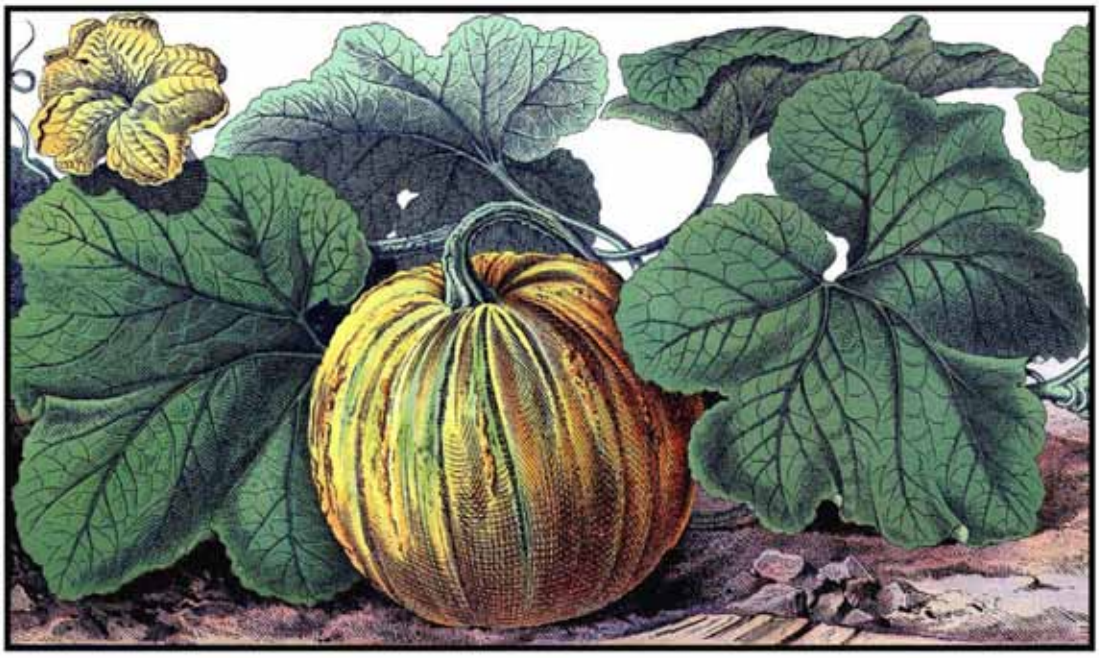
Ingredients:

- 2 cups cubed, peeled sugar pumpkin or butternut squash
- 2 cups milk
- ½ bay leaf
- 2 thin slices of onion
- 2 sprigs of parsley
- ½ teaspoon sugar
- Grated nutmeg to taste
- 2 Tablespoons quick-cooking tapioca
- 1 cup chicken stock
- 1 cup heavy cream, scalded

Directions:

1. Cook the pumpkin in water barely to cover for about 15 minutes, until pumpkin is tender. Puree the pumpkin in a blender or food processor.
2. Combine the milk, bay leaf, onion, and parsley and bring to a boil. Strain the seasoned milk into the pumpkin mixture and add the sugar and nutmeg to taste.
3. Cook the tapioca in the stock until tender. Add the mixture to the soup. Add cream, bring to boil, and serve.

Enjoy! Stay Toasty! Be well!

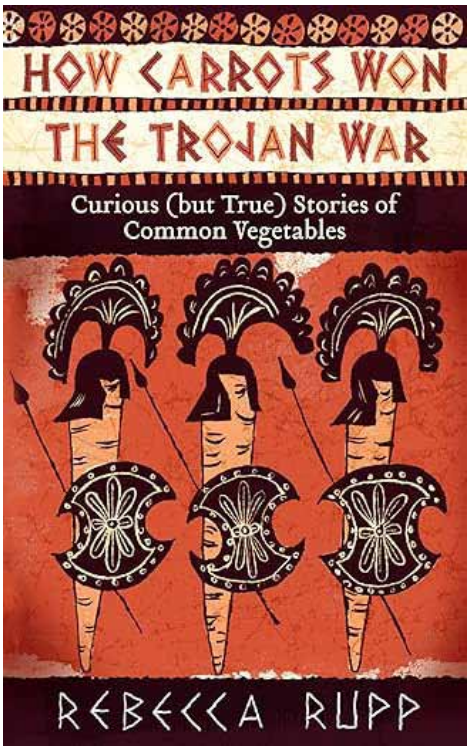


"Pumpkin Vintage Art Poster" released by Andrea Stöckel under Public Domain license.

Book Review: "How Carrots Won the Trojan War" — Curious (but True) Stories of Common Vegetable by Rebecca Rupp

Thersa Hutton Shermon, Loudoun County Extension Master Gardener

Trivia (find answers at the end)



1. What is the second most widely planted home garden vegetable in the United States, eclipsed only by tomatoes?
2. Which vegetable was marketed in the late Nineteenth Century as "The Ninth Wonder of the World"
3. Which green vegetable would likely grow on Mars?
4. These vegetables stalks were used as roof supports in the Channel Islands.
5. Which crop would go extinct without humans to replant it?
6. Which vegetable was dubbed "Vegetable Vigara" in 2010 by 3 doctors in their book "Stay Young"?
7. Which vegetable was recommended as a sleep aid in ancient times?
8. What fruit/vegetable was once nicknamed "raging or mad apple" for its reputation for causing insanity after the first person to eat it subsequently fell into a fit?
9. Presbyterian ministers in Scotland forbade eating this vegetable because nobody had mentioned it in the bible.
10. Which vegetable was placed in the eye sockets of Ramses IV when he died in 1160 BCE?

Where can you find more facts about vegetables like the ones above?

"How Carrots Won the Trojan War" -Curious (but True) Stories of Common Vegetable by Rebecca Rupp is a lighthearted and entertaining book about the history of vegetables.

After reading the first few paragraphs, discussing the healthfulness and necessity of meat diets throughout history and the lack of regular vegetable intake, you might think that the book is going to contain only negative information about vegetables. Don't let the introduction fool you, the author has a deep respect for vegetables. I mean really, who could've captured this much trivial information without a true love of the subject matter?

Each chapter is devoted to a specific vegetable and includes clever subtitles, "Chapter 21-Peas almost poisoned George Washington", and teaser statements on the chapter intro page to whet the readers appetite. Even the illustrations may give you a chuckle. The information is organized in a way that mixes interesting tidbits with instruction and drier scientific facts in a manner that will hold your interest. The author includes "shocking revelations" that most readers will not know, making this a unique take on the subject. If you are looking for step by step instruction to start your own garden, this is not the book for you. The book touches on a bit of everything, but nothing in-depth making for a quick, light-hearted and humorous read even for those of us who take our vegetables very seriously.

In this book, you will find where and when each vegetable discussed shows up throughout the world, family and relatives of the vegetable, and the related politics, customs, and culture of each. The author includes how the names were derived, growing conditions, some nutritional information, and chemical compounds that give the vegetable its characteristics. You will discover the vegetables' "superpowers", how some were, and are used to treat disease (with

varying degrees of success), origin, and alternate theories of some popular uses and dishes throughout history.

The 350-page book is well researched and the list of sources significant. You will see quotes and read about the most revered and most hated vegetables of several US presidents, Louis XV, Johan Sebastian Bach, Henry Ford, Pliny the Elder, Ben Franklin, Giacomo Casanova, and many other historical figures. A few of my favorite examples include:

> The vegetarian followers of Pythagoras (530 BC) forbade eating beans. The bean ban is attributed to the belief that human beings could be reborn as beans. "Eating a bean, according to Pythagoras, was like biting the head of one's mother"
>
> Virginia planter Landon Carter writes in 1766 of his worries about his daughter Judy. "She does bear ungovernable the whole summer through, eating extravagantly and late at night of cucumbers and all sort of bilious trash"
>
> A warning regarding lettuce during the Elizabethan error: "The plentiful and daily eating of the lettuce by married persons is very incommodious and noisome to them, in that it not only doth diminish the fruitfulness of children, but the children often borne do become idle foolish and peevish persons"

Some of the stories parallel today's "good food, bad food" paradigm. The author briefly discusses the history of different diet types (vegetarian, meat, exclusions, etc.) and delves in depth into what people thought the vegetable did to them physically and/or psychologically. Some are touted as aphrodisiacs, others as miracle cures for physical ailments, behavioral issues, or psychological problems. Understandably, newly introduced vegetables were approached with some hesitancy. If I were relying on some of these historic anecdotes, stories, and folklore, this veggie lover may not have been the first in line to sample this exotic new fare.

Whether you need a unique holiday gift, want to rock the food category at Trivia night, love history and vegetable gardening or just need some veggie humor during the less fertile gardening days of winter "How Carrots Won the Trojan War" by Rebecca Rupp, is a winner.

Trivia Answers: 1) cucumber 2) beans 3) asparagus 4) cabbage 5) corn 6) celery 7) lettuce 8) eggplant 9) potatoes 10) onions

Plant Nurture Grow

15th Annual Gardening Symposium

Saturday, March 21, 2026
9:00 a.m. to 3:00 p.m.
Academies of Loudoun
42075 Loudoun Academy Dr, Leesburg, VA
Registration opens January 8, 2026

Please join the **VCE Loudoun Master Gardeners** for this wonderful educational event. Four prominent speakers will share their knowledge and inspire us as we start preparing our gardens for the spring and subsequent growing seasons.

Featured Speakers and Programs:

- **Dr. Holly Scoggins**, "Success with Self-Sowing Annuals and Perennials"
- **John Magee**, "Let's Talk About This"
- **Kathy Jentz**, "Groundcovers: Great Alternatives to Turf Grass"
- **Thomas Rainer**, "The Ecologically Abundant Garden: Practical Strategies for Resilient Home Landscapes"

The symposium will also feature a marketplace with gardening items from local vendors and lightly used books. Visit **bit.ly/MGSymposium26** to learn more.

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