



Trumpet Vine

*Knowledge for the Community from Loudoun County Extension
Master Gardeners*

Fall 2022

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LOUDOUN COUNTY EXTENSION MASTER GARDENER LECTURE SERIES

FREE AND OPEN TO THE PUBLIC
7 P.M.

HOSTED BY LOUDOUN COUNTY
LIBRARY, PLANNED BY LOUDOUN
COUNTY MASTER GARDENERS

Virtual Lecture

October 6, 7:00 – 8:00pm
Selecting Trees by Matt Bright,
Earth Sangha

In-Person Lectures

Rust Library
October 23 7:00-8:00pm
Fall Planting and Landscaping
by Sandy Smallwood, Extension
Master Gardener

Rust Library
November 6, 2pm
Preparing Your Garden for
Winter by Carol Ivory,
Extension Master Gardener

Check the event calendar on
our [website](#) for updates on
topics and speakers and urls for
virtual lectures.

Visit us on Facebook:
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Fall is Fleeting

Summer and winter can seem endless and often relentless. But fall is a time of constant change and a significant transition to a year's end.

The air is crisp, and the leaves are turning gold and red. Halloween and Thanksgiving decorations abound with pumpkins, mums, and straw bales.

Pay attention! The landscape changes rapidly. Take time to note and savor the buttery gold hickories, the red maples and tupelos, and the rusty oaks. Appreciate the falling leaves as nature's natural fertilizer and notice the colors and shapes as you sweep them up. Getting lost in the wonder of the variety makes the chore much easier.

The time goes very quickly so mark your calendar with things you need to do before it's too late. Start some hardy greens, plant fall perennials, plant bulbs, plant a tree, plant seeds of native perennials.

Support our birds and insects that depend on seeds, berries, leaves, and dry plant stems to survive the winter. Carefully consider what you really have to clean up now and what can wait until spring. It is much more environmentally friendly to allow your garden to overwinter naturally. There's no virtue in a neat tidy garden. Consider doing the minimum cleanup to satisfy your own standards. Consider pruning spent plants but leave seed heads. Tidy the edges and make sure there's no bare soil that will be leached by winter weather. Treasure the fall season.



Educational Signage in the Demonstration Garden



In the past few years, the Demonstration Garden at Ida Lee has increased its educational signage. Colorful and informative signs provide a wealth of information on the Natural Resources Conservation Program – My Backyard, on Pollinator Gardens, and as shown here, Native Bird Gardens.

Many of the gardens have “realtor” type boxes containing individual garden layouts and information on the plants in that garden.

This year a team of Tree Stewards took on the project of labelling the trees in the demonstration garden. These tree labels represent a different approach to signage with the use of QR codes that unlock a wealth of information.

The team chose a sturdy sign that could be paired with the trees in a number of ways depending on the tree’s size and position.



In the ground at the base of a tree



Strapped to a small tree



Nailed to the arbor supporting the tree



Nailed to the trunk

To use the QR code, line up the camera on your smart device with the QR code you want to scan and hold the device steady until the app can read the code in front of it. Use the onscreen guides to center your QR code or barcode for Red Laser to read. For the best results, aim your device squarely at the code, and not at an angle. Tap on the URL which appears when the QR code is read. Then read and scroll through all the tree information that appears through the QR code. Information includes description and uses, zone, habit, leaves, flowers, fruit, bark and links to more information.

The Demonstration Garden is beautiful in the early fall, it’s a good time to visit and learn as you wander and explore.

Carol Ivory, Loudoun County Extension Master Gardener

Liriodendron tulipifera
Tulip tree, American Tulip Tree, Tulipwood, Tulip Poplar, Whitewood, Fiddle tree, and Yellow-Poplar
Family:
Magnoliaceae
Information and Uses
Tulip trees are fast growing, tall, and straight trees, often reaching heights of 150 feet. Because of the straight bole of the tree it was often used in making boards used in building cabins and furniture. It was also used by Native Americans to create dugouts. They are also important as a

Gardening for the Birds

Wild birds are a great way to enjoy nature from inside or outside your house. When you help the birds you can make a lovely garden for yourself and your neighbors. To attract and nurture birds in your yard the most important thing to remember is PLANT NATIVE! Consider giving the birds a haven by replacing some of your current landscape plantings with native plants. If you have lawn space you can spare, make an area of bird-friendly shrubs and flowers as an island or a border. If all you have is a patio, deck, or balcony, you can still create a native area in pots or tubs. Whatever you do, the birds will be grateful, and you will be supporting nature.

Birds need an environment that feeds the insects they live on, provides seeds and fruits for fall and winter feeding, offers shelter, and provides a source of water year-round. A bird-friendly environment has four plant layers. From top to bottom they are:

- 1) Canopy: large trees like oak, beech, tulip poplar, pines, wild cherry, hackberry, sassafras;
- 2) Understory: medium trees that grow beneath or on the edges of large tree populations such as red bud, service berry, elderberry, witch-hazel, dog wood, and sourwood;
- 3) Shrubs; and
- 4) Vegetative and ground covers including native perennials, annuals and grasses.

When contemplating a bird-friendly garden, choose a place you can see from your window if you like to watch birds. Determine how large an area you can plant. This will determine how many plant layers you can provide. There is no ideal size – make your bird friendly area fit whatever you have available to you: a few native plants and shrubs plus a feeder and bird bath will attract a good number of feathered friends.

You can start small. Select an area, maybe two, to work for the first year or so. Once you get some experience you can expand your native plant area as you like. Start with a few plants. If a native plant is happy where you put it, it will spread either by seed or underground stems. Add another type of plant the second year, and so forth. Soon you will have an interesting and beautiful natural area.

Consider: is the area currently sunny or shady or a bit of both? Is the ground at an incline, and if so in which direction? This will indicate the water flow through the area. Does the soil in the area tend to be dry or moist, and is the area windy? Is the soil type clay (likely in Virginia), loamy or sandy? Choose plants to fit the environment of the area. One of the benefits of native plants is they have evolved to live and thrive in our soil, regardless if the soil is considered “poor”. This also means you do not have to add amendments to areas that you convert from turf to native plants. These considerations will help you choose plantings that are the most likely to succeed. Be prepared for some failures. This is normal in creating gardens. Not all plants will do well, no matter how good your planning. Some plants may do too well and need to be cut back or thinned out.

Shelter consists of trees, thickets, tall annual and perennial herbaceous plants, and shrubs.



Carolina Wren
Photo by Lindsay Loyd

Water:

- Bird bath – make sure to change the water every 2-3 days in mosquito season so you don't grow a large batch of pests. "Water wigglers" will allow for less frequent changing because mosquitoes do not like to breed in moving water. Drinkable (melted) water is as important to provide in winter as in summer. It is worth getting a bird bath heater, either one with the heat element built in or a deicer you can put in the bird bath during the cold months. You will be pleased with the number of birds you attract in the winter when you provide water for them.
- Ponds. Have a place where birds can easily perch to drink and a shallow place to bathe. Best to have either a small fountain to keep the water moving or fish that will eat mosquito larvae.
- Make sure the birds will feel safe using the water source. Having shelter such as a shrub close by is important so they can escape predators. But don't put the water source under low hanging branches which could harbor predators.



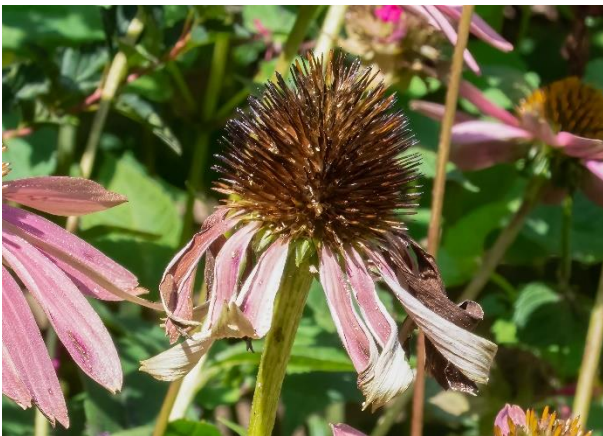
Photo by Sharon Perryman

Food:

- Insects, the most important source of bird food. Research the plants, shrubs and trees you plan to put into your garden to determine which are hosts for butterflies and caterpillar larvae. The larvae are what birds feed their babies. Oak trees are the best if you have them in the area, or if you are willing to wait for them to grow. In addition, many native understory trees, shrubs and perennials are host plants which support soft bodied insects. Leave the fallen leaves under trees and in your garden whenever possible. Insects over-winter in leaf litter, providing birds with much needed sources of energy. A selection of host plants: asters, baptisia, New Jersey tea, native petunia, butterfly weed, white turtlehead, native lupine, black-eyed Susans, zizia, chokecherry, Dutchman's pipe, penstemon, and New York ironweed.
- Fruits: consider native shrubs that bear fruit in the summer and fall. These fruits are very important to migrating birds – scientists are discovering that birds without adequate nutrition are not successfully completing their annual fall migrations. Fruits from native shrubs and trees have been found to provide much higher fat content than fruits and berries from non-native bushes. Birds will eat non-native fruits and berries, but they simply do not have adequate food value. Some non-native fruits are poisonous such as the Nandina. A selection of native fruit-bearing plants includes winterberry holly, chokeberry, sumac, bayberry, sassafras, hawthorn, Virginia creeper, native American viburnums, bearberry, trumpet honeysuckle, elderberry, American dogwood, partridge berry, and buttonbush.

**Mockingbird***Photo by Lindsay Loyd***Hermit Thrush***Photo by Lindsay Loyd*

- Seeds: most native perennials produce seeds that birds eat in the fall and winter. Leave the spent flowers on the stalks all winter. They may initially look ragged but consider them “winter beauty” and know that you are feeding the birds. Dried perennial stems also provide the all-important insects a place to winter-over until spring. A selection of these perennials includes: cone flowers (echinacea), black- and brown-eyed Susans, liatris, goldenrods, cosmos, asters, coreopsis, sunflowers (helianthus), cornflowers, zinnias, penstemon, sedum (Autumn Joy), goldenrods, little bluestem grass, and redbud trees.

**Echinacea gone to seed***Photo by Lindsay Loyd***Goldfinch on Echinacea***Photo by Lindsay Loyd*

- Nectar: hummingbirds feed on nectar from a variety of flowers. Cardinal flowers (lobelia cardinalis) is a sure draw for hummers as well as white turtlehead, rose mallow, native iris, and evening primrose. Native trumpet honeysuckle, bee balm (Monarda), hyssop, salvia, columbine, and button bush are a few others that attract hummers and orioles. Chickadees and finches are also known to drink nectar on occasion.

**Hummingbird at Cardinal Flower***Photo by Lindsey Loyd***Trumpet honeysuckle***Photo by Lindsey Loyd*

- Feeding stations: These will bring birds if you keep them filled. It is not necessary to put seeds out in the summer. Birds can only feed their babies soft-bodied insects, so seeds are not a good source of food for nestlings or fledglings. However, a few seeds for the adults to help them keep up their strength while caring for babies and to keep them in the area is fine. Suet is a good offering as it has a lot of calories. Feeders are an important source of food for birds in the winter. Include several types at various heights to attract a variety of birds. If squirrels steal your seeds, try coating the seeds lightly with vegetable oil mixed with ground cayenne pepper. The birds are not put off by the pepper, but the squirrels are.

- In the first year you plant your bird friendly garden it will not look the way you envisioned it. Have patience. The first and second years are when the plants, shrubs and trees adjust to their locations and put down good root systems. Starting about the third year, sometimes second, the plants will really start to develop. Flowering bushes will produce fruits; perennials will fill out, bloom fully and may start to spread; trees will put on new growth.

*Photo by Sharon Perryman***Song Sparrow** *Photo by Lindsay Loyd***Goldfinch on Thistle***Photo by Lindsay Loyd*

Choose a variety of plants to attract the widest number of birds and other wildlife. Remember a garden is an ecosystem that is relatively self-maintaining. As important as creating a native planting area, it is also important to make sure it does not get overgrown with unwanted plants.

Sharon Perryman, Loudoun County Extension Master Gardener

Sources and additional information:

- American Horticultural Society Bird-Winter-Garden-TAG-ND18.pdf (ahsgardening.org)
- Cornell Lab of Ornithology, cornellbirds@cornell.edu
- National Audubon Society www.audubon.org
- "Native Plants for Northern Virginia", published by Virginia Witmer, Coastal Zone Management Program, and Corey Miles, Northern Virginia Regional Commission.
- "Native Plants for Wildlife Habitat and Conservation Landscaping, Chesapeake Bay Watershed", published by US Fish and Wildlife Service. This is downloadable for free or hardcopy can be purchased from online vendors. Due to the amount of information hardcopy is more practical.
- "Planting: A New Perspective", by Piet Oudolf and Noel Kingsbury, published by Timber Press, Portland, OR, 2013

Safety 101 for Four- Legged Gardening Companions

In a review of the top 10 toxicants reported to ASPCA Animal Poison Control in 2020, items relating to gardening made four of the top ten categories. Plants were number 5, rodenticides number 7, insecticides number 9, and garden products came in at number 10.

Our pets love to be with us when we are working outside, and we enjoy their company. But it is very important to be aware of potential hazards so that you can minimize the risk of exposure and know when to seek professional veterinary help. Our gardens, garages, sheds and yards are full of things that attract our curious pets. Most gardeners, as lovers of nature, also tend to be pet lover, so I dare say most of us garden enthusiasts have at least one pet.

I will review potential hazards by category. There are many items that are well known for their toxicity, but others are less well publicized, and it is my hope that someone may avoid a dangerous situation for their pet after reading this article. This article is not intended as an in-depth toxicology discussion nor will I discuss specific treatments as this must be left to your veterinarian.

Plants

This list of toxic plants is overwhelming. There is a wide variation in level of toxicity and here I will list only those that are most significant and encountered most frequently by veterinarians.

Here is the link to the ASPCA toxic and non-toxic plant list:

<https://www.asPCA.org/pet-care/animal-poison-control/toxic-and-non-toxic-plants>

Some of the more common toxic plants are listed below. The asterisk indicates those with the most lethality.

- *Lilies, day-lilies, peace lily and lily of the valley
- Spring bulbs (crocus, daffodil, tulip, hyacinth)
- Azalea, rhododendron and mountain laurel
- Green tomatoes and raw potatoes
- Onions, garlic and chives
- *Oleander
- *Yew
- *Foxglove(Digitalis)
- *Sago Palm
- Lantana
- Acorns
- Prunus species pits

I have personally treated countless cats over the years for acute kidney failure after ingestion of lilies.

Rodenticides

Rodenticides are chemicals intended to kill mice, rats and other small mammalian pests. Unfortunately, their toxicity is not specific to the target mammals so our pets can be exposed

either directly by access to the storage container or indirectly by ingestion of the small animal. Many dogs and most cats are excellent mousers given the opportunity and can be intoxicated by eating a rodent that ingested the poison.

Rodenticides come in three basic categories based on the method of action used to kill. Anti-coagulants prevent normal blood clotting, bromethalins interfere with the neurological system and Vitamin D3 products cause lethal elevations in blood calcium.

It is of critical importance if your pet is exposed to one of these products to provide the label information to the medical professional so they can treat your pet appropriately. The antidote is completely different depending on the type of rodenticide. Always follow all label directions when using such products and be certain pets cannot access them where they are stored or deployed.

Pesticides

This category includes insecticides (used to kill insects) and molluscicides (used to kill snails and slugs). As with rodenticides exposure can be direct if the pet is directly exposed to the chemical or indirect if they ingest targeted species. Dogs and cats both love to eat bugs so this is a real threat. Traditional slug and snail bait contains metaldehyde which is very toxic to pets. Newer products containing iron phosphate are less deadly to pets but still dangerous. Insecticides come in several categories based on type of chemical. Most common are organophosphates and carbamates and pyrethroids. The first two result in the classic constellation of symptoms referred to as SLUD which means salivation/lacrimation/urination/defecation. Pyrethroids more commonly cause tremors and seizures.

There are newer and safer alternatives to some of these deadly chemicals and I encourage you to seek such options but keep in mind that just because a product is organic does not mean it is safe!

Always follow all label instructions for use and disposal and store these products where pets cannot access them.

Herbicides

Because these chemicals are designed to kill plants, not animals, they generally have a wider margin of safety and are much less likely to be lethal. However, exposure can still be toxic and frequently causes gastrointestinal distress. Exposure can be direct via access to a container or indirect if pets chew on or roll in sprayed foliage or grass. As with the above products always follow label instructions precisely.

Garden Products

Fertilizers, compost and mulch are three big sources of danger that are often found in and around our gardens. Some are combined with insecticides so pose a double threat.

Fertilizers often contain blood or bone meal which makes them smell and taste delicious to our pets. Those that contain ferrous sulfate (iron) are most dangerous and have severe effects on digestive, cardiac and metabolic systems. Because blood and bone have a high fat content, if a dog ingests a substantial amount, they can develop pancreatitis. Lastly these products have a

tendency to coalesce into a concretion in the stomach called a bezoar which can require surgical removal.

Compost is a common source of triple trouble for dogs. Toxic food items like grapes, coffee grounds and some nuts may be found in kitchen compost, but the more dangerous effect is from the molds that often grow on compost piles. The molds (*Penitrem A* and others) produce tremorgenic mycotoxins which can result in tremors and seizures and a host of other neurological signs. Without treatment this condition can be fatal. Lastly, compost may contain non digestible items like corn cobs and fruit pits that can lead to digestive obstruction. Bottom line is to keep your compost in a location that is off limits to the dogs.

Mulch is dangerous in multiple ways. Traditional bark mulch is not toxic per se but causes gastrointestinal irritation and may cause an obstruction if enough is ingested. Cocoa mulch is a specific hazard as the odor entices dogs to ingest it and the mulch contains theobromine and caffeine and causes signs similar to chocolate toxicity. If you have dogs, please do not use cocoa mulch.

Poisonous and Venomous Critters

Many of us plant specifically to attract pollinators. While this is lovely and benefits the environment, we do need to monitor our pets as they are tempted to catch and chase bees and wasps. Most cases result in just discomfort and swelling, but dogs and cats may develop anaphylaxis in rare instances. Danger signs are severe hives, vomiting, pale gums and collapse.

Spiders are often not visible, but our pets will find them! Black widows and brown recluse are dangerous to pets just as to humans and bites warrant emergency care.

Venomous snakes in our area include copperheads (becoming more common) and timber rattlesnakes (at higher elevations typically) and also require immediate veterinary care. Most emergency clinics carry anti-venin. As our urban sprawl continues into rural areas, encounters with snakes are becoming more frequent.

Toads and Newts can also be toxic. Severity depends on the specific species.

Mushrooms and Blue Green Algae

Certain environmental conditions can favor the appearance of mushrooms in our yards and slimy algae on our ponds. Wet conditions often usher in the appearance of toadstools in our lawns. While most are harmless, there are some highly toxic ones, so it is best to remove them and/or prevent access by pets. Toxic mushrooms cause gastrointestinal upset very acutely and this is followed by kidney and liver failure in 1 to 2 days and may be fatal. Blue green algae on ponds or other bodies of water occurs during times of stagnation and high temperatures and is caused by a proliferation of cyanobacteria. The surface of the water is covered by a characteristic blue green sometimes iridescent film. This is a deadly organism and dogs exposed by swimming in or drinking contaminated water often die despite veterinary care as there is no effective treatment other than supportive care. Do not allow dogs access to any suspicious appearing water.

In conclusion, while enjoying the company of your companion pets in the yard and garden, do monitor them closely and be sure all products are stored and used such that accidental pet exposure is prevented. The risks are real but can be minimized by our diligence.

Be sure to have a relationship with a local veterinarian established so you are not searching at a time of crisis. If the need arises to contact poison control. It is advisable to use a poison control contact specifically for pets versus humans. Here is the link to the ASPCA hotline for pets:

<https://www.asPCA.org/pet-care/animal-poison-control>

Happy safe gardening to you and your pets.

Wendy A Behm, DVM and Loudoun County Extension Master Gardener Intern

Celebrate Native Trees Week: September 26 - October 2

Educational Tree Walks	Tuesday, September 27 at 12:00pm OR Thursday, September 29 at 5:30pm (pick one)
Join VCE Loudoun Master Gardeners at our Educational Tree Walks as we celebrate native trees and shrubs during Native Tree Week.	Meet at Demonstration Garden at Ida Lee Park • Registration is not required.
	Hosted by VCE Loudoun Certified Master Gardener Tree Stewards

For more information on events and native tree and shrub sales throughout the region see:

<https://www.plantnovatrees.org/celebrate-native-trees-week>

Outsmart Those Weeds!

Sometimes we get a respite from weeds due to a summer drought, but that didn't happen this year and the weeds were relentless. But with a good strategy you don't have to be defeated! The following are some tips for prioritizing and managing your weeds.

1. **Know your enemy.** Don't lump all unknown plants together as "weeds." Use a good plant ID app, an online resource, or a field guide to identify and learn about your enemy. "Picture This" is frequently rated the most accurate app (Unfortunately available only on iPhone). A well-organized website from the University of Maryland is <https://extension.umd.edu/resources/yard-garden/weeds/weed-identification>. The Master Gardeners of Northern Virginia provide a helpful [Weed Resource Page](#). A web search on "Weed ID" provides many more resources.

In addition to identifying the plant's name, you should research it a bit to find key information.

What to know: Is the plant an annual, biannual, or perennial? What is its lifecycle? How does it reproduce? This information helps you develop an effective eradication strategy.

Just how bad is this weed? Mildly annoying, big nuisance, ugly, or an environmental scourge? Does it have any redeeming value? Does it provide pollen or nectar, is it a butterfly host plant? Could you put it in a salad? Does the plant pose any danger? Is it poisonous or thorny? Where is it located in your garden? Is it highly invasive? This information helps you prioritize your weeding.



***Persicaria maculosa*, Lady's**

Thumb An annual smart weed that is edible and a good species for bees, it's a very good honey plant. It is, however, a weed, and gardeners usually pull it. Your choice! Photo by David G. Smith www.delawarewildflowers.org

2. **Let the weed seeds sleep.** No-till planting isn't just for cornfields. Disturbing the soil in your garden will bring hundreds of weed seeds close to the surface and allow them to germinate. Your newly cultivated soil will look nice for a few days but all those seeds that have been dormant in the soil for years will burst forth. Dig only when you need to and immediately fill the disturbed spot with plants or mulch. Minimize soil disturbance by using a sharp knife or narrow tool to sever weeds such as dandelions and plantain just below the crown.
3. **Crowd out the weeds.** There are different styles of gardening. One is to allow a space several inches or more between each plant. This spacing invites weeds. Whether you use shredded bark, wood chips, nuggets, pine needles, or shredded oak leaves, mulch between plants to smother the weeds, keep the soil cool, and retain moisture. Use about 2 inches of mulch. More than 3 inches can deprive the soil and your plants' roots of oxygen. You can also use cardboard or newspaper to block the light from the surface of the soil and then spread mulch on top of that.

A more contemporary gardening style is to fill spaces with plants, creating shade between plants, and allowing no room for weeds to grow. (See references) This is usually favored

for native plant gardens. But it will work with non-native perennial plants as well. In a couple years, after a garden is established, it is very low maintenance.

4. **Weed when the conditions are good.** Remove weeds while they are small, and best, when the soil is moist. Weed early and often. Weed before the seeds have formed. Seeds often are spread in the plant removal process. Also, disposing of weeds with ripe seed heads is more complicated because they can't be easily composted.
5. **Off with their heads.** Chopping off the tops of weeds feels good, and it will reap benefits. When you can't remove weeds, the next best thing is to cut off the tops, removing the seed heads before they mature. Cutting back the tops of perennial weeds such as bindweed reduces reseeding, forces them to use up root reserves, and limits their spread.

A string trimmer can be used to cut down large stands of Japanese stilt grass, an annual, in late August or early September before it goes to seed. A string trimmer with a brush cutter can be used to cut down thistles or brambles before they go to seed.

Stilt grass



Hand pull individual weeds and those growing among your plants throughout the year.



For large stands of Japanese stilt grass, use a string cutter and cut it down in late August or before it goes to seed.

Weeding is not a mindless activity. Weed with knowledge and a strategy to reduce your weeds year over year until things are under control.

Carol Ivory, Loudoun County Extension Master Gardener

References

The Know Maintenance Perennial Garden, Roy Diblik, Timber Press, 2014

Planting in a Post-Wild World, T. Ranier, C. West, Timber Press, 2015

Managing Weeds <https://extension.umaine.edu/gardening/2020/06/04/managing-weeds/>

What Are Those Bugs on My Crape Myrtle?

Have you noticed a lot of white “bumps” on the branches and in the crotches of your crape myrtle (*Lagerstroemia indica*)? Or have you noticed white “cotton like” bumps crawling on your trees? These are most likely crape myrtle bark scale (CMBS) insects. Often the limbs and trunk of the tree



Crape Myrtle Bark Scale on tree in Reston. Photo: Carol Ivory

also are covered by a black sooty mold, which is the result of the scale insects sucking the sap from your tree and the mold growing on the sugars contained in the tree sap. Crape myrtles suffer aesthetic damage and may eventually die because of these CMBS infestations. Even if CMBS do not kill the plants, there likely may be a reduction in plant vigor, number of flowers, and flower cluster size. Infested plants typically leaf out later than healthy plants.

CMBS is not native to the United States and was probably introduced from China around 2004. It has been spreading across the South and Southeast of the United States since then.

Although it recently arrived in Norfolk, Steven

Traylor, the City Arborist, recently noted that CMBS is extensively present throughout Norfolk. Although Norfolk City budgetary constraints prevent the city from having a plant health care (PHC) program to do remediating treatments, the Bureau of Parks and Urban Forestry does issue permits for PHC treatment work to be done at private cost of citizens if they are interested. A good discussion of CMBS and treatment options can be found in the Clemson Cooperative Information Center factsheet is located at <https://hgic.clemson.edu/factsheet/crapemyrtle-bark-scale/>.

Chris Epes is the City of Norfolk’s Associate Virginia Cooperative Extension (VCE) Agent for Agriculture and Natural Resources. When talking to me about CMBS, Chris made the following points:

- CMBS tends to extensively infest those crape myrtles that are already under stress. The reason you frequently see them in high numbers on easements is because they have little pervious space around the roots and are subjected to higher-than-normal heat from the surrounding pavement. You may also see them in large quantities on trees that get topped or “crape-murdered” annually, trees that are planted in too much shade, or trees that simply don’t get enough water wherever they may be located. So, for this reason, it is suggested to first attempt to use “cultural” controls to improve the health of the tree. Doing this successfully should result in a crape myrtle that tolerates a small infestation, as most of the healthy trees in Norfolk do.
- Cultural controls include making sure that your tree is planted in a full-sun location, making sure the soil is moist, well-draining, not overly compacted and contains a reasonable amount of organic matter. It also means making sure the tree is getting watered periodically through the hot, dry parts of the summer. It means to prune the tree only to remove the dead branches and branches that are crossing and touching and never under any circumstance top or “crape-murder” the tree. De-suckering would be an acceptable pruning measure for

a crape myrtle, as sucker growth, especially profuse sucker growth, is fundamentally a stress response. It means that for some reason the tree is under duress. Might that be because of CMBS? Sure, but it could also be because of other environmental factors. Identifying and fixing the problem/problems will be helpful in both reducing future suckering and future pest infestation.

- VCE discourages use of chemical applications for this problem, although it is legal to do so in Virginia. The only effective chemical control involves using a concentrated neonicotinoid pesticide that must be mixed with water per the label instructions and poured over the root zone around the base of the tree. The tree will then absorb the insecticide via the roots and translocate it throughout the canopy. Given the lag between application and complete translocation, there may be a few weeks to a month before you begin to see much control, and that would be based on weather/rainfall which would dictate the degree to which the tree is translocating fluids. In addition, much of Norfolk is so close to the water table that the likelihood of contaminating the groundwater is high. Similarly, although there does not appear to be a consensus among researchers, neonicotinoid pesticides inside the flower parts and pollen may be harmful to pollinators that graze the flowers. Accordingly, most researchers tend to err on the side of caution and recommend that use of these chemicals be limited.

The VCE agent also stressed, "If cultural controls are not effective, I recommend simply replacing the tree with something more suited to the space, otherwise you'll be locked into either a perpetual infestation and the ultimate demise of the tree or having to do chemical applications annually. This is going to be far more expensive, far more potentially dangerous to the applicator and far more potentially dangerous to the environment in the long run than simply replacing the tree with something that is ultimately healthy, happy and unfettered in the space."

Finally, if you do decide to go the chemical treatment route, have an expert treat the tree for you. Don't try to "do it on your own", as misuse of the chemical treatment products can have a detrimental effect on you, your pets, and the environment.

Crape myrtle bark scale is currently infesting many crape myrtle in Arlington County where some residents are removing their trees. It is also present in Fairfax and is most likely establishing itself in Loudoun.

Bob Kelly, Virginia Cooperative Extension Norfolk Master Gardener

Fun fact: The common name for *Lagerstroemia indica* can be spelled either crepe myrtle or crape myrtle. Crape myrtle is the oldest known spelling and is generally preferred by botanists. The traditional Southern spelling is crepe myrtle. However, across the rest of the US it is more commonly spelled crape myrtle. Choose your poison, technically either is correct.

Bob Kelly has been a Norfolk Master Gardener Volunteer since 2014. He is active in most Crape Myrtle de-suckering and tree trimming events in Norfolk, although his real interest lies in storm water abatement and resilience projects. He participates in wetlands restoration with the Elizabeth River Program (mostly, planting of native bog plants and grasses) and he helps cut back phragmites for the Lafayette River Partnership.

It's Time to Plant Native Perennial Seeds

Fall is a good time to survey your gardens to determine areas you may want to fill in, plants you may need to increase, and opportunities to diversify. If a plant has done well and you like it, why not try more of the same? If not, something similar or something totally new. If you are still trying to get something to grow that is just not thriving, let it go, and try something different.

When filling in spots in established gardens you may want to consider growing from seed rather than purchasing mature plants. The benefits are huge cost savings and experiencing the adventure of growing from seed (not at all like growing tomatoes!). You can gather seeds from your garden or a friend's garden or purchase them. It depends on timing, the nature of the seeds, seed availability and your preference. The golden finch always beat me to the coneflower seeds (that's OK they provide such a great show) and the deer eat my zizia before they develop any seeds.

You also must choose between starting the seeds in a container and transplanting next summer once the plants are big enough or direct seeding or scattering the seeds in the area where you want them to grow. Lobelia seeds (both great blue and cardinal flower) are the size of dust and too difficult to sow in a container. I scatter these seeds in a moist area of the garden, rain moves the seeds around and the new plants always surprise me. Another example of direct seeding—I want to revitalize an edging of coreopsis and will scatter new seeds among the existing plants. This works well in spots that you don't closely weed and also in flat areas where you know the seeds won't wash away. If you are growing a meadow, most seeds will be directly seeded.

One of my favorite plants to gather seed and propagate is husker red penstemon. The seeds are ready at the end of the summer and easy to harvest. Open or crush the seed pods to extract the seeds. I sow these in a container and then transplant them the next year. Another very easy and fun seed to gather and sow are milkweed seeds. Many native plants don't bloom until their second or third year.



Husker Red Penstemon seed pods and seeds

Photo by Carol Ivory

Why are native seeds planted in the fall? The seeds of most plants in temperate zones have developed a mechanism that prevents them from germinating until conditions are favorable for growth. In our area this means they will not germinate in the fall when the young plants would be killed off by the freezing conditions of winter. This is a survival mechanism.

Seeds must go through a process before they will germinate. In the wild, nature takes care of this. Some seeds are held in the flower head until they dry out and fall to earth. There they experience winter temperatures and moisture and then germinate in the spring when the soil reaches 70 degrees. Some seeds need multiple cycles of warm and cold and may take two to three years to germinate. Some seeds need to be eaten and pass through the digestive tract of an animal before they germinate at a high rate. Some seeds are gathered by ants before they dry out and are carried into underground ant nests where they germinate without ever drying out.

Before you contemplate growing any native plant from seed, do a little research and learn how the seed must be handled when it's gathered and treated to achieve germination. These different treatment protocols are commonly referred to as the germination code. I use 2 main resources to learn about how to handle seeds. Prairie Moon Nursery [website](#) and seed catalog contain a [germination code](#) for each type of seed that they sell. My second resource is a wonderful book by William Cullina, *Growing and Propagating Wildflowers of the United States and Canada*. Cullina is a practitioner who speaks from years of experience and a deep knowledge of plants. He provides information on gathering and handling the seed that makes all the difference.

For a few years I tried to grow Virginia Bluebells, *Mertensia virginica*. I purchased the seed online. They arrived in a little paper envelope, dry and hard, I planted them following the germination code and nothing happened. I did know that bluebell seeds were dispersed by ants, but it was Cullina who pointed out that the woodland seeds dispersed by ants and some others with fleshy fruits cannot tolerate being dried out.

These need to be harvested as soon as they ripen and directly planted or stored in damp vermiculite. Bloodroot, twinleaf, and wild ginger also fall into the category of ant-dispersed seed. Jack in the pulpit and spicebush, *Lindera benzoin*, have seeds embedded in fleshy fruits that will germinate best if kept moist. Ripe spicebush berries should be picked and plunged directly into the soil in late summer or early fall, while Jack in the pulpit seeds should have the flesh washed off before planting. A chemical in the flesh can inhibit germination. The berries also contain a skin irritant so protect your skin with rubber gloves when cleaning the seeds. I have successfully propagated spicebush and Jack-in-the-pulpit but timing of berry gathering is tricky. I let the bluebells, twin leaf, and ginger do their own thing and they are reproducing very well.



Jack in the Pulpit berries
Photo by Kristi

Many directions for propagation assume that you will store the seed in your refrigerator for the required 30 or 60 days. Seeds that require moist storage must be mixed with moistened sand, vermiculite or some other medium before being labelled and placed in a plastic baggie in the refrigerator. The moisture level must be just right or the seeds will mold if too wet or dry out if not wet enough. Seeds must be monitored "periodically" for proper moisture level and any that begin to germinate in the bag must be planted immediately in a flat under grow lights. If this sounds like an unreasonable amount of work and attention don't stop reading — **there's an easier way!** Do it the natural way — outside — just take some reasonable steps to protect your seeds. Seeds can be washed away by hard rains, eaten by birds, squirrels and rodents or get too wet and rot. Seedlings that sprout in the wild can literally get lost in the weeds and destroyed in countless ways. You could also mistake them for weeds and pull them up since all those new sprouts look alike. If you want to increase the survival rate of your seeds and seedlings, know where they are, and recognize them when they come up, you will want to devise some safeguards. Large scale growers use cold frames and greenhouses, but backyard hobbyists can still have fun with seeds and keep close tabs on them also.

My favorite “greenhouse” for a small number of seeds is a plastic jug. This is your standard translucent milk, tea or water gallon container. I use a metal skewer heated on the range to make a generous number of holes in the bottom to ensure good drainage. The top is removed and discarded to allow rain, snow or sleet to enter though the top. This is soft plastic so you can use regular scissors to cut the jug leaving a “hinge” on one corner. A layer of coarse gravel in the bottom aids drainage and adds ballast. Add about 2.5 inches of new potting soil. (Don’t use recycled soil, you won’t be able to sort out the weeds from your valuable seedlings next spring.) Now you are ready to sow your seeds. Using this method, some plants have a very high germination rate. My biggest mistake has been planting too many seeds in a container and ending up with a mass of seedlings that are impossible to



There are about 20 holes in the bottom of this jug.

Photo by Carol Ivory

thin or separate. Note that most seeds need only a thin layer of potting soil over them, and some tiny seeds should just be sprinkled on the top of the soil. Use duct tape to close up the sides of the jug. Tie some row cover over the top opening to keep out weed seeds. Using a marker write the name of the plant on the jug. This is important, you will not remember what’s in it 5-6 months from now.



Small planter with row cover and hardware cloth

Photo by Carol Ivory

If you have a larger number of seeds, use a container such as a window box. Ensure that the drainage is very good because, as opposed to the jug with the narrow neck, this container will get all the precipitation that falls. Use coarse gravel and new potting soil and sow the seeds. Then use your ingenuity to devise a cover of hardware cloth and row cover secured with twine, wire and/or duct tape. The hardware cloth prevents ripping and chewing by squirrels, raccoons, etc., and the row cover keeps out unwanted weed seeds and protects against hard rain. Label your container.

Tuck the jugs and planters into a protected part of your yard. They can spend the winter under a large shrub or along the side of a deck, or along a fence on the ground. Heel them in with shredded leaves. In early spring bring the plants out into a semi-shady spot. Start checking them in mid spring by peering into the top of the jug (one of the many reasons I like the jugs.) If the plants are sun hardy, expose the seedlings to increasing amounts of sun. Depending on the growth of your seedlings you can transplant them in the early summer. You also can simply cut the top off the jug and use the bottom as a pot to allow the little plants to grow a little longer before transplanting. Remember that most perennials will not be “blooming adults” until their second year, or perhaps even third year.

Have fun!

Carol Ivory, Loudoun County Extension Master Gardener

Growing a Winter Salad Garden

Cooler weather, rain, and shorter days don't have to mean the end of a productive vegetable garden. Many crops can be grown into the fall and even through the winter so you can enjoy fresh vegetables from your garden virtually year-round. Although tomatoes and cucumbers cannot survive cooler temperatures, many other greens can keep your salad bowl filled throughout the fall and into winter. With a little planning and preparation, you can enjoy fresh homegrown greens most of the calendar year.

Planning a Winter Salad Garden

Careful selection of greens is important for a cool weather garden. Although most lettuces struggle with the heat of the summer and prefer cooler and damper seasons, some varieties are more successful than others for the late fall and winter garden. Since temperatures are cooler and the days are shorter, lettuce grown during this time will grow more slowly, so more plants may be required than during the warmer months. Romaine and butterhead varieties are well suited to cooler temperatures and will survive until the temperature drops below 20 degrees F. Since our Virginia weather fluctuates greatly, it is possible to protect these lettuces during a cold snap and then continue to grow and harvest during warmer periods.

Experiment With New Varieties of Greens

Salads made exclusively of homegrown lettuce may be difficult to sustain throughout the cooler



Mixed greens harvested in March 2020.

months, but many other types of greens grow well in cooler weather and survive even a light frost without protection. These are worth considering for their durability, additional nutritional content, and the variety they add to the daily salad.

Sorrel is a perennial French green with a spinach-like texture and a slightly lemony flavor. It can be used in salads, cooked as a green, or added to a traditional French sorrel soup. As it is a perennial, it will provide greens for years to come and can produce without protection for most of the winter when planted in a protected spot.

Blood or red-veined sorrel is actually a member of the buckwheat family, but, like French sorrel, is a perennial suitable for winter salads. Thin-leaved with bright red veins, the leaves are less flavorful than the other greens recommended here but provide a delightful punch of color to a winter salad.

Kale has become popular in smoothies and salads and can even be made into nutritious chips when baked in the oven. In the winter garden, tender immature leaves can be harvested for salads. Red Russian, Tuscan, and redbor all do well and provide different flavors and textures when the young leaves are eaten raw in salads. Kale does well in cooler weather and will grow more quickly than most lettuces. When warmer weather arrives, kale will thrive and produce a bumper crop of greens.

Chard grows vigorously and can be eaten in salads or cooked. The beautiful colors of bright light and other mixes make winter salads colorful and tasty. These plants will continue to grow through the spring, allowing for early spring harvests.

No matter which greens you choose, once the weather starts to cool, germinating the seeds inside will help get the plants off to a good start before planting them outdoors. Most of these seeds germinate best between 55 and 70 degrees F, so starting them in a sunny window or under a grow light before transplanting outdoors will result in a better germination rate and stronger seedlings. Harden them off as you would any other seedlings, exposing them gradually to the temperature and light where they will grow.

Protecting Winter Crops

Short-Term Cold Snap

For a short-term light frost, many greens can be protected by covering them with an old towel or blanket for the colder part of the night. The cover can be removed once the temperature rises. Most lettuces will tolerate the fabric resting on the leaves, but providing a little support will keep the leaves from becoming bent or damaged.

Ongoing Cold Weather

For a longer cold snap, lettuces will need more protection in order to remain productive and to avoid damage to the leaves. A greenhouse may provide the perfect protection for winter-grown lettuce, but can be expensive to purchase, take up valuable space in the garden, and be of little use during the scorching days of summer.

Some low-cost options for protecting your winter crops include placing a clear plastic storage container over the plants (weighing it down with a rock or brick will keep it in place) or draping the plants with plastic sheeting (a tomato cage on its side or other support can be used to keep the sheeting from touching the leaves of the plants). Use stones, bricks, or garden staples to secure the sheeting. In both cases, take care to remove the protective cover when temperatures rise to avoid cooking the plants. These options are best for smaller patches of greens and unlikely to work for the entire winter or very cold temperatures.



Improvised hoop house.



Winter-grown salad greens.

An improvised hoop house can be built using 18-inch rebar, inexpensive 8-foot flexible PVC pipes ($\frac{1}{2}$ - or $\frac{3}{4}$ -inch diameter), and plastic sheeting. In this scenario, the rebar is inserted into the PVC pipes at both ends, and secured in the ground at each end, forming an arch over the garden area to be protected. Plastic sheeting is then draped over the PVC pipes and weighted to secure it (bricks, rocks, and/or garden staples may be

used for this). This creates a small greenhouse-like tunnel, perfect for growing winter greens. With this increased room, plastic jugs of water can be added; they will absorb heat during the day and help sustain the temperature in the hoop house. As with the other covers, care must be taken to open the hoop house during warmer periods to avoid overheating the plants.

Keeping the greens growing over the winter can be rewarding, environmentally responsible, cost-effective, nutritious, and delicious. Whether you grow a small patch of lettuce under a plastic storage container, or build your own low tunnel, winter salad gardening is a great way to enjoy home-grown salads year round.

Freyja Bergthorson, Loudoun County Extension Master Gardener

All photos by Freyja

References

[Low Tunnel for Beginners](#), West Virginia guide to build a variety of tunnels and recommended crops to grow in them.

Link to VA Extension Office Fall Planting Guide--[Fall planting suggestions.png](#).



Kale and herb harvested on December 15, 2019 .

Cold Frames: How to Extend the Growing Season

As the summer comes to an end, we tend to think that it is also an end to growing fresh produce.



[Build a DIY cold frame using an old window \(savvygardening.com\)](https://savvygardening.com).

With the dwindling hours of sunshine and the falling temperatures, the tomatoes, cucumbers, and peppers we've been enjoying for the last few months quickly come to an end. Yet there are still a number of delicious veggies that can be grown using a cold frame. Incorporating a cold frame into the garden can increase the number of weeks available for growing and allow you to overwinter dormant plants that otherwise could not withstand the cold winter temperatures. In the late winter and early spring, cold frames can be used to get a jumpstart on the growing season by providing an outdoor space to start seedlings up to six weeks earlier and to harden off seedlings that are started indoors.

Simply put, a cold frame is an open-bottomed "box," usually rectangular, with a removable lid made of glass, plexiglass, or clear plastic. The body of the cold frame can be made

from a variety of materials: wood, cinderblock, plastic, or even bales of hay. Depending on the materials used, the cold frame can be taken apart and moved around the garden as needed or stored out of the way over the summer.

For fall planting, cold frames work like small greenhouses by insulating plants from cold and frost. The sun's rays help create a warm microclimate inside and can increase the temperature approximately 5 to 10 degrees warmer than outside. To ensure a warm microclimate, the cold frame should be placed in the garden facing south to southeast in order to capture as much heat from the limited hours of autumn sunlight and hold this warmth into the evening hours. It is best if the back (north side) can be placed up against a wall or other structure to protect against cold winds. Another consideration on placement is to make sure there is good drainage with the ground sloping away from the cold frame.



<https://savvygardening.com/straw-bale-cold-frame/>.

If you are to successfully use a cold frame, you must carefully monitor the temperature, moisture, and ventilation inside the cold frame. Temperature considerations include both soil and air temperatures if the goal is to germinate seeds or shelter seedlings. Cool season crops like those planted in the fall and winter prefer an air temperature in the range of 60 to 70 degrees F during the day and a drop to no lower than 55 degrees F overnight. For warm season crops, the air temperature can rise to 75 degrees F during the day and should go no lower than 60 degrees F at night.

It is especially important in the spring to regularly check the temperature inside as it can quickly heat up on sunny days. If this is the case, the temperature can be lowered by simply raising the lid of the frame to let in cooler air. However, the lid should be put back in place by late afternoon so that heat is retained overnight. During the fall and winter, if frost and freezing temperatures are in the forecast, the frame can be covered with straw, a blanket, or polystyrene boards to help

retain heat during nighttime hours. Any coverings should be removed in the morning so as to not impede sunlight to rewarm the inside.

So, what can be grown in a cold frame in the later months of the year? Actually quite a few cool season plants: arugula, beets, broccoli, scallions, lettuce, radishes, and carrots. Any of the root vegetables tend to do well in this type of growing situation. (For more information on how to grow vegetables in our area: [Zone 7 Fall Planting--Learn About Fall Planting Times In Zone 7 \(gardeningknowhow.com\)](#)). If the cold frame is being used to overwinter dormant plants already in pots, cut back any leggy growth and place the containers close together. Then place mulch or straw around the pots to provide further insulation.

While sometimes referred to as a “poor man’s greenhouse,” readymade cold frames can cost up to several hundred dollars. If purchasing a readymade cold frame online make sure to read the customer reviews beforehand to see how it performs in your hardiness zone. Or build a cold frame yourself and save some money while also getting great results. There are several tutorials online that provide details on how to construct your own cold frame:

- “Cold Frames & Hot Beds,” Cornell Cooperative Extension, Chemung County [Cold Frames & Hot Beds \(cceschuyler.org\)](#).
- “How to Build a Cold Frame,” Rob Wotzak, [How to Build a Cold Frame—Fine Gardening](#).
- [How to Make a DIY Cold Frame From a Dollar Store Bin \(ruralsprout.com\)](#).

Lettuces and spinach never tasted better than when grown at home and with the use of a cold frame; fresh garden salads can be enjoyed alongside warm dishes throughout the winter.



Growing lettuce in a cold frame will provide protection on cold nights.

Barbara H. Smith, ©2017 HGIC, Clemson Extension

[Lettuce | Home & Garden Information Center \(clemson.edu\)](#).

Jan Lane, Loudoun County Extension Master Gardener

Spotted Lanternfly in Loudoun County

Our newest invasive insect, the *Lycorma delicatula* or spotted lanternfly (SLF), has been discovered in Leesburg. It is of particular concern because of the agricultural threat it poses; particularly to grape harvests and fruit trees.

The spotted lanternfly has several life stages but only one generation a year. The adult SLF lays its eggs on any surface, including trees, lumber, lawn furniture, stones, and mailboxes. A more complete SLF check list from the New York State Integrated Pest Management can be found at:

<https://nysipm.cornell.edu/sites/nysipm.cornell.edu/files/shared/documents/SLF-checklist.pdf>.

The fact that SLFs do not discriminate in where they lay eggs allows the insect to spread easily. Scientists believe that female SLF lay at least 2 egg masses, each containing 30 to 50 eggs, per season. The female secretes a waxy material to cover the eggs after laying them. She doesn't always cover all the eggs with her secretions so the mass can look different. Overall, the segmented SLF egg masses are 1-1.5" long and ½-¾" wide, shiny whitish or grayish brown in color when fresh. They darken to a flat, gray brown with age, and often start to crack during the winter, resembling a splotch of mud. All eggs are laid in rows with the row structure obvious without the waxy cover.



Fresh eggs



Older eggs

Egg laying starts in September and continues until the first killing freeze. In this area of Virginia, the over-wintered eggs hatch in mid-April.

After hatching, the SLF has 4 immature (nymph) or instar stages. The nymph is initially about ¼", and black with white spots. It evolves over the next couple of months into a ½" red and black nymph. During these instar stages the SLF is unable to fly as it does not exhibit wings. Instead it hops or jumps. Its proboscis (mouthpiece used for sucking) has not yet developed; therefore, it feeds from tender branches, seedlings, and vines. In the early summer, SLF nymphs are small and can be difficult to see. Nymphs tend to feed on softer tissue (can be found on any part of the plant, from the base to the tops of trees and herbaceous plants) and are often found on the undersides of leaves.



Early black and white nymph



Older red and black nymphs



Two views of the adult spotted lanternfly

In July/August the red-black, white spotted nymphs molt to become mature spotted lanternflies. These insects are about 1" as adults and tent-shaped. The under wings are red with black and white markings. The red color is not visible when the insect is at rest but only when they are startled or flying. In this last stage the proboscis is formed and the insects become voracious feeders as they feed on sap from trees.

As they eat they excrete a clear substance called honeydew. The honeydew is sticky and contains sugars. A black fungus called sooty mold grows on the honeydew which accumulates under heavily infested trees; under these circumstances fermentations occurs and a vinegar smell is detected. This honeydew attracts ants and all kind of flying insects. SLF can be seen scampering up the trees and onto the branches.

The preferred host of the SLF is the *Ailanthus altissima* or Tree of Heaven (TOH), also indigenous to parts of Asia. Tree of Heaven should be removed when possible to help suppress the SLF. The Tree of Heaven has a compound leaf that is often confused with staghorn, sumac, and black walnut trees.

The following links will help you distinguish the tree of heaven from other trees with similar leaves:

<https://weedid.cals.vt.edu/profile/29>.

<https://moodle.cce.cornell.edu/mod/page/view.php?id=12563>

<https://extension.psu.edu/tree-of-heaven-native-look-alikes>

The tree of heaven contains cytotoxic alkaloids which may be obtained by the SLF as it feeds from the sap from the tree. These alkaloids make the SLF unpleasant for predators to eat. It is believed these alkaloids are passed from the female to her eggs to begin the cycle once again, and produce healthier individuals. This type of behavior is called toxin sequestration. This is a behavior noted with monarch butterfly caterpillars feeding on milkweed plants and taking on the toxic compounds from this host plant.

The spotted lanternfly has also been reported on a range of ornamentals around the home, on vegetables, and in the landscape. In Loudoun County, Virginia there is great concern for the wine industries. Overall, such a variety of hosts causes problems for agriculture, areas of recreation, and homeowners.

Initially, no predators of the SLF were reported. However, an [article](#) from Megan Frank (June 29, 2022) indicates that Penn State University entomologists have reported some encouraging news. One study is using a “community science approach” to gather data on which species of birds and other predators are eating the SLF and at what frequency. There are reports that chickens are the most reported predator. Cardinals, praying mantis, ants, wasps, and spiders were commonly reported. Wheel bugs have been found laying their egg masses next to the SLF egg masses. Apparently, the wheel bug eggs hatch first and wait for the SLF eggs to hatch so they can munch on them.

It is important to do the following to help to slow the spread of the SLF in Loudoun County:

- First, educate yourself. Learn about the spotted lanternfly so that you know how to recognize the insect throughout its life cycle.
- Second, inspect your surroundings by looking for spotted lanternfly egg masses and insects on tree trunks, wheel wells, under and around vehicles, lawn furniture, fences, storage sheds, rocks, metal surfaces (especially if they are rusty) and other smooth surfaces.
- Third, squash live insects on sight and squash/scrape off their egg masses.
- Lastly, report the sighting by taking a photo of the bugs and/or egg masses. You can then fill out a form online (<https://www.loudoun.gov/FormCenter/VA-Cooperative-Extension-28/Spotted-Lanternfly-Report-Form-2022-292>) so that an investigation of the area can begin.

Sally London, Loudoun County Extension Master Gardener, Tree Steward

Floriography

The Language of Flowers

For thousands of years humans have assigned meanings and beliefs to plants and flowers. Plants and flowers have been used to mark life events such as births, marriages, and deaths and used in religious and spiritual ceremonies. They've been used for medicinal purposes and, during the 19th century in particular, flowers were paired or grouped to use as a form of communication because outward signs of emotion were frowned upon. With thousands of flowers from which to choose, here are a few that are likely to be discussed during the cooler fall months.

Basil (*Ocimum basilicum*)

"Basil's association with hate comes from the Greeks, who believed the plant's unfolding leaves to resemble the basilisk's opening jaws. The Greeks also associated hatred with the basilisk's glare, because this legendary serpent could kill with just one glance." ¹

In the West Indies, *Ocimum basilicum* is placed around shops to attract customers.

In Italy, *Ocimum basilicum* is a symbol for love and is widely used as a token of love.

According to Jewish legend, if you hold a sprig of *Ocimum basilicum* while fasting it will help you maintain your strength and resolve to proceed" ²

Meanings:

- Travel well
- Compassion
- Virtue
- Mourning
- Hatred
- Wealth

Possible Powers:

- Accidents
- Exorcism
- Flying
- Protection
- Wealth



<https://www.pexels.com/photo/green-leaf-plant-on-brown-wooden-surface-1087902/>

Folklore: The fragrance of basil is said to provoke sympathy between two unsympathetic people.

Basil given as a gift will bring good luck into a new home

If you are seeking a job, sprinkle *Ocimum basilicum* at the front of the building you are entering for a job interview. ³

How to grow in Northern Virginia: Basil prefers moist soil, not too wet, not too dry. It can grow with as little as 3 to 4 hours of sunlight. If leaves droop in harsh sun, give it some shade.

Fern (*Adiantum*)

"Ferns grow in wet areas, yet their leaves repel water. This curious quality led ferns to be associated with magic and secrecy. The genus *Adiantum*, which come from the Greek for 'unwetted', honors ferns' fascinating duality. Additionally, Venus, the Roman goddess of love and beauty, was said to have tresses of maidenhair ferns, which remained dry after she rose from the sea." ⁴

Meanings:

- Magic
- Secrecy
- Invisibility
- Discretion
- Secret bond of love
- Fascination

Possible Powers:

- Beauty
- Love

Folklore:

The Druids believed *Adiantum* could provide invisibility.

How to grow in Northern Virginia: Ferns grow best in moist soil and like dappled shade. They can grow even if the soil does not drain particularly well, and with enough moisture, some varieties can tolerate additional sun.



<https://www.pexels.com/photo/green-leafed-plant-2563742/>



<https://www.pexels.com/photo/green-leaf-photography-691043/>

Hemlock (*Conium maculatum*) ☠

"One day in 1845 a Scottish tailor named Duncan Gow ate a sandwich made with wild greens his children had collected for him. Within a few hours, he was dead. The children had made the fatal mistake of confusing the lacy foliage of parsley with that of poison hemlock. It was the last (and, one suspects, the only) lesson in botany the children ever got from their father, and one they would never forget." ⁵

Hemlock is a class B noxious weed that contains toxic alkaloids that can affect nerve impulse transmission. Ingesting any part of this plant can cause respiratory failure and death. It has a stem with purple spots, has white flowers that grow in clusters that resemble Queen Anne's lace and can grow up to 9 feet tall. It is related to carrots, celery, parsley, dill, caraway, cilantro, parsnips, and fennel.

The most famous case of hemlock poisoning was Socrates who was convicted in 399 BC in Athens of "refusing to recognize the gods recognized by the state" and "corrupting the youth".

Meanings: Death
You will be my death
Letting go
Transition

Possible Powers: Induces astral projections
Destroys the libido
Power
Purification

Folklore:

"Every part of the *Conium* plant is deadly poisonous, and for that reason it is too dangerous to use for any reason whatsoever." ⁶

How to grow in Northern Virginia:

Don't.



https://www.freepik.com/free-photo/hemlock-conium-maculatum-illustration-from-medical-botany-1836_3533574.htm#query=poison%20hemlock&position=0&from_view=keyword

Marigold (*Tagetes*)

"When clouds roll in or night falls, the marigold curls inward and lets its head droop. When it opens again in the sunlight, its petals, wet with dew, appear to be crying.

Traditionally, marigolds are used to celebrate Dia de los Muertos (Day of the Dead) in Mexico, when the spirits of the departed are believed to visit the living. This celebration is rooted in the Aztec festival honoring Mictecacihuatl, the goddess of the underworld."⁶

Meanings:

- Creativity
- Grief
- Jealousy
- Pain
- Passion
- Vulgar minded

Possible Powers:

- Love charms
- Prophetic dreams
- Protection
- Psychic powers

Folklore:

"Early Christians would offer *Tagetes* blossoms around statues of the Virgin Mary, in place of coins.

The Welsh believed that *Tagetes* could be used to predict the stormy weather if the flowers did not open in the morning."⁷

How to grow in Northern Virginia:

Marigolds can be sown directly outdoors after danger of frost, or seedlings can be planted in mid-May after being hardened outdoors. Marigolds prefer fertile, well-drained soil, and full sun. If planted in shade or cool, moist areas they are prone to powdery mildew.

Sow seeds 1" apart and no more than 1" deep and thin to 8-12 inches apart depending on variety. Once established, pinch off tops to encourage bushiness and more blooms. Deadhead back to the closest set of leaves.



<https://www.pexels.com/photo/close-up-photography-of-blooming-flowers-3702363/>

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Kansas City, Missouri, Andrews Mcmeel Publishing, 2020. Page 16/66/114

^{2/3/7} Dietz, S. Theresa. *The Complete Language of Flowers: A Definitive and Illustrated History*. Wellfleet Press, 2020. Page 151/151/64

⁵ Stewart, Amy. *Wicked Plants*. Algonquin Books of Chapel Hill, 2009. Page 139-141

Barred Owls

Owls have silently been flying through the skies for a very long time. Their fossil records are one of the longest of all groups of living birds. It is thought they have been around for 70-80 million years.

The Barred Owl belongs to the subfamily of *Striginae*, meaning large-eared forest adapted owls, and the genus *Strix*. One of the many species of owl in North American, the Barred Owl is the fourth largest in size. Only the Great Gray Owl, Great Horned Owl, and the Snowy Owl are larger than the Barred Owl.

Barred Owl Measurements

	Female	Male
Wing	14"	12.8"
Tail	10.2"	9.2"
Length	9.1"	8.3"
Weight	32 oz	25 oz



Mature Barred Owl

Photo by [Liz Guertin](#)

Barred Owls are generally large-headed birds, which relates to their relatively large brains. They have very large frontally orientated eyes and a facial disk of feathers that sometimes includes a pair of "horns" or "ears" at the top of the disk. These ear tufts on top of their heads look like ears, although their real ears are found on either side of the head just behind the eyes. All owls have feathers colored with tones of brown, gray, and sometimes black, often in a manner that allows the birds to blend well with their surroundings. There is usually little sex-related color change in the plumage of owls.

The eyes of the owl face forward, a position that gives the birds excellent frontal vision, but causes them to turn their heads to the left or right to see in those directions. They have excellent hearing and can locate the source of sounds accurately. Owls that hunt at night, like the Barred Owl, have exceptionally acute hearing and can pinpoint the location of even the faintest noise.

Four features help owls hear better: large ear openings, specialized loose feathers around the ear openings, a movable flap of skin around the ear, and a facial disk of stiff feathers that collects and focuses sounds to the external ear opening. Nearly all the species of owls, including the Barred Owl, have dark brown iris coloration and are virtually invisible in the dark. Barred Owls are highly nocturnal owls.

Owls are birds of twilight and darkness; they make their way in and out of the shadows in utter silence. Barred Owls, a creature superbly adapted for hunting small rodents, watch silently till the time comes for a fast approach.

Barred Owls' flight is noiseless, buoyant, and light. They start hunting a few hours prior to sunset and continue to sunrise with the most active hunting shortly after sunset. They hunt from high perches on trees beside roads, in mature woodlots and along streams, and

lowland areas. They will at times hunt from perches over water which allows dropping and catching fish and crayfish. Amphibian prey on the ground is captured by pouncing on them. They will plunge into snow to capture small mammals.



Barred Owl

Photo by [John Eppler](#)

Their prey is swallowed whole, usually in their feeding nest, or ripped apart and consumed. When swallowing food, large materials are sometimes ingested. Even small owlets seem to be able to swallow entire small mice one after another, headfirst. Owls lack a crop as well as a gizzard which makes it necessary for them to either swallow their prey whole or rip apart large prey. They have no teeth but have specialized beaks and claws that grasp and tear up prey. They don't have digestive enzymes to break down food so the food will either travel down into the cecum, a large blind gut. Later the undigestible parts are regurgitated in a compacted, felted mass known as a pellet or casting.

Their diet varies seasonally and geographically. Small mammals are the largest part of their prey, followed by birds, amphibians, and reptiles. The rodents they eat include shrews, meadow voles, mice, red squirrels, and flying squirrels. Birds include Blue Jays, Grackles and Grouse. They will also eat snakes, skinks, crayfish, beetles, and grasshoppers. Barred Owls are also known to prey on the Eastern Screech-Owl and other smaller owls.

The Barred Owl is a forest-dependent species, requiring at least some old growth trees for nesting. These owls are strongly attached to their nest sites, using them for years. Their nests are usually found in large woodlands. The nest cavity is usually 25 feet above the ground, occasionally using a depression in a high tree stump. They often select a natural tree cavity of an old hawk, squirrel, or crow's nest, with few if any repairs or modifications needed. They often nest in very close proximity to Red-shouldered Hawks with little conflict. Both living and dead trees are used as nesting sites. Barred Owls and several other species of owls will use nest boxes as substitutes for natural tree cavities. This helps to maintain or increase their local breeding populations. They breed widely throughout eastern North America from boreal forests in southern Canada to the northern Florida Keys and the Gulf Coast.



Juvenile Barred Owl

Photo by [Liz Guertin](#)



Two Juvenile Barred Owls

Photo by [Liz Guertin](#)

The daytime roosts of Barred Owls are well hidden in dense coniferous forests, wet deciduous woods or the mixed woods of wetlands.

The vocalization of a Barred Owl is their loud “hoo-hoo-to-hoo-oo, hoo-hoo-hoo-to-whoo-to” hooting or translated to English as “who cooks for you, who cooks for you?” The call often ends in a low sharp “hooo-aah”. The voice of a male is lower than that of a female.

For the most part, they are nonmigratory birds. Some however may move from the northern edge of their range to the

southern edge during the winter months. Owls are nocturnal so any migrations are little noticed and difficult to study.

Barred Owls are thought to be monogamous. Eggs are deposited in March, and again in the late summer and autumn. Two or three white eggs are incubated by the female for 28 to 33 days, from late March to early April. Nestlings remain in the tree cavity until nearly full juvenile plumage is acquired.

They are long-lived – living up to 23 years in captivity and 10 years in the wild. It has been reported that one nest site was occupied by various Barred Owls over a period of 10 years, and the same woodlot for at least 33 years. These nest sites are used year after year, so long as they remain usable. Barred Owls are often friendly to humans once humans have won their trust.

The greatest population density of Barred Owls in North America is in the southern United States from Texas to Florida and North and South Carolina. The population of the Barred Owl appears to be stable but can decline in the future because of forest clear-cutting.

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