Trumpet Vine

Knowledge for the Community from Loudoun County Extension Master Gardeners

Fall 2017

Volume XIII, Issue 4 www.loudouncountymastergardeners.org

LOUDOUN COUNTY EXTENSION MASTER GARDENER LECTURE SERIES

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October 5, "Restoring Streams and Stream Valleys: Finding Balance in Altered Landscapes" by Charles Smith, naturalist, ecologist and branch chief of Fairfax Co. Dept. of Public Works and Environmental Services.

November 2, 2017 - "Big Dreams, Small Garden" Presentation by Marianne Wilburn, Loudoun County author and award-winning garden columnist.

For more information, visit our web site at loudouncountymastergardeners.org.

Visit us on Facebook: Extension Master Gardeners of Loudoun County, Virginia.

Fall is for Planting

It may seem counter-intuitive, but the end of this growing season is the best time to prepare for the spring.

Take advantage of the weather. The air is cool but the soil is still warm, and continuing rain allows plants to get a foothold for spring. Plant bulbs, overseed your lawn, plant perennials now so they will be established before next year's harsh summer.

Divide, divide, divide. Dividing and transplanting perennials as their metabolism winds down is much less disruptive than doing so at the beginning of their spring growth cycle. Water frequently until divided plants recover and take root.

Plant trees and shrubs. For the same reasons, fall is the best time to add woodies to the garden. Conditions are ideal for the plants to establish themselves before spring. Make sure to take into account the mature size of the tree or shrub when placing a new plant. Water throughout the winter

Shred leaves into mulch. Create natural mulch from fallen leaves to lay over your new plantings and any bare soil. Protect your soil from erosion through winter, increasing its organic matter content and improving the soil fertility and structure with 2-4 inches of mulch.

Autumn, the year's last, loveliest smile. William Cullen Bryant

Photo by N. Martin

Extension Master Gardeners Seek Volunteers

The Extension Master Gardeners of Loudoun County, celebrating 26 years of community service this year, are an association of 120+ volunteers. Together we advise and educate residents on research-based gardening and horticultural practices that protect water, soil, and air quality. Our dedicated volunteers receive extensive training under the auspices of Virginia Tech/VSU and the Virginia Cooperative Extension.

Join us for a casual Applicant Informational Meeting and Open House beginning promptly at 7 p.m. on Thursday, September 28th at the Loudoun County Extension Office at 30 Catoctin Circle, SE in Leesburg. Meet current Master Gardeners, share your questions, and learn about our programs. We are looking for individuals interested in supporting our Environmental Stewardship and Value of Landscape programs to assist with projects focused on water quality and healthy eating. Our next training class begins in January 2018.

Some of the many services provided by Loudoun County Master Gardener volunteers include:

Denise Palmer mentors HOA community gardeners. Photo by Normalee Martin

- County-prioritized programs like Healthy Virginia Lawns, Demonstration Garden, Garden to Table Community Education, and our Master Gardener year-round Help Desk;
- Volunteer-staffed garden clinics that offer information and advice at local farmers markets and at Lowe's in Sterling;
- Monthly expert guest lecturers on the first Thursday of each month and an annual "Let's Get Growing" symposium each March;
- Instructional lectures at libraries, to community groups, and to garden clubs;
- Mentoring resident HOAs in community vegetable gardening;
- Children's Education Team that works with 4H in schools and community groups;
- And as mentioned above, a Demonstration Garden at Ida Lee Park that implements the latest research-based practices in both ornamental and vegetable gardening, hands-on vegetable gardening instruction most months, and soil tests during the spring through fall.

Nancy Kelley and Teresa Minchew complete a soil test for Healthy Virginia Lawns Photo by Anne Shonnard

Applications for the Loudoun County Extension Master Gardener Class of 2018 are being accepted now through October 16, 2017. Please email any questions to LCMGtraining@gmail.com or learn more details at http://loudouncountymastergardeners.org/become-a-master-gardener/.

Nancy Kelley, Loudoun County Extension Master Gardener

Fall Cleanup of Your Vegetable Containers

I hope you achieved great success with your container vegetables this season! I certainly learned that, with a wetter than normal August, I did not have to spend so much of my time watering containers to achieve lush vegetables. In many instances, they outgrew my ability to keep up with them, which is a joyous event for any vegetable gardener. With the season winding down and cooler temperatures arriving, the containers will soon need to be retired for the winter. Proper cleanup this fall positions you to be ready for next season in addition to minimizing the same pest and disease issues you might have experienced this year.

Once the vegetable plant foliage has started dying off, and after the final vegetables have been harvested, it is very important to dispose of all dying foliage in the fall. Overwintering pests and diseases would love to take up a warm and cozy place under and among your dead foliage and in a perfect position to reappear next season. Plants with no disease and minimal pest issues can be composted in your household compost pile, but plants with disease or serious pest infestation should be disposed of offsite or in the household trash.

Potting mixes or soils for containers can be an expensive purchase to make on a yearly basis. However, with some precautions, these mixes from your containers can be reused next season with some work at renewing them. Never plan to reuse mixes in which you grew tomatoes to grow tomatoes or other tomato "family" vegetables such as peppers, potatoes, and eggplants next season. Diseases and/or pests could overwinter here too. Additionally if other container vegetables were diseased and/or pest-infested, then this same precaution against reuse for like vegetables would also stand.

If you have decided to recycle your potting mix for next year make sure to store with adequate ventilation but out of the direct weather such as in an old trash can with holes drilled in the side or under a loose tarp held down with bricks at the edges. Before storing, make sure to screen out old roots, pests, and weeds. In addition, some of this used container mix can also be turned into ornamental beds, added to the compost pile, or used to fill small holes in the landscape.

Properly sanitizing containers is also extremely important. Rinse out containers with plain water after the soil has been removed. Then disinfect them using one part chlorine bleach to nine parts water applied with a spray bottle or by dunking into a tub filled with the solution. Let the solution stay on for 30 minutes and then rinse with plain water again. This chlorine bleach solution will destroy most pathogens and ensure that diseases are not transmitted next year from your garden items. While you are at it, remember to disinfect tools and other portable garden hardscape such as trellises. Dry and then store.

Containers such as terra cotta or ceramic items, which could potentially crack with the freeze-thaw cycles of the winter, should be stored inside a garage or in a basement. They can be further protected by wrapping with newspaper or packing material. Metal, wood, and plastic can be

stored upside down and out of the direct weather outside but will stay sanitized if stored indoors. Most cloth pots can be rinsed of debris and soil and then put into the washing machine to be sanitized.

Finally, take some time to take stock of what worked or did not work. Make notes about what you will do differently next year and/or make a wish list of needed items. Fall is a spectacular time to take advantage of end-of-season savings on containers, watering cans, trellises, and other garden supplies. After fall cleanup has been accomplished, enjoy the downtime with the knowledge that you have prepared well for the next season and the bountiful harvests it will bring.

Denise Palmer, Loudoun County Extension Master Gardener

Don't Forget Your Vegetable Garden!

When September rolls around, we tend to put our vegetable garden aside as other tasks loom larger. Remember to continue to harvest your ripe produce, although mature size and ripening time will slow considerably during this month. Keep an eye out for frost or freeze warnings after mid-September. Frosts are unusual here during September as the average first frost is generally around October 15th, but they have been known to come early.

Sweet potatoes Photo by Denise Palmer

When the calendar changes to October, it is really time to start collecting all your summer vegetables before the first frost. Summer vegetables left on the vine during frost will be damaged. Gather the rest of your peppers, chop them up, and freeze in a single layer. Then put them into a plastic bag and return them to the freezer for adding to winter dishes. Pick all of the tomatoes and sort the green tomatoes away from the ripe ones. Throw out any green tomatoes with soft or rot spots and lay on newspaper in a cool, dark location to ripen to red (the taste will NOT be vine ripened) or use them in their green state. (See the recipe for Green tomato Cake on the next page.)

Cut your tender herbs such as parsley, dill, cilantro, and oregano, and dry or freeze according to each particular herb's requirements. Basil should be collected before temps get below 50 degrees at night in September and then stored fresh for a day or two on the counter or frozen whole in a plastic bag. Some herbs like parsley, thyme, and oregano can be overwintered inside. Carefully lift their roots from the ground, pot them up with a mixture of potting soil, sand, and compost, and then set in a sunny location inside.

After the first frost, pull out any old vegetable plants and weeds. Dispose of plant material in the compost bin, but diseased plants should go in the household trash. Do not let vegetable plant debris overwinter in your garden because it harbors disease and pests during the cold months. Remove any hardscape like trellises, tomato cages, and plant markers. Round tomato cages take up lots of space and you may want to consider buying square collapsible cages if space is at a premium.

Give your garden a head start on next spring's planting by performing a soil test. If adjustments are necessary, they are best done in the fall. Another important task is to add organic matter to your garden soil. Kinds of organic matter are leaf mold mulch, chopped leaves mixed with straw, or animal manures. If you use animal manures, fall IS the season to apply. If using manure, turn under lightly into the top four inches of soil. Other kinds of organic matter can be left on top of the soil to cover it and protect it from the winds and snow of winter; it can then be turned into the soil in the spring.

Don't forget to write down your final thoughts on this year's season in your garden journal. Make notes about new techniques, tactics, or plants you want to test next season along with what went wrong and why. Now you and your vegetable garden are ready for winter.

Denise Palmer, Loudoun County Extension Master Gardener

Fruits of Our Labor Recipes

Hello Dear Fellow Gardeners:

I would like to share a few recipes from friends and family that will help you use the vegetables that you all are growing in your gardens. Enjoy!!

Green Tomato Cake

4 c. chopped green tomato
1 Tbsp. salt
½ c. butter
2 c. white sugar
2 eggs
2 c. flour
1 tsp. ground cinnamon
1 tsp. ground nutmeg
1 tsp. baking soda
¼ tsp. salt
½ c. raisins
½ c. chopped walnuts

Preheat oven to 350 degrees. Place tomatoes in bowl and sprinkle with salt. Let stand 10 mins. Then, place in colander, rinse with cold water, and drain. Cream together butter and sugar. Add eggs and beat until creamy. Sift together flour, cinnamon, nutmeg, baking soda, and salt. Add raisins and nuts to dry mixture. Add dry mixture to creamed mixture. Dough will be very stiff. Mix well. Add drained tomatoes, mix well. Then pour into pan. Bake 40-45 minutes or until toothpick comes out clean.

Zucchini Bake

Spray a 9-inch square pan with Pam. (I used a glass pan.) Preheat oven to 350 degrees.

3 c. grated zucchini
4 eggs
½ c. parmesan cheese
½ c. vegetable oil
1 c. Bisquick
1 clove garlic
1/2 onion finely chopped. Add salt, pepper, and chopped fresh parsley to taste. Mix all ingredients well and add to greased pan. Bake for one hour.

Great for morning breakfast with a piece of toast.

Rose Battistelli, Loudoun County Extension Master Gardener

Fall Care of Your Cool Season Lawn

It's fall and, to your great pleasure, your lawn is green and happy. Global warming seems to have spent its wrath elsewhere this summer, sparing Northern Virginia those frying temperatures that last year turned our lawns into desert wastelands. Moreover, we got more precipitation than usual. Our current rainfall is six inches above normal. Cool season grasses like fescues and Kentucky blue grass were appreciative. Generally, they did not "brown out," but kept growing all summer long.

Now it's time to take advantage of our mild summer and move that lawn of yours to a new level:

- If you haven't done so for a few years, test your soil. You can pick up a soil test kit from the Extension Office.
- Aerate. Even if you did it last year, do it again. The ground is soft and aeration should be that much more beneficial.
- If you need lime, spread it now--in appropriate quantities. Again, the Healthy Virginia Lawns soil test will tell you just the right amounts.
- Fertilize, but remember that more is **not** better. If you use too much you can pollute our local watersheds. Use the analysis received with the soil test results for guidance.
- Overseed and keep lawn moist until the seeds sprout.

If this is all just too sketchy, here's a VCE publication that provides lots more information about fall lawn care: http://www.pubs.ext.vt.edu/430/430-520/430-520.html

Now comes the hard part. What to do about all those weeds that popped up due to the added rain? If you live in a townhouse with a small plot of grass, the answer is simple: pull them by hand. If, however, you have a quarter acre or more and really don't regard time spent yanking out weeds as quality time, then a chemical herbicide may be the answer. But what kind?

The answer is a bit complicated. On one hand, most common weeds are annuals, i.e., they sprout and die in the same year. That means they are going to die with the first frost, so why use expensive and potentially dangerous herbicides to kill them now? On the other hand, some weeds are perennials. They persist for two years or more and will likely show up in your lawn again next spring. We would like to kill them now, but they have built up their strength during the summer and killing them now would likely require multiple applications of herbicides. Too expensive; too polluting. So the answer about what to do to control most weeds in the fall is pretty simple: nothing. Wait until next spring.

That is, unless your problem is "winter weeds." They sprout in the mid-to-late fall, survive the winter, and are lurking there next spring, waiting to disfigure your lawn when the weather warms. They include annual bluegrass (poa annua), wild garlic and onions, common chickweed, henbit, and dandelions.[i] You can control them with herbicides containing, atrazine, 2, 4-D, or dicamba. Remember: (1) this applies to cool season lawns only, (2) don't get the herbicide near ornamental plants, and (3) read the instructions on the label TWICE before you use it.

A nice lawn is a great advantage to a home's curb appeal. This should be a pleasant fall, a great time to spend time outdoors. Take a few hours to improve your lawn—in a healthy, sustainable way.

Jim Kelly, Master Gardener Emeritus

[i] A guide to identifying weeds can be found at: www.msuturfweeds.net

Mulching Your Lawn

A recent study done at Michigan State University shows that you can forget about raking, blowing, and bagging leaves. Instead, just mulch them with your lawn mower. Simply mow over the leaves on your lawn. You want to reduce your leaf clutter to dime-size pieces that won't blow and that will decompose over the winter. You'll know you're done when about half an inch of grass can be seen through the mulched leaf layer. Once the leaf bits settle in, microbes and worms get to work recycling them. Any kind of rotary-action mower will do the job, and any kind of leaves can be chopped up. (Not appropriate for pine needles.) With several passes of your mower, you can mulch up to 18 inches of leaf clutter. Microbes do a better job recycling carbon from leaves when they have nitrogen so if you lightly fertilize after mulching, you'll get better results.

When spring arrives, you'll notice something. The leaf litter you mulched up in the fall will have disappeared. And your grass will look greener than ever. Mulching leaves simply recycles a natural resource, giving you richer soil for free.

If mulching leaves with a lawn mower is not possible, you can still mulch leaves for uses on any area where you would normally put purchased mulch. Search online for leaf mulchers and you will see a variety of devices that will work to create a valuable natural resource that will enrich your soil. Leaf mulch on all your perennial beds is a best practice.

Pine needles may be put through some of these mulching devices. Otherwise use pine needles on paths or to mulch under bushes.

Carol Ivory, Loudoun County Extension Master Gardener

A Tough Native Groundcover: Golden Ragwort

This is the best season to get new plants the old-fashioned way–get them for free from another gardener. This is how I acquired my stands of golden ragwort–from a Native Plant Society acquaintance who would leave boxes of freshly pulled ragwort on my doorstep. I put wet newspaper over their roots for up to two weeks until I could get them all planted.

I use golden ragwort, *Packera aurea* (formerly *Senecio aureus*), a perennial flower in the family Asteraceae, in difficult spots where I want it to spread and crowd out undesirables such as Japanese stilt weed and garlic mustard. It thrives in wooded areas and along transition areas. I recommend placing it in areas where it has plenty room to spread.

Glossy green leaves. Photo by C. Ivory

Ragwort has semi-evergreen basal leaves that are heart shaped and glossy dark green. Most composite flowers are in bloom during the summer or even the fall. Blooming from April to June, this yellow composite is one of the earliest blooming species of the Aster family.

In the photo on the left, taken on April 2, flower buds are prominent on erect stems that reach 12 to 24 inches tall. Notice that leaves growing from the flower stems (cauline leaves) take a different shape. Then on April 10 a little patch, below, is beginning to bloom. These early-blooming flowers are beneficial to spring pollinators, particularly smaller butterflies, skippers, flower flies, and bees.

Ragwort is an aggressive spreader using both stolons–runners–and seed heads that look a bit like dandelions. Many references recommend that you cut off the flower heads when the blooms are finished to keep them from spreading seeds, but I don't know why you would want to reign in these guys if you have planted them in a large space that needs them. A well-developed stand of ragwort will look like the photo on the left when in bloom. These plants really light up a wooded area.

Photo courtesy of North Creek Nurseries

Ragwort leaves contain a low toxicity alkaloid (Pyrrolizidine) that keeps most mammals from eating the foliage (however sheep will still eat it!). So it is a good plant if you have deer problems. Some people are sensitive to this chemical and get mild dermatitis when they come in contact with the leaves.

"Wort" often denotes a plant that has medicinal value or one that was believed to have medicinal value at the time that it was named. Golden ragwort is a well-known medicinal plant. Despite serious safety concerns, people take golden ragwort to treat diabetes, high blood pressure, water retention, bleeding, chest congestion, and spasms. The same chemical that makes it noxious to deer can cause serious liver damage when ingested by humans. It's also unsafe to apply golden ragwort to broken skin. The toxic chemicals in golden ragwort can be absorbed quickly through broken skin and can lead to dangerous body wide toxicity. (See WebMD.) Don't let this keep you from using this plant. Many common plants are toxic. Wear your gardening gloves and don't eat the plants!

Ragwort prefers part sun and moist conditions. Given enough moisture it can thrive in full sun. Many references describe it as a slow spreader, but that has not been my experience. It spreads relatively quickly and just a few plants become a substantial patch in a few years. You can divide it in the spring.

The basal leaves of golden ragwort can look similar to those of an invasive species we have in this area, garlic mustard. If you plant ragwort to crowd out garlic mustard, weeding can become tricky. The leaves of garlic mustard do smell like garlic, so that is an easy way to check. Garlic mustard is a biennial that is also semi-evergreen between its first and second year. Make sure you know what you are pulling if you are working in an area that contains both plants.

Garlic Mustard

Golden Ragwort

Photos by Emily DeBolt Fiddlehead Native Plant Nursery

Carol Ivory, Loudoun County Extension Master Gardener

Fall Enhancements to Your Pollinator Garden

New Jersey tea (Ceanothus Americanus) is a small shrub with a rich American history. There are over 50 varieties of Ceanothus, but only three varieties are found east of the Mississippi River. New Jersey tea is part of the Buckthorn family and can be found in every state east and in nine states west of the Mississippi River; however, it is threatened in Maine. How did it get its unusual name? This small shrub was called red root tea until the American Revolutionary period. The leaves of the plant were harvested when the plant was in full bloom, then dried in the shade and used to make a caffeine-free tea that became a substitute for Chinese tea during the American Revolutionary period when imported tea had such high tax rates. Since red root tea was abundant in New Jersey, the name New Jersey tea stuck!

Description: low growing compact deciduous shrub for a wildlife-friendly garden. While it will lose its leaves in winter, the yellow twigs of its newest growth will provide winter interest.

Light: requires at least six hours of sun; afternoon shade in hotter climates is tolerated. **Water:** very deep-rooted and drought-tolerant once established.

Height: two to three feet tall and wide.

Spread: will spread by suckers, if desired.

Zone: USDA Hardiness Zones 4-8.

Bloom: Spring and early summer fragrant white flowers appear followed by attractive reddish burgundy fall seed pods.

Location: mixed border, grouped as low hedge, pollinator garden, rocky slopes.

Soil: requires excellent drainage and more alkaline soil with a pH between 6.8 and 7.2 For best success, our acidic soil in Northern Virginia may need to be tested and amended before planting. **Cons:** Unfortunately, deer enjoy browsing this tasty shrub. It does not tolerate shade and requires very good drainage or can succumb to root rot.

Landscaping With New Jersey Tea: Gardeners love New Jersey tea for its short compact nature. It stays low and creates a nice ground cover or a low hedge, or it can be used as a specimen plant for the front of a garden bed. Its ability to thrive in lean soils makes it a great low maintenance landscape plant. The extensive root system of New Jersey tea makes it a great candidate to stabilize steep slopes or loose soils. The late spring and early summer flowers make this plant a must for butterfly gardeners.

Fun Facts: This buckthorn family member is one of the few non-legumes that can fix nitrogen, which means it can thrive in poor soil without fertilization. The roots are white with a bark-covered exterior and a red interior. They can grow up to four feet underground, with a thickness two to three inches in diameter, so drought is not a problem for this shrub. It is also quick to recover after fire. Consequently, those deep roots do not like to be moved once established, so carefully choose your planting site. This shrub is tolerant of black walnut toxicity and can be planted near black walnut trees without concern.

Native American Usage: The Native Americans used all parts of this plant. Its leaves are fragrant when crushed and the flowers contain saponins, which when bruised and added to water, make a lather. This "fragrant soap" was used for laundry and women also used it to bathe in preparation for marriage. Both blossoms and roots were used to make dye. Roots were harvested in the autumn, when the interior flesh color is deepest red. Native Americans made a tea using the whole plant for diseases ranging from skin cancer to liver and lung problems. Tea was made with the red portion of the root as a remedy for snakebites. With such interesting history and applications, your New Jersey tea will surely be the center of conversation at your next garden party!

Benefits to Wildlife: In the spring, when the dainty white blooms appear, so do the hummingbirds, native bees, and many other pollinators. Flowers are an early nectar source for hummingbirds. Butterflies such as the Spring Azure, the Summer Azure, and the Mottled Dusky Wing use the shrub as a larval host. Turkeys and quail consume fall seeds. The seedpods are fun; like those of wisteria, they can just crack open forcefully and release the seeds away from the plant.

Sharon Smith, Loudoun County Extension Master Gardener and Julie Borneman, owner Watermark Woods Native Plant Nursery

Overwintering Pests: Insight into the Secret Hiding Places of Garden Foes

Asian Multicolored Beetle- One of our most revered overwintering pests

It might feel too early to be thinking about winter with hot humid Virginia weather still making an appearance, but the pests of the garden are already thinking ahead. As gardeners, our first instinct is to protect our plants from the harsh conditions ahead but in doing so, we may be putting on an extra security blanket to aid overwintering insect pests through those long cold nights.

What Is Overwintering?

Many pests choose to take on a dormant lifestyle and will wait underground until triggered by more favorable conditions. Examples of what would signal the time to emerge would be warmer temperatures, increased light, added nutrients, or increased humidity. Many species, such as beetles and moths, often use their transitional pupal stage as the overwintering phase and will emerge as full blown adults in the spring. Others, like the notiorious cucumber beetles hang out in debris as adults and will pop back into action the moment the spring sun hits its desirable peak. The good news is with a few easy prewinter preparations, you can prevent an insurgence of these pests come Spring!

Be Diligent About Debris!

It's tempting to just let our gardens go in winter since the elements are not favorable, but in doing so, you are unknowingly adding an extra layer of protection to overwintering pests. Leftover garden debris, such as leaves, old growth, and fruit, provides their absolute favorite place to settle in for a few months of undisturbed relaxation. This is especially important if you had problems with pests all spring. It is likely there are larva just beneath the debris and soil, ready to pupate. You can double your satisfaction knowing you are probably getting rid of blossoming pests while tidying up your garden this fall.

Spend Quality Time With Your Siding

When was the last time you really checked out the siding, gutters, and little nooks and crannies along the side of your home? Pests know these areas and are probably using them as we speak. Not only is it an excellent place to hide out for the winter, it also puts them in a convenient location to enter your home. Famous home invaders such as stink bugs, boxelder bugs, milipedes, and Asian multicolored ladybugs often make use of these areas just before making a break for the inside comfort of your house. Powerwashing and cleaning out your gutters can go a long away in keeping your home pest free.

Saving a Few Steps May Add a Few Pests

No one wants to walk far when winter temperatures and the dreaded "s" word make their appearance in Virginia (I sure don't) but you might want to rethink putting your firewood pile close to the door. Piled wood is one of the most popular hangouts for roaches, crickets, ants, and just about every bug you don't want in your house! Piled up wood, newspapers, or any garage clutter generates warmth and safety and is an ideal spot to overwinter or pehaps even start a

new family. The closer the wood pile or debris pile is to your home, the more likely it is that these pests are going to find their way inside your home or to the garden come spring.

Tent caterpillars Photo by J.R. Carmichael (Public domain] via Wikimedia Commons)

Don't Forget to Look Up!

Trees are the host plants for many Lepidopetran species, including several pests. One of the most notorious in our area are tent caterpillars, which infest crabapple and similar species of trees in early spring. Eggs are laid prior to the cold months where they will stay dormant all season and will hatch when the first leaves appear in the spring. Gypsy moths and several other moth species also go this route.

Beetles also use trees as spots to avoid cold tempeartures. Boring beetles will lay eggs inside the tree, where the larva will happily feast all winter long and emerge in the spring as adults. Properly monitoring when you see the adults is key because once they slip under the bark, they are quite hard to control.

Use Winter to Your Advantage

With less to do in the garden, now is an excellent time to brush up on your nemesis! Knowledge truly is power insofar as outsmarting pests next year. Knowing lifecycle stages, emergence patterns, and actions that work will save you time this coming season. Best of all, you don't need to leave the comfort of your warm home this winter to do so!

Resources:

Bradley, Fern Marshall, Barbara W. Ellis, and Deborah L. Martin. *The organic gardener's handbook of natural pest and disease control: a complete guide to maintaining a healthy garden and yard the Earth-friendly way*. Rodale, 2010.

Flint, Mary Louise. *Pests of the garden and small farm: a grower's guide to using less pesticide*. Vol. 3332. University of California, Agriculture and Natural Resources, 1998.

Amanda Rose Newton, BCE. Entomologist and Loudoun County Extension Master Gardener

Foraging Forays
A Few Suggestions for Gleaning From Fields and Forest

For those who like to arrange flowers, foraging along roadsides, in fields, and in forests for flowers for arrangements or for bits of wood for containers can be a pleasant morning's adventure or a seemingly never-ending nightmare of insect bites, scratches, or even worse. With a few common sense precautions and preparations, however, foraging can be lots of fun, and you can return home with a car full of treasures.

Stinging nettle spines. Photo by Doug Goldman, courtesy of USDA, NRSC, National Plant Data Team

Here are a few of the most important suggestions that will keep you safe and happy while foraging.

1. Ask for permission. Ask for permission from landowners before you go on private property, even if the property is weedy and seems abandoned. It's not your field or woodlot!

2. Don't pick or damage endangered species. Know the protected species in the area and don't cut or damage them in any way.

3. Don't strip a stand of flowers. Even when cutting very common flowers, such as Queen Anne's lace, don't strip the stand; leave enough for generous reseeding.

4. Know which plants *not* to handle. Learn to recognize plants that can have unfortunate side effects for humans, like stinging nettles, poison ivy, poison oak, and poison sumac. Try to avoid even brushing against them. For more information about stinging nettles, see https://www.nps.gov/plants/alien/pubs/midatlantic/urdi.htm. For more information about poison ivy, poison oak, and poison sumac, including lots of photos of these three plants at various times during the year, see http://www.poison-ivy.org/identify-poison-ivy-poison-oak.

5. Dress appropriately. You may be walking over rough ground and through tall weeds in fields and woods. Wear jeans and a long-sleeved shirt. Yes, you may be a bit warm, but weedy fields full of miscellaneous insects and potentially irritating vegetation are no place for bare legs and arms.

6. Wear gloves. Wear gloves to protect your hands. It's not amusing to grasp a handful of stinging nettles instead of the flower you intended to cut, and an encounter of this kind can possibly make the rest of your day much less pleasant.

7. Protect yourself from the sun. Even on a cloudy day, wear both a sun hat and an unscented sunscreen. There's no need to court either heat stroke (also known as sunstroke) or sunburn.

8. Take care of your feet. Wear sturdy shoes or, preferably, boots specifically designed for walking. Sandals don't belong in any field where you could encounter briars and other prickly weeds, not to mention snakes.

9. *Snakes!!* While Virginia is home to 34 different species and subspecies of snakes, only three are venomous. Of these, only two, copperheads and timber rattlesnakes, can be found in our area. The eastern cottonmouth (also called water moccasin or black moccasin) is found only in the southeastern portion of the state. Learn to recognize the two species endemic to our area on sight.

Goldenrod. Photo by Cathie Bird, licensed under Creative Commons

Copperheads generally can be found almost any place throughout the region. Given a choice, they prefer to hang out under logs or rocks, in cracks in building foundations or stone walls, and in rubbish piles, but they have been found on front porches, in lawns, and in grassy fields. Be alert! For a discussion of copperhead behavior, see http://www.virginiaherpetologicalsociety.com/reptiles/snakes/northern-copperhead/northern_copperhead.php.

Rattlesnakes like to hang out on rocky ledges and logs. For a discussion of rattlesnake behavior, see http://www.virginiaherpetologicalsociety.com/reptiles/snakes/timber-rattlesnake/timber_rattlesnake1.php.

Snakes prefer avoiding you if at all possible. Help them!

- Be noisy. Supposedly snakes can feel vibrations on the ground from your feet or a walking stick as you approach and will move away from the vibrations. Given fair warning of your approach, many snakes will slither out of your way.
- Don't step anyplace where you can't see, especially in rocky areas or around or over fallen logs.
- If you should encounter a snake, don't disturb it, try to move it, handle it in any way, or try to scare it. Most snake bites occur when a snake is frightened and someone tries to move or kill it. Just give it a wide berth–at least six feet.

Ox eye daisies. Photo in the Public Domain

While you want to be careful, realize that snakes are everyplace; the only way to avoid them is to stay inside your house. With proper precautions, it's unlikely you'll encounter a poisonous snake. Over many hours of foraging through our Virginia fields, I've met only one snake–a little green garter snake. He (she?) went west–quickly; I went east–just as quickly.

10. Deter insects. Ticks, mosquitoes, bees, yellow jackets, spiders, and various other crawling, flying, or creeping critters are out there, and some of them would love to nibble on you as part of their dinner plan. With a few precautions you can avoid becoming a meal for whatever insects happen by.

- Don't wear perfume or scented cosmetics in the field unless, of course, you *want* to attract bees, wasps, and other insects.
- Use an insect repellant containing at least 20 percent DEET (30 percent is better) to repel ticks, mosquitoes, and other insects. (Other repellants are available, such as those that contain picaridin, but it's not absolutely clear that they repel ticks.) Follow the directions on the label.
- You can buy so-called insect-repellent clothing from a number of stores that specialize in hiking or outdoor activities if you're particularly cautious (and have a hefty wallet–these garments aren't cheap!). In actuality, this clothing doesn't actually *repel* insects; rather, the clothing is treated with permethrin, which hopefully kills the insect *before* it bites you but after it lands on the clothing. You should *also* use an insect repellent on any skin that isn't covered by the clothing. (But *don't* spray on skin that is *under* clothing.) The repellent will repel the insects; the permethrin-treated clothing will kill any that land anyway. If you're interested in learning about permethrin-treated clothing, Google "insect repellent clothing."

Common yarrow. Photo by Pam Dwiggins

Black-eyed Susan. Photo by Sally and Andy Wasowski

- Apply sunscreen first; let it dry; then apply insect repellent.
- Wear long pants, preferably with the pants tucked into your boots, and shirts with long sleeves, tucked into your pants.

11. Stay cool. If possible, schedule your foraging ventures either for early morning, after the dew has dried but before the day becomes excessively hot, or on a day that is cool or cloudy, but not wet. Avoid days that are very hot and/or humid. Heat stroke is no joke!

12. Stay hydrated. Take a couple of bottles of water with you, in a cooler if necessary. It tastes mighty good after even a scant 15 minutes of foraging in a sunny field on a warm day.

13. Take the proper tools with you. You'll need pruning shears and, possibly, floral snippers, at least one bucket, and at least one plastic gallon jug of water. Don't put the water in the bucket and drive merrily off in search of flowers; you'll slosh most of it all over the back of your car before you travel a mile. Wait until you've cut a bunch of flowers, *then* fill the bucket with a few inches of water and put in the entire bunch. The flowers will prevent the water from sloshing about. You'll need to brace the bucket to prevent it from tipping over. Placing it in a cardboard box stuffed with newspaper works just fine.

14. Watch where you park.

- Don't park on roadsides unless you can pull your car *completely* off the pavement. *Never* stop on four-lane highways, on any extremely busy roads (such as Routes 15, 50, 7, 9, and 287 during most hours of the day), or on bridges. All of these locations are or can be dangerous and, in the case of interstate highways, you may be fined for parking on the shoulder.

Lance-leaved coreopsis. Photo by Sally and Andy Wasowski

- Don't leave your car unattended with the engine running, even for a few seconds while you nip across a ditch to pick up a tempting piece of dead wood. Lock your purse in your car and take your key with you, pinned securely to your belt loops or pants with an extra-large safety pin.

15. Finally, remember that your security and safety come first. A few prudent precautions are in order.

My favorite! Queen Anne's lace.
Photo By Scott Zona

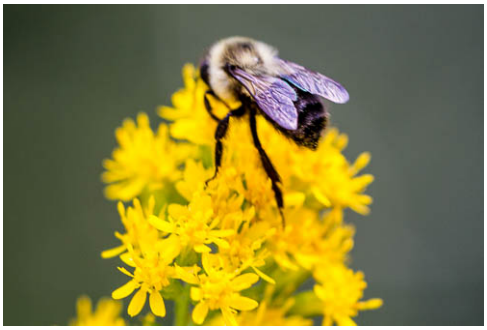
- Be sure your cell phone is fully charged and that you have reception in the area where you're foraging. Whenever you leave your car, take your cell phone with you.
- If you don't have cell phone reception, try to forage only in places where you can be seen by other people–on foot, in nearby houses, or from passing cars. Avoid lonely lanes unless there are two or more people cutting flowers together. Remember: A sprained ankle in your living room is a painful nuisance. At high noon in a lonely field, half a mile from the nearest house, on a dead-end gravel road, 100 yards from your car, on a 95 degree day with 70 percent humidity, a sprained ankle is much more than a nuisance–it's highly dangerous.

Taking these few precautions, foraging the fields and forests in summer and early fall can be a pleasurable adventure, and you'll come home with armfuls of flowers as your reward!

Lina Burton, Loudoun County Extension Master Gardener

Asters and Goldenrod: Fall Color and Much More

By the time fall arrives, you want to sit back and enjoy flowers that need little or no special care and still provide the pollinators with much-needed pollen and nectar before winter settles in. These should be tough, durable plants that provide dependable color and boost the habitat value of your garden. You need to look no farther than the top two best bets to **attract butterflies and moths** in the United States mid-Atlantic region according to the website *Bringing Nature Home*, http://www.bringingnaturehome.net/what-to-plant.html—goldenrod and asters.



Goldenrod or *Solidago* supports 115 butterfly and moth species and it's a wonderful pollen and nectar source for bees and other insects. You have dozens of species to choose from, ranging from sun to shade lovers, dry to wet, salty seaside dwellers, and goldenrod species that grow from 8 inches to over 6 feet in height. Some are clumping and others spread through rhizomes. Yellow goldenrod goes well with the blues and purples of asters, sedum, Joe pye weed, and ironweed. *Solidago sphacelata* Golden Fleece dwarf goldenrod is an excellent short garden plant.

Goldenrod photos by John Eppler

Goldenrod does not cause allergies; ragweed is the culprit. Goldenrod has heavy, sticky pollen that requires insects to spread it. Bees, butterflies, beetles, wasps, flies, and spiders abound on goldenrod. Birds eat its seeds. Flies lay their eggs in the stem, which then swells and forms a gall. Birds will break open the gall to get to the insects.

Interesting historical note: During World War II when rubber was in short supply, Thomas Edison created a process to extract rubber from goldenrod. The tires on the Model T given to him by his friend Henry Ford were made from goldenrod. Then Ford enlisted George Washington Carver to try to perfect the goldenrod rubber, but it proved to be too weak for industrial use.

Asters are true fall bloomers with some species blooming into November. They support 112 butterfly and moth species and supply nectar and pollen for a very wide variety of insects. Approximately 60 species are native to the mid-Atlantic area. There's an aster for every garden--sunny, shady, dry, or wet. Cultivated asters range from 9 inches to 6 feet in height. Flowers range from ¼ inch to 2½ inches in diameter. Flower colors are all shades of blue, violet, and purple, plus white.

Both asters and goldenrod display photoperiodism, that is, they grow and bloom when the days start to get shorter. Tall goldenrod and tall asters can be kept at a reasonable height by pruning them back before the beginning of July.

Carol Ivory, Loudoun County Extension Master Gardener

Saving Seeds

"*Seed is not just the source of life. It is the very foundation of our being."* Dr. Vandana Shiva, environmental activist and antiglobalization author.

Saving seeds is a global enterprise in the cause of human sustainability and the care of our planet. But it is also a personal hobby that can be shared within your own community. My own experience of saving seeds is because I have favorite varieties of some herbs, vegetables, and flowers I want to grow yearly. I have taken for granted that I can find certain seed every year in a catalog or at a garden center only to be disappointed. Some flowers have appeared as volunteers from a bird or the wind, and saving their seed is how I can continually enjoy them year after year.

Saving seeds can be as easy or as dedicatedly scientific as you'd like it to be. I will touch on some basics--enough I hope get you interested in trying it out yourself.

The different vegetable seed types are:

Self-pollinating annuals, which are the easiest to save because they can pollinate themselves and do not usually cross-pollinate. These include beans, peas, tomatoes, eggplants, and peppers.

A bit more difficult are annuals that produce seed in one season but can readily cross-pollinate. To assure seed purity, these plants need to be separated by a quarter mile or more. More study into seed saving than will be given here would be advisable if you want to seriously save this type of seed.

Even more difficult are *biennials,* which are plants that take more than one season to produce seed.

And then there are clones, which are not true seeds but clones of a single parent plant, such as garlic or a seed potato.

Hybrid seeds have been cross-pollinated two or more times to obtain specific characteristics and will not produce what originally was planted.

Save vegetable seeds only from *open-pollinated or heirloom* varieties. Heirlooms have been passed down for many generations and have stable traits. They are genetically diverse and tend to adapt to local growing conditions if allowed to grow in the same area for many years. By saving seed, you could be designing seeds specifically for your garden!

Tomato seeds are coated with a gel. Squeeze or spoon those (heirloom) seeds into a glass or a jar. Add enough water to equal the mass of seeds and put them in a warm spot out of the sun. Stir the contents at least once a day. In three to five days the viable seeds will fall to the bottom while the unusable seeds will float. Spoon away the gunk and seeds at the top and wash the good seeds in several changes of water and lay them in a single layer on newspaper or a paper plate or towel. Put them in a warm place until the seeds are fully dry, which may take several weeks.

Cucumber seeds have a gel on them as well. Squash seeds may have a bit of membrane on them. Hold these seeds under running water, rubbing them between your fingers to clean them, and then lay out in a single layer to dry.

For cantaloupe and melon, wash the seeds off and put in a container of water. The good seeds will sink to the bottom.

For peas and beans, allow the pods to turn brown on the vine. Pick the brown pods and remove the seeds, which require about six weeks of air drying. A woven basket is a good place to store these seeds. You can also pull up a pea or bean plant--that is ripe but not dry--by the roots and hang the plant upside down in a warm area. The pods draw energy from the plants, which increases the seed viability.

Other vegetable plants produce seeds in pods, like radish, lettuce, and some other greens. These plants dry from the bottom up a few pods at a time. The dry pods tend to shatter and spread seeds, so pick the dry pods daily.

Once seeds are completely dry they should be stored in a marked or labeled container. Cardboard containers, rinsed pill bottles, glass jars, and tins are all good for seed storage.

I save silica gel packs and use them before seeds have dried. Damp seeds can mildew easily. Silica gels for drying seeds can be ordered as well. Check your favorite seed catalogs.

Insects or weevil infestations among stored seeds can be a problem. Freezing seeds can help with that, or adding a little diatomaceous earth (D.E.) to the containers is a nontoxic precaution. D.E. is available in garden centers.

As the length of time in storage increases, the vigor of seedlings produced is lowered. Roots are adversely affected by long-term storage. The more frequently seeds are regrown, the better the overall health of the plants.

I save certain flower seeds every year: poppies, cleome, zinnia, marigold, tithonia, hyacinth bean, and calendula.

For poppies, I wait until the pods are almost completely dried while still standing. I then carefully cut the pod off, keeping a container close at hand. The tiny black seeds spill out easily.

For marigolds, zinnias, calendula, and tithonia, I deadhead the flowers and keep them in an open container to let them dry.

Cleome seeds are easy—just pick the long seed pods off the stem and when they are dry, open and release the seeds.

This year I have also saved garlic bulbils. These are the cluster of marble-like “seeds” that grow from garlic scapes, which are also called flowers. There is an advantage to planting garlic bulbils over cloves. Propagating from garlic plant bulbils can revitalize garlic strains, can reduce the transmission of soil-borne diseases, and is economical as well.

Seed saving, for me, goes along with sustainability and consumer consciousness. But the fact that it can be very simple and allows me to plant where I want every year is a plus.

Glassine envelopes, leopard lily seeds, poppy seeds, garlic bulbils, calendula, and zinnia

Cleome seed pods and dried seeds

Seed saving and seed sharing go hand in hand. Check locally for seed swaps and check some of the many seed saving organizations.*

Share with a friend or neighbor, help a community garden become more self-sufficient. Work with a beginning gardener and teach him or her how to save seeds, too!

"Though I do not believe that a plant will spring up where no seed has been, I have great faith in a seed. Convince me that you have a seed there, and I am prepared to expect wonders." Henry David Thoreau

*Organizations and catalogs that deal with seed saving and heirloom seeds:

International Seed Saving Institute – saveseed.org

Seed Savers Exchange – seedsavers.org

Baker Creek – bakercreek.com

Rare Seeds – rareseed.com

High Mowing Seeds – highmowingseeds.com

Sow True Seed – sowtrueseed.com

Johnny's Select Seed – johnnysselectseed.com

Normalee Martin, Loudoun County Extension Master Gardener

2018 Gardening Symposium Speakers

The Master Gardener Symposium speaker lineup has been finalized.

ELLEN OGDEN

Author, Lecturer, and Kitchen Garden Designer
Ellen Ecker Ogden, is the author of five books, including *From the Cook's Garden*, based on the catalog she cofounded in Vermont, and *The Complete Kitchen Garden*, which features theme designs for cooks who love to garden. Ellen spoke at our very first symposium and we are happy to welcome her back.

DOUG TALLAMY

Professor, University of Delaware
Doug Tallamy is a professor in the Department of Entomology and Wildlife Ecology at the University of Delaware. Dr. Tallamy presents a powerful and compelling explanation of how the choices we make as gardeners can profoundly impact the diversity of life in our yards and neighborhoods. Dr. Tallamy will make two presentations at the 2018 Symposium.

SCOTT AKER

Horticulturalist, U.S. National Arboretum
Scott Aker is Head of Horticulture and Education at the U.S. National Arboretum in Washington, D.C. Scott is a popular speaker and writer. Scott will provide practical advice on reliable trees and shrubs that have proven to perform well in our area.

Check the winter edition for speaker topics. Registration opens in mid-January 2018. Everyone must register online.

Protecting Our Naturalized Areas

Many of our communities contain naturalized areas and small forests. These areas are especially vulnerable, and property owners–both home owners associations (HOAs) and private land owners--should recognize that these areas require a special type of care that requires keen plant identification skills and knowledge of forest ecologies. In natural forests, trees form a deeply shaded understory. This area under the trees becomes the residence of plants that like lower sun levels. Only when a tree falls or breaks and sunlight flows onto the forest floor do sun loving plants return until another tree plugs the hole with its leafy joy, returning the floor to its initial dimness. The understory plants fall into a few categories: ephemerals, those with large leaf growth, mosses, ferns, and understory trees to name a few.

Young Asiatic bittersweet vines. Photos by Carol Ivory

On the edges of forests, the plant life changes. Here you will see tall herbaceous plants, saplings, and vines. A healthy edge contains tall stands of common boneset (eupatorium) wingstem and woodland sunflowers, and Virginia creeper and poison ivy (yes, poison ivy is a native beneficial to wildlife). In an endangered edge, non-native invasives take advantage of disturbed areas. These invasives include Japanese honeysuckle, garlic mustard, Japanese stilt grass, wild Bradford pear trees, and Ailanthus trees. All these should be monitored and, ideally, removed. The most destructive of these invaders are the vines. Vines will make their meager start at the base of a plant and continue to climb toward the sun. Some vines such as English ivy and wintercreeper can climb straight up using aerial roots. Others such as Chinese wisteria and Asiatic bittersweet twist around the tree trunk in what becomes a deadly grip. Grapevine and porcelain berry climb with tendrils. In any case, the vine's objective is to go toward the light. This usually means to follow along the top sides of branches to gather the most sun time. Vines such as mile-a-minute and wild grapevine can cover a tree branch in weeks with their fast seasonal growth. Trees are not equipped to outgrow vines, adding to their growth radially compared to the vine's lineal growth. Therefore, we see so many trees on the forest fringes engulfed in vines. This is a huge problem in neighborhood forests.

Wintercreeper will totally envelop a tree when given the opportunity.

With the onset of vine growth in the trees, forest areas start to decline. Small areas of tall tree growth have been disturbed by past nearby construction, and broken forest areas are more exposed to the weather. Wind, snow and ice can be detrimental to smaller groves. Trees in a smaller group don't always get enough root and branch support from each other to weather the brunt of strong winds or heavy ice and snow. Adding the weight of vine growth and the strangling of the tree limbs that the vines grow on, further contributes to the breakdown of the trees and total forest health.

A good reference: Plant Invaders of Mid-Atlantic Natural Areas.

Cathy Anderson, Loudoun County Extension Master Gardener

"King of Flowers" – Tree Peonies

Unlike the more familiar herbaceous peonies, tree peonies are shrubs that shed their leaves in the fall, leaving behind woody stems from which new leaves and flowers grow the following spring. Native to China where it has been cultivated for more than 1,500 years, *P. suffruticosa* is highly esteemed in both China and Japan, has been widely used medicinally, and is known in both countries as the "King of Flowers." In addition to *P. suffruticosa*, there are also other woody *Paeonia* species that are used in breeding programs. Using these various species, breeders have created thousands of cultivars, most of which range from $35 to $120, with a rare few soaring to $350.

'Lavender Grace,' Photo courtesy of Klehm's Song Sparrow Farm and Nursery, www.songsparrow.com

Well-grown tree peonies are magnificent; a mature, ten-year-old plant can have more than 100 blooms. Tree peonies can range in size from about 2½ feet tall by 3 feet wide to 6½ feet tall by 5 feet wide. Most grow about 4 feet tall by 4 feet wide, more or less, but depending on the cultivar and growing conditions, some can grow up to 8 feet tall and wide over ten years. Each papery single, semi-double, anemone-shaped, or double flower lasts for about five days, depending on how hot it is and whether or not the plants receive sufficient water during the blooming season. The flowers come in a range of colors including white, yellow, pink, purple, and red, with some flowers showing beautiful flares and blotches.

'Age of Gold,' Photo courtesy of Klehm's Song Sparrow Farm and Nursery, www.songsparrow.com

Tree peonies are magnificent planted alone as specimen plants. You can also plant them in a row, three feet apart, to create a hedge effect. Or you can plant several in a bed especially prepared for them, in which case space them at least three feet apart (preferably six feet apart for larger varieties) for good air circulation, which is important for disease prevention.

Once planted, tree peonies should not be transplanted and *never* be divided. Because of their extensive woody root systems, they are extremely difficult to move. Attempting to do so not only will take some strenuous work on your part, it will set the plant's growth back several years. Since they can live up to 100 years or more, when you plant one, be sure you're planting it exactly where you want it to remain—for a *very* long time!

Tree peonies, like their herbaceous peony cousins, are relatively disease and pest resistant. They can be grown safely in deer country without ever being nibbled. The most common diseases to attack the plants are mildew and botrytis, both of which are easily prevented or controlled by garden sanitation, good air circulation, proper watering practices, and when necessary, fungicides.

Shima Nishiki,',Photo courtesy of Adelman Peony Gardens, www.peonyparadise.com/

Culture:

Tree peonies are happiest with five to six hours of morning sun followed by afternoon shade. In giving them shade, be sure to

plant them at least eight to ten feet away from tree trunks. Otherwise, they will be competing with the trees for nutrients and water. In addition, plant smaller varieties at least three feet from buildings and walls so they have plenty of room to grow and larger ones even farther. Tree peonies may be interplanted with small bulbs and ground covers, but keep the area immediately surrounding the trunk bare to provide good air circulation to the trunk. They also like protection from the wind, which can badly batter the large flowers.

'Guardian of the Monastery,' Photo courtesy of Klehm's Song Sparrow Farm and Nursery, www.songsparrow.com

Any good, average garden soil that grows vegetables well will also grow tree peonies well. Soil that is fertile, well-aerated, well-drained but evenly moist, and high in organic matter with a pH of 6.5 to 7.0 is ideal. They should never be planted in soggy soil, in an area where water stands, or near a lawn sprinkler; they'll simply get too much water. If creating a bed for tree peonies, incorporating organic matter is a good idea, as is adding a high-phosphorous fertilizer such as 5-10-5.

Tree peonies are available either in containers or as bare root plants. In either case, wait until late summer or fall to purchase plants. In buying bare root peonies, look for plants with healthy, firm, slightly dull pink buds that have not yet started to grow. Try to buy third and fourth year grafts; they will be more expensive, but they'll bloom sooner than younger plants.

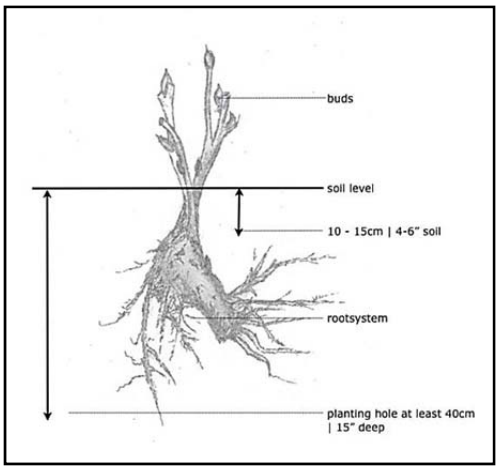
'Souvenir de Maxime Cornu,' Photo Courtesy of Klehm's Song Sparrow Farm and Nursery, www.songsparrow.com

Tree peonies require patience. They may not bloom the first year or even the second year after planting. By the third year, however, they should start to bloom although the bloom may not look like the plant you thought you purchased. Wait a year or two, and all will be well. It simply takes time for them to settle in.

To get them off to a good start first, dig a hole two feet wide and deep in your prepared bed. Now, it's time to plant.

To plant tree peonies correctly, it is useful to know how they begin their lives. Some are grown on their own roots, but most are grafted onto the roots of other peonies, called the nurse roots. Some are grafted onto the roots of other tree peonies, but most are grafted onto the roots of herbaceous peonies. Occasionally a shoot will arise from the nurse root stock, particularly if the peony wasn't planted deep enough. If this happens, cut the shoot off immediately.

When planting a bare root tree peony it is essential to plant the graft union at *least* four inches, preferably six inches, below the soil so that the woody stem above the union touches the soil and is encouraged to grow its own roots, which can take a few years. The union will be clearly visible as a bulge at the base of the stem, just above the roots. Plant potted tree peonies with the top of the soil ball at



Planting depth. Illustration courtesy of Graefswinning Peony Nursery, Belgium, www.graefswinning.be/en/

ground level.

Once you've planted the peony, water it thoroughly and mulch it to retain soil moisture, being sure not to let the mulch touch the stems.

While tree peonies are somewhat drought tolerant, they do prefer moist soil and will not thrive in very dry weather unless watered. This is especially true during the first year or two when they are making roots on the woody stems below ground. And it is essential that they have adequate moisture throughout the growing season to flower well the following year. Water once a week whenever there is less than one inch of rainfall, being careful not to wet the leaves when watering. This is especially important if it is dry during the bloom season and in the fall when the buds for the next year's flowers are being set.

If planted in a specially prepared bed into which fertilizer was incorporated initially, it won't be necessary to fertilize again for several years. When it is necessary to do so, use a high-phosphorous fertilizer such as 5-10-5 about a month after blooming. Avoid high nitrogen fertilizers and don't over fertilize!

'Dorie's Pink,' Photo courtesy of Cricket Hill Garden, www.treepeony.com

Pruning is rarely needed and usually consists of removing damaged or dead wood or minor shaping in the spring, after the buds have just begun to swell but before the plants start to grow. When dealing with dead wood, cut the branch on an angle just above the first live bud, with the cut slanting away from the bud. You will also want to nip off spent flowers in the spring to tidy up the plant. In the fall, remove and discard dead leaves. For very old plants, it may be necessary to thin the interior somewhat, removing crossing branches that rub against each other, for example, and to encourage air circulation. *Never* cut tree peony stems back to the ground!

After the first year or two, once tree peonies have settled in, they will require very little care other than occasional watering during dry spells, and you'll be rewarded with years of gorgeous flowers for the pains taken in starting them off correctly.

Once they have settled in, you may cut flowers for arrangements, but cut them with short stems no longer than six inches, and cut before the flowers are fully open. Because of their size and the need to cut short stems, the flowers are commonly floated in a bowl rather than used in traditional flower arrangements.

By Lina Burton, Loudoun County Extension Master Gardener

Peonies in the landscape. Photo courtesy of Cricket Hill Garden, www.treepeony.com

Successful Gardening: More Learning From Knowledge

It may be a roundabout way of referring to continuing education, but interest in further learning begins with knowledge. That is so true in gardening and landscape endeavors.

It begins with the urge or need to garden and grow anything, whatever the scale. There is, for example, the condo dweller with a sunny balcony and a pot of tomato companion-planted with basil and marigold. Then there is the garden aficionado with a garden oasis in a quarter-acre lot. And then you have the landowner with five acres and a large canvas to work with. All want to succeed somehow. Even the most casual gardener will be faced eventually with a nagging need to learn more in order to do right by a lone container of struggling annuals that are supposed to be fail-proof with the proper knowledge.

Now that the gardening seasons are almost over and more gardening experience is behind us, what more have we learned to guide us along? Here are examples to share:

Viburnums and Cross-Pollination?

Oh, the much-trumpeted four-season interest of viburnums! Those oh-so-glorious berries adorning viburnums in the fall through winter are candy for our eyes and a treat for the birds! So, we made sure we planted a few of them in our gardens. We chose varieties we knew would be amazing. Fragrant Koreanspice (V. carlesii), native Blackhaw (V. prunifolum) and Arrowwood (V. dentatum). But then we noticed later, they bloomed so nicely in the spring, as always, yet they have never produced berries since we've had them! Just what went wrong?

Koreanspice viburnum (V. carlisii) in the spring

The Answer: Cross-pollination. Viburnums are generally monoecious (flowers with both female and male organs), yet they are not self-fertile. To produce those desirable berries, viburnums need to cross-pollinate, and that can get quite tricky. There must be a compatible viburnum nearby that is from the same species but of a different cultivar, definitely not a clone or genetically identical. It is also necessary that blooming times coincide for pollination activity to work.

So merely planting various cultivars to make a collection of this wonderful genus, or planting several of the same cultivar for a sweeping effect, will give three seasons of beautiful display; sadly, with no guarantee of berries. Want those viburnum berries? Find out more about viburnums already in your yard or those you want to have and pair them up for proper pollination.

Thistle Weed, or Is It?

Do we know all we need to know about thistles? Most likely not. What quickly comes to mind is that thistles are undesirable weeds, e.g., Canada thistle (*Cirsium arvense*), an invasive that we pull out to toss almost automatically. Thistle, bad! We won't even think right away that the vegetable artichoke (*Cynara scolymus*) is also a thistle. Or that the blue-flowered perennial globe thistle (*Echinops ritro)* is a thistle cousin. Most thistles, wanted or unwanted, belong in the very large Asteraceae or composite (sunflower) family.

Now, the "thistle seeds" we put in goldfinch feeding socks or tubes, although they are in the Asteraceae family too, are not from thistle plants but are cultivated nyjer seeds from the African yellow daisy plant (*Guizotia abyssinica*). Previously mostly imported, nyjer seeds are required to be sterilized for importation. That is to prevent germination and dispersion of any noxious exotic

weeds inadvertently mixed in their packaging. Since nyjer seeds are sterilized when they enter the country for bird feeding, they would not become invading weeds in our gardens. There would be no free nyjer (not thistle) seeds from yard volunteers. Incidentally, this desirable bird food is expensive as an import, but the United States now produces nyjer for commercial distribution.

About desirable volunteers, here is another thistle-related curiosity. Do you feed birds with

safflower seeds? If these seeds are in wild bird food mixes, you probably do not think much of them. But what if some of those ' fall on fertile ground, sprout, and grow? You probably will not notice because they look like common thistle weeds. You could have been pulling them out all these years not knowing that they are desirable bonus safflower plants! Also called American saffron, or Mexican saffron and edible, safflower is at least a good culinary colorant. It may not be a flavor substitute for the expensive spice saffron from the crocus plant (*Crocus sativus*), but should you have volunteer safflowers growing in your garden, it is worthwhile to identify them and not just pull them out like you automatically do with pesky weedy thistles.

Shown here is that volunteer that may be sprouting near bird feeders in your yard--**Safflowe**r (*Carthamus tinctorius)*, thistle-like only, also in the sunflower family, definitely not thistle weed. It could be a good find with welcome use in the kitchen.

Safflower Notes:

May be mistaken for thistle weed because of the sharp prickles and the flower form, and you did not plan them. The natural source of healthy monounsaturated (more common) and polyunsaturated safflower oil for cooking. Commercial production is concentrated in the western part of the United States because it requires warm temperatures and sunny, dry conditions. Does not like humidity, so what few volunteers grow in our area can be put to good use as a food coloring treat.

Here's related good reading: http://www.motherearthnews.com/organic-gardening/volunteer-plants-zmaz80mjzraw

Left for Dead or Maybe Not?

Have you been surprised by plants you had thought were gone and almost tossed in the compost heap or yard trash bin? Plant loss is a reality of gardening; there are successes, and there will be failures. Those who garden are well advised to consider plant fails as part of the learning experience. After all, gardening is supposed to be somehow therapeutic too. We try our best, but there is no point in dwelling on the disappointments.

But then again, how about being open to the experience and learning? Here is what happens even with little thought or care about plant fizzles:
This was from an annual caladium (*C. bicolor*) plant enjoyed in a shady side of a container garden and brought inside for overwintering. Soon it wilted and dried up to nothing. Dug up from its indoor pot for disposal, the tuber looked still viable. It was shoved back into the pot soil and forgotten. When that pot was put outside for the spring and summer, look what came out.

A variation of that experience is when a gardener wishfully sticks in soil an inadvertently severed healthy-looking stem. Surprisingly it roots and starts a new plant. That happens almost always with, for example, wintercreeper (*Euonymus fortunei 'Emerald Gaiety'*) and germander (*Teucrium x lucidrys*).

When a plant fails or dies, many gardeners will choose to move on by shopping for a replacement. Either that, or those who have the time, expertise, the inclination, or who are constrained by a limited plant budget, will not accept that the investment is simply down the drain. Then one works at trying to save it in any possible way. Some of the most satisfying gardening experiences include propagation, planting preferred re-seeders, and getting volunteers, and to the connoisseurs, hybridizing or discovering desirable mutations. Knowing that one has saved a supposedly dead plant is another.

Enough of those experiences can encourage a gardener to learn more about the characteristics of plants and thus become more systematic in giving seemingly dead plants and tossable cuttings a chance. We don't know what we don't know, and imagine the welcome gardening surprises we missed all these years! It need not be too late.

Learning more for successful plant saving:

This semi evergreen broad-leafed shrub abelia could have been pulled out and tossed. It was a two-foot-tall shrub when purchased in the fall. It was fine all through the winter and looked great in the spring with reddish-pink growth. And then the unexpected spring freeze. It languished, turned leafless, and looked dead, other than for the barely green scratched under the bark. With the dead wood removed, plant not pulled out, here it is by July.

Other efforts to save nearly dead plants (e.g., root rot on Heuchera) include relocating or replanting still viable plant parts or keeping a holding nursery bed.

There are legendary stories of progeny of nearly lost plants now still with us because of gardening hands' need to learn more and do more, not giving up. One good example is the Liberty Tree seedling dedicated and celebrated at Rust Library, Ida Lee Park, Leesburg, on August 4, 2017. It will be planted at Ida Lee, cared for by Loudoun County Extension Master Gardeners.

Photo by Barb Bailey

This was what happened that gave us the seedling: "*Liberty Tree Is Felled*." (*10/99)*

Annapolis's famed Liberty Tree is no more. In a brief ceremony on the campus of St. John's College this morning, several hundred people bid a fond farewell to the majestic tulip poplar that in 1775 sheltered rebellious Maryland colonists dreaming of a new nation. "Here the seeds of revolution were planted for this country and the world," Gov. Glendening (D) said. "We say farewell to an old friend." After the Liberty Tree was badly damaged during Hurricane Floyd last month, experts advised St. John's that it was in danger of collapsing and should be cut down for safety reasons.

This seedling is a bud-graft from that felled 400-year-old tulip poplar (*Liriodendron tulipifera*) in Maryland that was the last remaining of the original 13 (colonies') Liberty Trees. Virginia will have three planted across the state. In caring for a Liberty Tree descendant, Loudoun County helps keep our nation's history alive and within reach. https://www.providenceforum.org/project/liberty-tree/

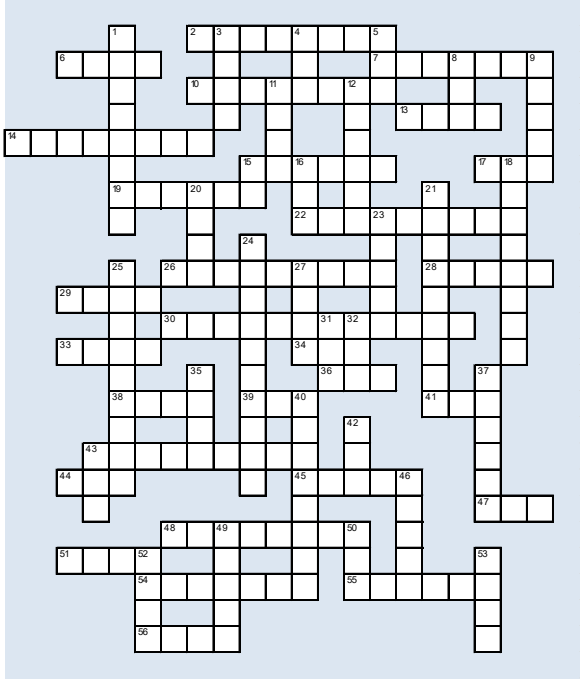
Click here for the full history from the *Smithsonian* magazine.

Times have surely changed when it comes to research and learning. In fact, an explosion of easily accessible information sources exists. New learning can be made reliable by how carefully we consume information. It is quite believable for a casual gardener to turn expert because a gardener, in dealing with nature, just cannot avoid wondering what, where, why, how, and even who, along the way.

Maria Daniels, Loudoun County Extension Master Gardener

Green Thumb

Note: The puzzle can be viewed and solved online using the following link:
https://CrosswordHobbyist.com/339353

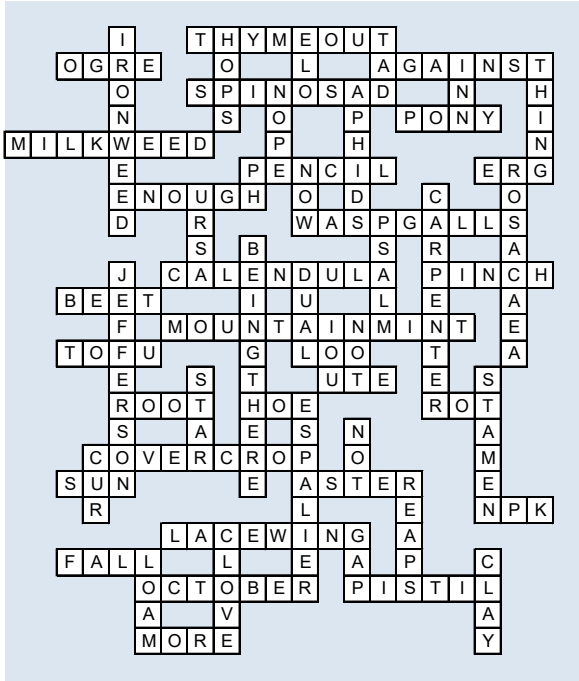


Across

2 Take an herb break?
6 Shrek is one
7 Not for
10 Organic pesticide derived from sugarcane bacterium
13 Small horse
14 Favorite of monarch butterflies
15 Most common is a number 2
17 Unit of energy or work
19 As much as required
22 Nodules may be found on oak leaves
26 Pot marigold
28 Do this to encourage plant branching
29 Red root veggie
30 Plant that's good for pollinators and repelling mosquitos
33 Soy milk curds
34 Bathroom in Leeds
36 Univ. of Utah alumni
38 Part of plant that absorbs nutrients and moisture
39 Long handled garden tool with metal blade
41 Noble ___ (affects grapes)
43 Adds organic matter and nutrients to soil
44 Turns potatoes green
45 Fall flower whose name comes from Greek word for star
47 Primary plant nutrients
48 Beneficial insect whose larvae are aphid predators
51 Best time of year to fertilize a lawn
54 Month of first frost in Loudoun
55 Female part of flower
56 ____ or less

Down
1 Veronia spp.
3 Gives beer its aroma and flavor
4 '70s English rock band
5 A little bit
8 Lodging for travelers
9 Addams family hand
11 Opposite of yup
12 Tiny insects causing curled or distorted leaves
15 Measure of soil acidity
16 ____ and then
18 Apples and cherries belong to this family
20 Latin bear
21 Type of bee or trade
23 150 of these in the bible or the torah
24 Chauncy or Chance's movie
25 Founding Gardener?
27 Consisting of two parts or aspects
31 Debt document
32 Makes negative
35 Anise shape
37 Male part of flower
40 Fruit trees can be grown this way
42 She loves me, she loves me ___
43 Mongrel
46 Harvests
49 Piece of garlic
50 Space between
52 Type of soil we all wish we had
53 Finest particles in soil

Answers



David Long, Loudoun County Extension Master Gardener

Notes From the Help Desk

Why are my Yoshino cherry trees dropping their leaves in August? Early leaf drop of this decorative cherry tree seems to occur in our area every August. The most likely reason is excessive heat. Although a source from the North Carolina Extension Office said early leaf drop of decorative cherry trees was normal, based on my observations of my neighbors' trees, the Yoshino cherry tree (which has single pink blossoms) as opposed to the Kwanzan variety (which has double pink blossoms) seems more susceptible to early leaf drop. But there may be other factors contributing to this condition. These factors include environmental or cultural factors, disease, or insects. Moreover, when a tree is under stress due to one factor, others such as diseases and insects may also attack. Some common factors follow:

Environmental or Cultural Factors:

- Poor or heavy soils may cause cherry trees to decline.
- Overwatering or excess rainfall may cause the leaves to yellow and drop. Poor drainage can add to the problem.
- Drought periods during the summer may stress the tree, which reacts by dropping its leaves early.
- Excessive heat is a common condition in our area.

Diseases:

- Root rot occurs in overly wet soil.
- Bacterial canker may occur--look for dark gum oozing from the bark.
- Cherry leaf spot is a fungus that favors wet conditions for infection and temperatures between 60 and 68 degrees. Look for purple lesions on the leaves.
- Bacterial leaf spot causes brown to black leaf spots, numerous small holes on leaf surfaces, leaf yellowing, and leaf drop.
- Other possible diseases include bacterial shot hole, bacterial scorch, black knot, cytospora canker, and white rot.

Insects:

- Scale--look for these insects on the twigs and leaves.
- Spider mites--look for spider webbing and tiny crawlers.
- Caterpillars--look for an infestation because caterpillars can cause defoliation.

If your ornamental cherry shows any of these conditions and it is a valuable part of your landscape, it may be in your best interest to hire an arborist. This professional can perform an on-site inspection and recommend an appropriate treatment. Otherwise, you can bring your unhealthy leaf samples to the Help Desk for identification. We in turn will recommend treatment. One final thought--not all trees with early leaf drop may be suffering from the same factors as cherry trees. Defoliated walnut trees may suffer from walnut anthracnose, sometimes called leaf blotch, which is a widespread destructive fungal disease.

Margie Bassford, Loudoun County Extension Master Gardener