Trumpet Vine

Knowledge for the Community from Loudoun County Extension Master Gardeners

Summer 2020

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LOUDOUN COUNTY EXTENSION MASTER GARDENER LECTURE SERIES

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Turn to Your Garden

A theme that runs through much of this edition is the peaceful, healing, and nourishing effects of gardening. Whether your garden is a large vegetable garden, a pot of herbs, beds of perennials, a small plot of cutting flowers, or a patch of native plants in a naturalized area, it can be rewarding and beneficial in so many ways.

Take advantage of this opportunity to observe your garden closer and more frequently. Make daily careful observation of your plants; sometimes you can see overnight growth!

Stroll with your coffee in the morning, slow down, putter and enjoy. Be safe, be contented.

Taken in the Ida Lee Demonstration Garden. Photo by Normalee Martin.

Master Gardeners Continue to Work

"Though COVID-19 has halted many of the in-person events that Virginia Cooperative Extension has historically held, it hasn't slowed Extension agents, specialists, and administrators who have brought many of the in-person experiences online, which has resulted in some unique and impactful educational opportunities." (Virginia Tech news)

Starting in April, the Master Gardeners began presenting online Zoom classes on vegetables, tree care, compost, landscape design, and more. Please find all VCE Loudoun recorded webinars here: https://www.agroecologyhub.info/recorded-webinars.html.

Master Gardeners are still working the vegetable area of the Demonstration Garden, following Gov. Northam's distancing guidelines, to grow and donate food to Hunger Relief.



Vegetables to be donated to Loudoun Hunger Relief. Photos by Normalee Martin.

As Phase 1--Safer at Home--permits a slightly more relaxed environment, volunteers in Phase 1 are addressed, and the CDC recommends limiting volunteers unless essential. Therefore, all in-person Master Gardener activities are still suspended. Even with so many regular activities shut down due to COVID-19, **Master Gardeners can still offer help!** If you have a problem in your home garden, whether insect, disease, or other, our members can remotely research your problem and provide unbiased research-based solutions through our Virtual Help Desk. E-mail a description and photos of your gardening problems to **loudounmg@vt.edu** or click here for more information on our Help Desk: http://loudouncountymastergardeners.org//gardening-advice/help-desk/.

Loudoun Extension Master Gardeners can also do a virtual talk for your organization. Check out the list of topics on the Speakers Bureau page: http://loudouncountymastergardeners.org/programs/speakers-bureau/.

Phase 2 for volunteers is yet to be determined. While Gov. Northam's recommendation allows for up to 50 individuals to gather, there is still a social distancing and mask requirement. We will have to assess what can open at that time. Please check the website for updates: http://loudouncountymastergardeners.org/.

Barbara Bailey, Community Engagement Coordinator, Loudoun Extension Office

What to Do with All That Summer Squash

As our harvests of lettuce, spinach, and other spring greens start to decline or become bitter, we shift our focus on how to prepare and use the abundance of summer vegetables that are weighing down our trellises, overflowing our gardens, and filling the farmers market.

One vegetable in particular can sometimes make even the most adventurous cooks pause or search the Internet and cookbooks frantically for new ideas: the summer squash. Because summer squash is fairly easy to grow and produces tasty fruit in abundance (just one plant can have you harvesting its fruit several times a week), it is a favorite among home gardeners and is a commonly grown vegetable in this area. From the basic straight neck, crookneck, and zucchini to the fancier patty pan and scalloped varieties, summer squash is suitable for any event from casual family picnics or quick weeknight dinners to fancy appetizers or dinner club dishes.

Harvesting, preparing, and storing summer squash is easy. Harvest summer squash when it is small, around 4 to 6 inches. Harvesting size is key. The smaller the fruit, the more water content, which might not be good for adding to eggs. Larger fruits have a lot of seeds and a pithy texture. Growing the largest squash in the neighborhood is fantastic for bragging rights, but if you want it for cooking, harvest when smaller for the best taste and texture. If you do forget to check your vines for a day or two, you might be surprised to find a very large squash. Do not fear! Cut immediately to aid in continued production from the plant and discard, give to the chickens, compost, or save for a fall display. To harvest squash, cut with a knife and leave a bit of the stem on the plant and store unwashed and tightly wrapped in the refrigerator--no snapping, digging, or peeling required.

The antioxidants and most nutrients reside in the skin of summer squash and add texture and flavor to your dish. With just 36 calories per cup, summer squash is a good source of vitamin C, magnesium, manganese, vitamin A, zinc, and fiber. If you need just one more reason to think that summer squash is cool, the flowers of summer squash are edible and even if not part of the main dish can be used as a beautiful garnish.

Photos by Thersa Hutton Sherman.

Summer squash pairs well with many ingredients. Basil, dill, oregano, and mint all complement the flavor. Other ingredients that I regularly use to accompany squash include cheese, peppers, tomatoes, corn, pine nuts or walnuts, and eggs.

Here are a few ways beyond the common casserole to use those prolific summer squash harvests or to focus your recipe searches.

1. Grill--Slice squash lengthwise, sprinkle with oil, salt, pepper, and your favorite seasoning and throw it on the grill alongside whatever else you are grilling.
2. Raw--Simply grate it onto your salad.
3. Sauté--Heat a bit of oil and sauté with other vegetables like tomatoes and peppers to eat alone or use in eggs, over pasta, in rice, or with another grain.

4. Stuff it--The options are endless. Stuff with ground turkey, cheese, or other summer vegetables just as you would stuff peppers or tomatoes.
5. Fry--I think this may have been the only way we ate squash when I was a kid. Simply slice the squash and coat with breading of egg, flour, salt, and pepper and place in a pan of hot oil until bubbly and crisp. You might also try it as a vegetable cake, a vegetarian version of a crab or salmon cake substituting the squash in place of the seafood.
6. Save--This can be tricky. Because of its high water content, squash is a bit difficult to store for the long term. The raw fruit does not generally freeze well although blanching helps. I have been most successful with drying or freezing it after using in sauces or stewed dishes like ratatouille.
7. And of course, make it into bread. Just ask anyone and I bet at least one out of three people that you encounter has a zucchini bread recipe. As a bonus, you can use that oversized zucchini for bread.

Easy Squash Bruschetta Recipe

Slice a baguette and drizzle lightly with olive oil. Bake in a 350-degree oven for eight minutes or until slightly golden. Rub with peeled garlic once the baguette is cool enough to touch. Spread ricotta cheese onto the baked bread. While the bread is toasting, dice summer squash and sauté in a teaspoon of olive oil over medium heat for a minute or two until cooked but not soft. Remove from heat. Add a teaspoon of fresh basil, a teaspoon of lemon juice, and salt and pepper to taste. Place the squash mixture on top of the ricotta covered baguette slices and serve warm.

If you have a renewed appetite for squash and you didn't include it in your garden, never fear. Summer squash loves the heat and our weather in this area. It's not too late to plant. Summer squash germinates easily from seed in just 7 to 10 days and most plants will produce squash in 40 to 50 days. Plant seeds in nutrient-rich soil in full sun. Enjoy!

Thersa Hutton Sherman, Loudoun County Extension Master Gardener

Growing Bok Choy Using Row Cover

My family buys bok choy (*Brassica rapa* subspecies *chinensis*) on pretty much every single grocery run. It's a versatile vegetable that works well in stir fry or in soup. This year I made sure to make room for it in my space-constrained townhouse backyard. Since this is my first year to grow bok choy, I researched ways to control pests without resorting to pesticides. I came across the use of row cover as a physical barrier to deter pests and decided to give it a try.

All photos by Eric Ti Yu Chiang.

As I investigated which row cover to buy, I found the fabric thickness could range from 0.5 to 3.0 ounces per square yard. I opted to go with a lightweight fabric at 0.5 ounces per square yard because I'm not too concerned about the fabric's temperature-regulating capability. Aside from preventing pests, row covers are primarily known as a tool to extend the growing season because row covers can trap heat from the soil. A more in-depth look at row covers can be found at VCE publication*: Low Tunnels in Vegetable Crops: Beyond Season Extension*. I learned that certain nonwoven fabric row covers can be placed directly over plants or over hoop structures. I wasn't sure if bok choy was considered a delicate vegetable, so I thought using a hoop structure was a safer choice. Typically, hoops are made of thick wires, PVC, metal pipes, or some other sturdy material that can be bent to a semicircle shape and withstand wind. I have a roll of hardware cloth, so I figured making semicircles out of it could be a reasonable substitute. The areas in which I planned to plant bok choy are two beds of 3 by 5 feet. So I cut two pieces of hardware cloth measuring 3 by 4.5 feet to form semicircles that serve the same function as hoops. The length of the semicircles (3 feet) are somewhat shorter than the length of the beds (5 feet) because I wanted easier access to the beds without having to move the hardware cloth.

On the day I planted bok choy, I made sure the row cover was ready to install. This is because using a row cover as a barrier to control pests is most effective when it its installed right after planting. If I planted first and waited a few days before adding a row cover, cabbage worms and aphids might get to the bok choy before I did! Two minor details I overlooked but was able to address on the spot were: 1) how to secure the row cover so it doesn't get blown away by the wind and 2) how to irrigate the beds. There are many ways one could hold the row cover in place. I opted to use a combination of soil nearby and some leftover tiles I had lying around. Since the size of the bed I have is relatively small, any item with some weight would have done the job as well. On the irrigation front, fortunately, the nonwoven fabric material of the row cover I chose allows water to permeate, so my default approach of overhead watering still works. If I were to use a nonpermeable row cover material, some type of drip irrigation system would have needed to be set up for the beds to make it a viable choice.

About a month after planting bok choy, I noticed there were a couple of holes on one of the beds with row cover. It appeared to be due to strong winds rubbing the fabric against the hardware cloth. I entertained the idea of adding another layer of fabric to cover the holes but thought it might do more harm than good. The fabric I used permits light transmission of 85 percent. Adding another layer would reduce light transmission and water permeability. For now, I'm leaving the holes as is, treating this as an opportunity to experiment. I will continue to monitor the difference between the beds over time. So far, the bed with the holes has little pest damage. Fingers crossed!

First harvest.

Looking back at my initial use of row cover, I realized that hardware cloth is a makeshift choice to make a hoop structure because it has a relatively rough surface that has the potential to rip the row cover fabric. I also wondered if placing the fabric directly over bok choy plants would have been sufficient. If so, the set-up work would have been much more straightforward! Next time I might want to try using pegs or pieces of lumber to fasten the covers to the ground and to hold the covers in high winds. Apparently, fall season is more ideal for planting bok choy because one wouldn't need to worry about plants bolting. So, when the fall season approaches, I could even test using row cover as a season extender!

Eric Ti Yu Chiang, Loudoun County Extension Master Gardener Intern

Companion Planting--It's Not Too Late for Flowers and Herbs!

Three years ago, after having purchased a farm with my family, I designed a massive vegetable garden: beautiful, straight, neat rows with one plant type per aisle. It was so, well… *orderly*. I proudly showed the plan to a dear friend and she promptly taught me about companion planting. Then she sent me the book she used to create her own garden: *Great Garden Companions* by Sally Jean Cunningham, Master Gardener, Cornell Cooperative Extension. I was so excited as I read through the book. Then, with a sigh, I tossed my neat garden plan into the recycle bucket!

What quickly drew me into the concept of companion planting was its holistic view of the garden. Certain plants complement each other. They grow well together, just like they do in nature. Other plants are pollinators and draw in beneficial insects. Those insects may help control populations of bad insects that could destroy a part of your harvest. By interspersing flowers and herbs in the garden, it may also make it harder for the bad bugs to hone in on the vegetables that are hiding behind them. This means less (or no!) pesticides. In this scenario, the garden becomes a community where the members rely upon each other. The basil scent covers the tomatoes. The pole beans climb up the sunflowers. The ladybugs are attracted by the flowers and then gobble up the aphids.

Another important topic in the book covered the concept of "neighborhoods." By breaking your garden into smaller plots, you can design the plant community within each, their preferred crop cover or mulch, and the rotation plan to keep them moving along year after year. This helps avoid promoting disease and infestations of undesirable insects. The mulch helps to keep down weeds and hold in water.

I have since embarked on what I consider to be one of the most wonderful adventures I have ever experienced. The garden plan transformed into a mix of crops, all in their designated neighborhoods, according to a rotation plan. All had flowers and herbs mixed in to delightful effect. The abundance of insects has been eye opening. I have shed the notion of the perfectly

Lettuce palace with cosmos.

Beans, cucumber, and sunflower.

Praying mantis with prey!

Photos by Katie Conaway.

neat, orderly, and weeded garden. It is wild out there! And it's so much more enjoyable.

Asparagus with cone flowers and thyme. Photo by Katie Conaway.

The tomato neighborhood is mixed with loads of basil, parsley, cosmos, aster, and a few pepper plants. The cucumbers run up nets over the bush beans with a few sunflowers thrown in. The lettuce beds have cosmos and thyme popping up between their beautiful heads. The asparagus is surrounded by oregano and coneflowers. And the strawberries--well, they are marching along making themselves companions to everything they can reach!

While it may be a little late to redesign your garden this year, it is not too late to tuck in some flowers and herbs. You also have lots of time to read about companion planting and plan for next year.

Below is a brief outline of the types of typical garden neighborhoods, their companion plants, flower and herb friends, preferred mulch or ground cover, and rotation timing.

Enjoy your garden journey!

Neighborhood	**Companions**	**Friends**	**Mulch,Groundcover**	**Rotation**
Tomato	Tomatoes Peppers Eggplant Greens	Basil Cosmos Parsley Tall Asters	Black Plastic Clover	4 years
Potato	Potatoes Beans Peas	Cosmos Daisies Dill Rosemary	Straw	3 years
Cabbage	Cabbage Lettuce Root Crops	Asters Marigolds Rosemary Sage Thyme	Sweet Alyssum Dwarf White Clover	2 to 3 years
Squash	Squash Corn Pole Beans	Borage Dill Nasturtiums Sunflowers	Straw	3 years
Roots & Greens	Carrots Greens Onions	Cosmos (dwarf) Dill Fennel Aster (short)	Grass Clippings	2 years
Perennial	Asparagus Horseradish Strawberries Rhubarb Raspberries	Borage Sweet Alyssum Chives Asters Bee Balm Cosmos Dill	Strawberries: Pine needles or straw Asparagus: Black Plastic or Buckwheat	N/A

Source: *Great Garden Companions* by Sally Jean Cunningham.

Katie Conaway, Loudoun County Extension Master Gardener

A Sunchoke Story: One Gardener's Encounter with Jerusalem Artichokes

Uta Brown, of Purcellville's Crooked Run Orchards, introduced me to Jerusalem artichokes one fall day 12 years ago. She explained that they are a kind of sunflower whose roots, or tubers, are edible. I was intrigued, so I went home and looked up the plant to see if I should accept her offer of sharing some.

Jerusalem artichoke (Helianthus tuberosus), also called sunchoke or earth apple, is a species of sunflower native to central North America. A tender perennial that stores its energy in a tuber for the winter, it generates a plant up to 6 feet tall with cheery bright yellow blooms in the late summer. What it's best known for, though, is its edible tuber, which resembles a ginger root and has many attributed nutritional benefits. Early settlers to North America learned about the sunchoke from the Native Americans who had cultivated it as a food crop for centuries!

Jerusalem artichokes got their name from the early Italian settlers to the United States who called the plant by the Italian word for sunflower: girasol, which morphed into "Jerusalem." The artichoke part of the name refers to the flavor of the edible tuber, which is artichoke-like. Sunchoke is the modern-day name. It's easier to say, too.

Jerusalem artichoke
Helianthus tuberosus.
I Michigan State Universityhttps://www.canr.msu.edu/news/jerusalem_artichokes_tasty_and_versatile.

I decided to give it a go. Back at Crooked Run Orchard, I followed Uta through the paths softened with late season folded grasses to a stand where the flowers were blooming as tall as I! With a pitchfork, she began digging in the soil at the bottom of the stems. About 6 inches below the soil line, she hit some knobby tubers. She dug out and gave me three of them. "Won't that disrupt this plant?" I asked? "No," she replied, "you can't kill Jerusalem artichokes." I learned these were prophetic words.

The days passed that fall, and I forgot to plant my gift; the tubers shriveled into shrunken wrinkled brown pods, half the size of their robust selves. Voicing silent apologies to Uta and her plant for their sacrifice, I tossed the spent tubers in the trash and thought no more of it.

The story resumed in fall 2018, when I received an offer from my friend, neighbor, and fellow Virginia Extension Master Gardener, Betty Hedges. She offered me a bag of sunchokes that she had picked up on the bargain rack at Harris Teeter for $1. "Each bag has about 15 tubers. Would you like one of the bags?" Seeing an opportunity to redeem my previous failure, I said "YES!"

The bag she dropped off contained shriveled, wrinkled tubers like the ones I'd tossed before. I dove into the Internet again to learn that these old tubers were likely still viable.

Sunchokes will grow in just about any soil, even our dense clay here in Loudoun. But they produce great yields in loose, well-aerated soil. You plant sunchoke tubers similarly to potatoes: place a tuber, or a part of a tuber containing some buds, about 3 inches deep and about 2 feet apart either in late fall or early spring.

Spring came, and I had not yet decided where in my yard I wanted to plant the sunchokes, so I decided to plant four tubers in one of my raised veggie beds. Sunchokes like loose, well-aerated soil, right? I figured I'd let them grow there for the year, and then harvest their tubers to get a few to eat and replant the rest in the yard. The 4-foot by 4-foot bed was shared with sage, rosemary, oregano, thyme, and basil plants.

Once their shoots come up in mid to late spring, little care is required for sunchoke plants. However, water is essential, and they'll do best if they get an inch per week. Similar to potatoes, they are ready to harvest when the plants begin to brown in mid-fall.

Gina harvesting sunchokes. Photo by Cynthia Morris.

Two of the tubers soon shot up sprouts quickly; the other two must have rotted. Throughout the season, they grew ecstatically, amazing me like all sunflowers do with their vitality and vigor. Multi-stemmed with wide leaves, they towered over the herbs. While they muscled out the sage plants, they provided well-appreciated shade for the basil so that I was able to harvest it through July!

In late October, it was time to put the garden to bed. My friend Cynthia was there, helping me wrestle tall okra skeletons, and pulling dry pepper plants out of the soil while I prepped for my sunchoke harvesting with pitchfork and gloves. As with potatoes, you want to use a pitchfork to harvest so as to loosen the soil but try to avoid puncturing the tubers.

I was not prepared for the immense harvest from these two plants! I filled a paper grocery bag three quarters full of the tubers I harvested--way more than I could eat and/or plant for myself! I offered tubers to my Master Gardener friends, to the neighborhood gardeners, and to the Lovettsville Garden Club members via email and Facebook.

A neighbor, who is also a Brunswick, Maryland, newspaper reporter, asked to do a story on the sunchoke sensation, and the story of my shared bumper crop was published in the *Brunswick Citizen* in November 2019 with an article by John Flannery.

I roasted the sunchokes for snacking and even made sunchoke soup! There are tons of online recipes for roasted sunchokes. The one I made was Jerusalem artichoke and potato soup that called for roasting the sunchoke tubers first. I snacked on several roasted ones while I was making the soup--they were good!!!

Simple Roasted Jerusalem Artichokes

Wash tubers thoroughly and cut off any eyes or rootlets. Cut larger tubers into 1-inch pieces. Toss any number of tubers in a bowl with a tablespoon or two of olive oil and add a generous pinch of salt. Place tubers in a single layer atop a layer of parchment paper in a shallow baking dish or on a cookie sheet. Roast in a 350-degree oven for 25 to 40 minutes, optionally turning once or twice until tubers are soft to the fork. Enjoy!

A bowl of freshly harvested sunchoke tubers. Photo by Gina Faber.

Did you know that Jerusalem artichoke tubers have health benefits? A source of carbohydrates, they are high in fiber, folate, and iron. Edible raw or cooked, sunchoke tubers can help you maintaining a desired blood sugar level and control your cholesterol level because they help the body metabolize fats at a fast rate.

Though I gave away most of the tubers I'd harvested in that famous bumper crop, I saved a few to plant against the fence in my yard. My lawn soil is typical of new development: very little topsoil, lots of clay, and a variety of sizes of rocks. I expect the tubers will be quite a bit more contained in this very different environment from the raised bed. My goal is a nice seasonal "hedge" of sunflowers along the fence, with the ability to control any wandering rhizomes by mowing.

Epilogue: This past March, I planted spinach and radishes in the raised bed from which I had harvested last fall's bumper crop of tubers. By late April, the radishes came up and the spinach started supplying us with salad leaves. A week or so later, though, the bed surprised me by popping up dozens of little sunchoke plants all throughout the 4 feet by 4 feet of its extents. This outcome will not surprise you sunchoke veterans, but it was a surprise to me!

First sprouts this spring of fence-trained sunchokes.

Again, armed with my pitchfork, I dug down into the light winter-rested soil and pulled out another bumper crop of tubers, many of them 9 to 10 inches below the surface, deposited in all the far corners by those two initial plants last year! I've been pulling up dozens more sunchoke plants through May, reaching down to harvest more and more tubers, hoping that I'll soon see the end of the volunteers! After offering tubers to friends and fellow gardeners, I still have some left. I guess I'll be eating sunchokes next week. Maybe I can come up with a healthful sunchoke breakfast muffin!!!

Surprise sunchoke sprouts next to cilantro and spinach in this year's spring garden. Photos by Gina Faber.

At press time, I hope I've gotten to most of those hidden gems, and I'm looking forward to continuing my experiment with sunchokes in the safety of the fence hedge, where I can grow and harvest while still maintaining control of this plant's vigorous growth habits!

Gina Faber, Loudoun County Extension Master Gardener

Plant Detective

To me gardening is both relaxation and exercise. I love the quiet time for contemplation as I sit and pull weeds. I also appreciate the physical exercise of digging up and moving plants or rebuilding a retaining wall. I enjoy walking around my garden early in the morning with my camera in hand to capture new growth or signs of the critters who visited overnight. It gives me a chance to notice anything that needs my attention or points to my gardening tasks for the day. Sometimes my morning walk points out a problem that leads to my least favorite gardening activity: researching its cause.

Being a gardener means I have to be a science detective now and then. I spend much of my Extension Master Gardener time volunteering with the Children's Education Team. One lesson I offer is on the importance of careful observation as part of the scientific process. The process includes asking questions and defining a problem, investigating and making observations, describing patterns, interpreting and analyzing data, and developing solutions. If I want to be a successful gardener, I have to move this process from the theoretical to the practical to find the cause and solution for my garden concerns. I think the reason this is my least favorite activity is because it takes me out of the garden to do the research, but I realize taking this step helps me be a better gardener.

An example of this was discovering darkened and curling leaves on several herbs and herbaceous plants in my garden, as shown in the first picture. At first glance it appeared to be some sort of foliar disease. But the first part of the scientific process is careful observation. In taking a closer look I discovered the problem was more likely an insect as I spotted these insects on the plants with the damage. The insects were tiny--only about 1/8-inch-long--and had different markings. However, I wondered if they might be the same insect variety in different "instars" or stages of development.

Photos by Diane Bayless.

I had not encountered this insect before so now I had to do some research. I started by doing a general Internet search, describing the insect and then scanning the images that came up. My insects and the damage they had done seemed to match the work of the four-lined plant bug. However, to confirm my diagnosis, I sent pictures to the Loudoun County Extension Master Gardener Help Desk (loudounmg@vt.edu*).* The volunteers who answer Help Desk questions *like* to do research, so I wanted to be sure I had not overlooked something. They confirmed my diagnosis that these were four-lined plant bug nymphs. They also directed me to some websites and gave me some tips on dealing with the insects. Because the damage to my plants was minimal and more cosmetic than lethal to the plant, the suggestion was made to try to hand remove the insects. This came with a warning that they would easily fall to the ground if the leaves were disturbed too much, making it nearly impossible to capture them because of their size. I weighed my options and decided the best approach was to use a jar of soapy water which I placed below the insect and gently tapped the leaf to capture the insect as it fell. It took a couple days to get all of the insects (or at least all I could find) but at least I was back out in the garden doing this.

When I first spotted this damage to my plants, I am glad I resisted the urge to reach for a spray--whether an herbicide, insecticide, fungicide or an all-inclusive one just to cover all bases. By taking the time to be observant, doing research, including seeking the assistance of more knowledgeable volunteers, evaluating my options and then coming up with a plan to address the problem, I was able to resolve this issue in a way that was effective and friendly to the environment. I still prefer to spend time *in* my garden over being inside doing research, but I recognize the value of the scientific process and research-based gardening that helps make me a better gardener.

Diane Bayless, Loudoun County Extension Master Gardener

Sedum Ternatum: Our Native Succulent

Sedum ternatum is also known as three-leaved stonecrop, wild stonecrop, or woodland stonecrop.

There is so much to love about this underutilized native perennial! It's an attractive, tidy, and low maintenance groundcover. And it's evergreen! This is a true succulent with small plump leaves in clusters of three. It is low growing, to about 3 inches. In spring, it produces white star-like blossoms on spikes that grow to 6 inches and last several months in April, May, and June.

Sedum ternatum in summer.
Photo by M. Judd.

Sedum ternatum in spring.
Photo by M. Judd.

The plant will politely spread--when conditions are suitable--to form a low, dense evergreen groundcover. It spreads primarily through branch rooting in adequate soil conditions. Once the desired spread is reached, the branches can simply be trimmed back to prevent further spreading.

Sedum ternatum en masse.
https://mtcubacenter.org/wp-content/uploads/2016/06/Sedum_ternatum_1.jpg.

Sedum ternatum prefers part sun to light shade. When planted in full sun, the plant may not spread, particularly if conditions are dry. If the plants are in full shade, they may not bloom. They prefer moist but well-drained soil. However, they tolerate both dry and poor soils. They are an outstanding choice for rock gardens.

Sedum ternatum is native to the eastern United States from Maine to Georgia. In Virginia, it is most commonly found in the Piedmont and Mountain regions. According to the *Digital Atlas of the Virginia Floral*, it is the only sedum native to Loudoun County.

Sedum ternatum in winter.
https://mtcubacenter.org/wp-content/uploads/2016/06/Sedum_ternatum_4.jpg.

Sedum ternatum is also one of several food sources for the variegated fritillary.

Availability: the following are several Virginia native plant nurseries that stock sedum ternatum. Contact them for current availability. Sedum ternatum is also commonly available from mail-order native plant suppliers.

Watermark Woods https://www.watermarkwoods.com/.

Hill House Farm and Nursery http://hillhousenativeplants.com/.

Earth Sangha https://www.earthsangha.org/.

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https://www.butterfliesandmoths.org/species/Euptoieta-claudia.

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Marcee Judd, Loudoun County Extension Master Gardener

Gardening as Self-Care

"I go to nature to be soothed and healed, and to have my senses put in order"--John Burroughs (American naturalist 1837–1921).

Cleaning products, toilet paper, and other grocery staples are not the only things that have been in short supply the past few months. Seed companies and garden supply catalogs report being overwhelmed with demand for their products by first-time, as well as experienced gardeners. As we stay safer at home, what is driving this desire to grow seeds and get out in our gardens?

E. O. Wilson developed the concept of "biophilia"--the theory that humans are hard wired to connect with nature. He defines biophilia as "the innately emotional affiliation of human beings to other living things."[1] As people deal with the stress of separation from family and friends and normal life, reconnecting with nature through gardening promotes our physical and mental health and enhances our emotional wellbeing.

For example, who needs a gym when you have a garden? Digging holes for new perennials, pruning back overgrown bushes, and repeatedly getting up and down to weed can give muscle groups a great workout. This type of physical activity has been shown to help reduce blood pressure and relieve stress. In addition to getting some exercise and improving your physical health, there is the pleasure and satisfaction of having created something when you're done.

Just being in green spaces can reduce mental fatigue through attention restoration. Excessive stimulation, be it from spending hours on our iPhones and iPads catching up on the latest news or ruminating on all that is going on in the world, is what is known as "directed attention." It can lead to "…damaging levels of psychological and physiological arousal," the 'flight or fight' response built into our brains[2]. Instead, being in nature can give us a sense of being away from things and kindle "involuntary attention." For example, we may be fascinated as we observe the intricate center of a flower, bees doing their pollination dances, or the way light changes throughout the day. Involuntary attention may help reduce anxiety and depression by distracting us from difficult thoughts.

From the standpoint of enhancing one's wellbeing, gardening can engage all five senses. Just think about it: the visual delight of blooming flowers, the scent of roses and herbs, the rustle of the breeze in ornamental grasses, the taste of freshly picked tomatoes, and the feel of sun on our arms as we care for our plants. This type of sensory stimulation can calm our moods and lift our spirits.

[1] Haller, Rebecca, and Kennedy, Kathleen. 2019. *The Professional Practice of Horticultural Therapy*. Boca Raton: CRC Press.
[2] Ibid.

As a registered horticultural therapist (HTR), I practice in collaboration with the Recreational Therapy team at INOVA Mt. Vernon Hospital, working with patients recovering from stroke and brain and spinal cord injuries. Horticultural therapists use gardening activities to help individuals meet specific goals within an established treatment plan. Basic gardening activities such as deadheading spent blooms, watering, and weeding allow patients to work on their fine and gross motor skills, eye-hand coordination, standing, balance, and endurance.

However, this year it was the hospital garden that helped me deal with the impact of being sheltered at home. In early March, the hospital shifted gears dramatically to deal with COVID-19. There were no more group sessions and I could no longer work with patients. My therapy to deal with this loss was to dust off the grow lights in my basement and get seeds started for the cutting garden that we had planned for the summer before the pandemic hit. Checking each morning to see what seeds had germinated and then nurturing these seedlings until they could be transplanted became my daily distraction and fascination--and it brought me joy! By focusing on the future cutting garden rather than the loss of interaction with patients, the months spent at home became much more bearable. The zinnias, strawflowers, marigolds, basil, and love-in-the-mist plants are now happily growing in the hospital garden giving the recreational therapists tools to help patients achieve their physical and cognitive goals.

So where do you start if you are a new gardener or an experienced gardener with questions? The Virginia Cooperative Extension website (https://ext.vt.edu/lawn-garden.html) has fantastic resources that can help answer almost any question you may have about growing ornamentals, vegetables, fruit trees, and perennials. Websites for further reading about the therapeutic aspects of gardening include: Therapeutic Landscapes Network https://healinglandscapes.org/ and the American Horticulture Therapy Association (AHTA https://www.ahta.org/).

A number of Facebook pages can serve as resources on various aspects of gardening. Research-based horticultural information and information on upcoming events from the Virginia Cooperative Extension Master Gardeners can be found on the “Master Gardeners of Loudoun County, VA” page. “Access to the Garden” features helpful suggestions about gardening for people of all abilities. John Forti, executive director of Bedrock Gardens, curates an inspiring page called the “Heirloom Gardener” that features garden history, beautiful photos, and tips on growing numerous plants.

Author Jenny Uglow who has written about the history of gardening in Britain says it simply, “…We might think that we are nurturing our garden, but of course it is our garden nurturing us.”

When you garden this summer, ponder the Spanish proverb: “More grows in the garden than the gardener sows” and see if it rings true for you.

Jan Lane, Registered Horticultural Therapist, Extension Master Gardener

The Zen of Weeding

This article begins a four-part series about the little things we amateur gardeners do every day in our gardens. The articles are intended to provide a little information in a humorous way.
Weeding can be a never-ending task. By the time you've finished all the flowerbeds, it's time to start over again. When I tell people that I love to weed, they look at me like I'm crazy. There is a Zen to weeding, a freedom for the mind in physical repetition. I get some of my best ideas while I'm weeding. As my mind slowly clears of day-to-day thoughts, things pop up from the proverbial "back burner." Maybe I'll remember a friend's birthday and think of a clever gift idea, or suddenly a solution to a problem will become clear. Weeding is like walking through the woods alone, a truly enjoyable, solitary experience. A few years ago John Kelly, a reporter for the *Washington Post*, wrote an article about "getting to the root of why weeding is so satisfying." In his article, he states that he was recently reminded of how "pleasantly tactile" and "irresistibly sensual" weeding is. He likens the satisfaction of weeding to "scraping ice off your windshield after a big ice storm and having the whole gelid sheet slide right off your windshield in one big piece." Instant gratification!

Walking is another of my favorite things to do. It's great exercise and when I walk in my neighborhood, I can check out all my neighbors' gardens. I've gotten some great ideas for my own gardening on my neighborhood walks. Some people are great gardeners and their yards reflect that—nicely ordered flowerbeds filled with beautiful flowers and shrubs and no weeds. The man on the corner of my street has a beautiful garden. A great design, lots of colorful flowers and no weeds! He spends hours each week "working" in his garden. Although I question that he's not really "working." He's having fun; he's enjoying being outside creating a work of art. Others aren't as interested in their yards and it shows—just a few shrubs surrounded by a sea of weeds.

Photo by Jayne Collins.

It's very tempting to weed other people's gardens when I'm walking and I see weeds taking over their flowerbeds. There's something very satisfying about pulling weeds out of the ground. In a different time, when we could all work together twice a week at the Demonstration Garden, the first thing I would do was get a weed bucket from the compost area. I was totally happy to take my bucket and start weeding until we decided what chores needed to be done that day. I loved how peaceful it was (and still is) in the garden. I loved listening to the wind chimes in the veggie area, being surrounded by men and women who loved being in the garden as much as I did, listening to them softly talk to each other while they worked. I loved working beside the bees and the birds. I loved the smell of wet earth, the fragrant foliage, and the flowers. I feel the same peace when I weed my own garden. The wind chimes, the birds chirping, and the soft sound of the breeze all transport me to a serene, quiet, calm place. To me, gardening is about my relationship with nature and I find Mother Nature endlessly fascinating. At home I almost always have at least one window open so I can hear the outdoor sounds and feel connected to the outdoors, even on cold days.

And so, I have come to see that gardening is weeding. And weeding, for me, is pretty close to Zen.

Jayne Collins, Loudoun County Extension Master Gardener

An Easy Way to Convert Grass into a Garden

Photo by Terry Coulter.

Gardens are a place to relax and enjoy the beauty of nature but getting to that point can sometimes take quite a bit of work! If you have ever considered putting in a new garden bed over existing lawn but were hesitant with the thought of all that work, stop!

We all know that healthy lawns are beautiful to look at but are environmentally a nightmare. Too many of us end up using too many chemicals, pesticides, and too much water to create that enviable green carpet we so much desire. So why not give up the space and dedicate at least a good portion of that lawn to a low maintenance garden? The initial time and small effort will give you back tenfold in beauty what a lawn could. There is an easy way to minimize the size of that lawn and create a new bed with very little work!

I will give you step-by-step instructions on how to convert that lawn into a beautiful garden! If you are struggling with an area where grass will not grow, for example, under a tree or in a shady spot, this would also be the perfect place for a bed.

Items you will need: a flexible hose or rope, spray paint that can be inverted (sprayed upside down), lots of newspapers **but not** the heavy colored inserts, mulch, and water!

Steps:

1. To begin, decide on the placement of the bed. Preferably it would be a level area with minimal runoff. Mow this area as low as you can. A string cutter can get it down to the soil.
2. Decide on the shape of that bed. Take a flexible hose or heavy rope and outline the area. If you will be mowing outside this area, consider the angle of the bed to be soft curves rather than tight angles that would be difficult to maintain. Once you have decided on the shape, take your spray paint and spray alongside the hose or rope and then remove the hose or rope.
3. Lay at least four layers of newspaper inside the sprayed area, making sure to heavily water with a spray hose as you go, saturating the newspaper once it's down. This will help the newspaper to better come in direct contact with the grass. It may help to pat the wet newspaper flat. If you are working on a large area, wet the newspaper in small sections. Do not do this on a windy day!

Photo by Terry Coulter.

4. Place at least 3 to 4 inches of mulch on top of the wet newspaper. Be sure to press the mulch firmly in contact with the edges of where the lawn meets the outline. I prefer to use composted leaf mulch and do not recommend the nugget type of wood or rubber mulch. Once you have finished placing the mulch, water the mulch well. Now the fun begins!

It will take several weeks for the grass to die but during this time, you can plan your new garden! With your planting plan in place, start shopping! I like to take my potted plants and put them directly on top of the mulch, moving them around until I'm sure of how everything looks. I note of spacing the plants according to the plant tags, thinking of how wide apart and how big the mature plant will be.

Once all is in place, starting at one end, I take a large, unopened black plastic bag and place it flat next to my plant. Moving the plant aside for the moment, I remove the mulch and place it onto the plastic bag. By this time, the newspaper should be friable, and it should be easy to dig a hole through it. I take another bag and place it on the opposite side of the mulch and use this bag to hold the soil that I remove as I dig the hole. Remember to dig the hole twice as wide as the plant but no deeper than the existing depth of the plant root ball. The plant should then be planted the same depth as it was in the pot. Using the soil that was removed, surround your plant firmly in the soil. If you have extra soil, do not try to use it all but rather remove the extra soil and use it elsewhere in another garden. Replace the moved mulch back onto the new plant, taking care to leave a few inches clear, away from the stem. Water well and move onto your next plant!

That's it, so easy and so satisfying!

Terry Coulter, Loudoun County Extension Master Gardener

Lantana--A Season-Long Bloomer

Lantana could possibly be called the flower that keeps on giving, day after day, week after week, all season long. There are over 150 species in the world; however, the cultivars of only two of the species, *Lantana camara* and *Lantana montevidensis*, are grown in our gardens. Occasionally the species itself is grown. In the tropical and subtropical areas of Central and South America where they are both native, *L. camara* is a perennial upright shrub and *L. montevidensis* is a perennial trailing shrub. Both species have naturalized and become noxious, invasive, thicket-forming pests in frost-free areas of the southern United States, but not in areas that experience hard freezes.

In our gardens, lantana is treated as an annual, planted once the soil is warm (preferably two weeks after the last frost), enjoyed over the summer, and either discarded or, if in pots, brought inside the house to winter over until spring. The species is almost never grown; there are too many wonderful cultivars more suitable to our gardens available instead, almost all of which are shorter, in the 18-inch to 3-foot range, although there are exceptions. Both trailing and upright forms are available. I've grown both types in containers and garden beds, and both thrived.

Lantana. Photo by Lina Burton.

Not only are they lovely to look at, bees, hummingbirds, and butterflies swarm to their colorful flowers. If you have a berry-producing plant, it will also attract birds. And, to top it off, they're easy to grow and deer and rabbit resistant.

Lantanas are heat tolerant (in fact, they love heat) and also tolerant of both droughty and humid conditions. Given at least six hours of full sun a day, they will bloom continuously from the time you set them out until they are killed by frost, with very little attention required. The upright forms are lovely in beds or containers. If you're trying to temporarily fill a large space quickly, some of the wide-spreading cultivars, such as Spreading Sunset® and Confetti™, are ideal for the purpose. The trailing types are equally lovely trailing down an embankment or over a stone retaining wall or in containers, especially hanging baskets. In containers they can stand alone as a single plant or in a large container combined as filler with summer-blooming annuals. They even can be trained as patio trees, and in the hands of a specialist, as bonsai. In both cases, you'll need a greenhouse to winter them over--these are multi-year ventures.

Thanks to extensive breeding programs, a number of wonderful cultivars are available, including one with variegated leaves (such as Lemon Swirl®). Several are completely sterile, and a handful of others are partially sterile and bear little or no fruit. These new cultivars are smaller and bushier than the older cultivars, flower earlier, are more free-flowering, and come in more colors. The Bloomify™ series and Hot Blooded™ are both completely sterile. Others that are partially or completely sterile include those in the Patriot™ series, the Sunburst™ series, "Gold Mound," "Alba," and "New Gold," to name a few. Naturally, there's a downside to the sterile lantanas--because they are sterile, they probably are of little or no benefit to bees, butterflies, and hummingbirds. The jury is still out. However, to quote the Rebecca Finneran, Michigan State

University Extension: “A plant that was bred to be sterile or contain no nectar will not benefit a pollinator at all.” And quoting Justin Wheeler, Penn State Extension Master Gardener, formerly of the Xerces Society: “Many of these cultivars [of perennials and annuals, generally] are sterile and have no benefits to pollinators.” So if your goal is actually benefiting pollinators until this question is resolved, it probably is a good idea to avoid the sterile types and select older cultivars instead.

Lantana flowers grow in flat-topped clusters ranging from one to two inches in diameter. Each cluster consists of numerous tiny, five-lobed, tubular flowers within the head. The flower clusters can be a single color or multi-colored and are available in a wide range of colors including white, yellow, purple, pinks, orange, and red. And some clusters change colors as each tubular flower in the cluster ages, resulting in bicolored or even tri-colored clusters. Some, but not all, flowers are lightly scented and have a spicy smell.

Butterflies love lantana. Photo courtesy of National Garden Bureau. https://ngb.org/year-of-the-lantana/.

The leaves are slightly wrinkled, rough in texture (feeling a little like very fine sandpaper), dark green, and up to about four inches long, maximum. Some have an odor that many people find objectionable. Unless you crush a leaf in your fingers, however, this shouldn’t be a problem.

Obtaining and Selecting: Lantana plants are readily available at garden centers and good nurseries (local, mail order, or online) or even at big-box retailers. They vary in price from store to store, but generally start at about $5.98; larger plants are available for increasingly higher prices, but lantana grows so fast, it’s really better to buy the smaller ones and let them grow.

Don’t buy them too early unless you’re prepared to hold them in a safe place until the ground has warmed in mid-May to late-May. There can always be a late plant-killing frost, and planting them before the soil warms is counterproductive. I never plant mine until the last week or two of May.

Lantana can also be grown from seed, however I can’t recommend this. Seed needs to be sown three to four months before the last frost and it’s very difficult to find a reliable source of seed. In addition, if you grow your own from seed, you’ll be growing the species; the cultivars are *never* seed grown, and simply aren’t available except as plants.

You can also take cuttings from plants at the end of summer to carry through the winter, but this really is a labor-intensive venture requiring perfect growing conditions for the cuttings and would be hard to achieve unless you have a greenhouse. It’s much better to simply buy the plants!

Soil: Any good garden soil suitable for tomatoes is suitable for lantana. They also will do well in sandy soils, and are salt tolerant. In pots, any good potting soil will satisfy their needs. They have a preference for slightly acid soil, around 6.5 or lower, but are quite adaptable.

Planting: Transplant lantana in the same way you would plant any annual you purchase for transplanting, spacing them 18 to 24 inches apart in flower beds. If you choose to plant in a container, use one at least 18 inches wide and deep. Otherwise, plant as you would for garden beds.

Caring for lantana:

Watering: Keep your lantana moist for a few weeks, until it has settled in. Thereafter, it is quite drought tolerant and forgiving. Generally, a good rule of thumb is to water lantanas in beds only if there is less than one inch of rain a week. In pots, they will need watering more often, but don't overwater--they resent it and may reward you with root rot.

Bees love lantana too. Photo by Jimmy Smith, at https://flic.kr/p/N2U3T.

Fertilizing: Grown in garden beds with soil of average-to-good fertility, it generally isn't necessary to fertilize, but, if flower production falls off, fertilizing will quickly resolve the issue.

If you plant in a container and use a commercial potting soil that includes a time-release fertilizer, fertilizing won't be necessary until late in the season, if then. Fertilize only when a plant tells you it is hungry by reduced flowering, using any general purpose fertilizer suitable for annual flowers. Don't overdo it--over fertilizing will result in lots of lovely foliage and fewer flowers.

Pruning: Pruning isn't necessary unless the plant outgrows its space or if a branch breaks. Trimming or pinching a plant back can induce additional branching, if necessary, but the new cultivars generally branch nicely without our assistance.

Lantana is lovely in garden beds. Photo by Virginia (Ginny) Sanderson, at https://flic.kr/p/84aPhw

Deadheading: Deadheading isn't necessary, especially with the new cultivars that are sterile or self-cleaning. Newer nonsterile cultivars do produce berries, but not as abundantly as the species, and deadheading generally isn't necessary for these either. If you have one of the older cultivars that does produce berries in abundance, deadheading will help maintain flower production.

Wintering over: If you have a greenhouse, a cool room with bright light, or grow lights, you may try to bring a pot or two of lantana inside to winter over. Bring the plants in before the first frost. Make sure you don't bring any insect pests, particularly whiteflies, in with the plants. Cut them back, put in the spot you've designated as their winter home, and water sparingly throughout the winter. Continue to watch for whiteflies. In the spring, move the plants back outside, repot if necessary, begin watering more often, and fertilize to give them a spring boost.

Training as trees (standards): Because older stems are woody, lantanas can be trained into a tree form (standard) and can grow to as much as five feet tall or more. It takes patience, and if you're going to do this, you simply *must* have a greenhouse or cool room available to you for wintering the plant over. It's helpful if, at the very beginning, you put the plant on some type of decorative plant dolly so you can move it into the greenhouse for the winter. It will be *heavy!* There are some informative videos online for those who want to try their hand at growing a lantana standard. Go to https://www.youtube.com/watch?v=U3If58p5308 or https://www.youtube.com/watch?v=hzJaZEnHQJc. If you're interested in giving it a try, Confetti™ would be a good choice for the adventure as would Sunburst™ Spreading and Spreading Sunshine®. Lantana can also be trained as bonsai, but this takes years of very specialized treatment and is not for the faint of heart or the impatient gardener!

Lantana is also a hummingbird magnet. Photo by Lisa Zins, at https://flic.kr/p/2h8x17E.

Pests and diseases: As long as it has good air circulation in a sunny spot, the humidity isn't excessively high for too long, and it isn't planted in poorly drained soil, lantana is disease resistant. Given poor air circulation or during cool, damp summers, however, it can be prone to powdery mildew. If planted in a poorly drained site, it can develop root rot. Except for cool, damp summers or excessive humidity, these problems can be prevented by good site selection.

As for pests, there are few pests that attack lantana and those that do can be quickly and easily dealt with. The most common issue arises if a potted lantana is brought into the house in the fall, in which case whiteflies can be a problem.

Lina Burton, Loudoun County Extension Master Gardener

Lantana plays well with other flowers in the garden. In this case, they almost hide the whiskey barrel they surround. Photo by Jody Richards, at https://flic.kr/p/ajaCry .

Lantana--Poisonous or Not Poisonous?

Is lantana poisonous or not poisonous? There is some question as to the plant's toxicity. There is general agreement that the immature, green berries (actually drupes), are poisonous. There the agreement ends, with some studies claiming that while the green berries are poisonous, the dark purple-black or blue-black, *ripe* berries can be eaten and others claiming that both the green (unripe) and dark (ripe) berries are mildly poisonous and shouldn't be ingested.

Green (unripe) lantana berries. Photo by Obsidian Soul / CC BY-SA , https://commons.wikimedia.org/wiki/File:Lantana_camara_berries.jpg.

In 2010, The California Poison Control System studied their database and found that the plant wasn't as toxic as had been thought. Their researchers suggested that other poison control centers needed to update their advice. *However*, North Carolina State University Extension service considers *all* portions of the plant to be poisonous, including the flowers and sap.

As of 2020, the National Capital Poison Control Center and other poison control centers ***do*** include lantana on their list of poisonous plants. Based on their inclusion of lantana on their list, it's best to err on the side of caution and assume that lantana, in all its parts, and particularly the berries in *all* their degrees of ripeness and colorations *are* toxic to at least some degree and shouldn't be eaten. *Just don't do it!* To be on the safe side, I wouldn't grow the berry-producing cultivars in an area where toddlers or young children might be attracted to the shiny berries. I'd choose a non-fruiting cultivar instead and even then, check frequently in case an aberrant berry might show up.

- In case of emergencies, the National Capital Poison Center can be reached at 1-800-222-1222 and at https://triage.webpoisoncontrol.org/#/exclusions. (For nonemergencies, their home page is https://www.poison.org/ .) The service is free and available 24/7, so you can always find someone to help.

Some people *do* have a reaction to lantana leaves, such as temporary skin irritation or a rash after handling lantana. The remedy is as simple as wearing gloves and long sleeves when you touch them.

That having been said, *some* species of lantana have been used in traditional herbal medicine, and some studies have shown that the leaves of these species do have antimicrobial, fungicidal, and insecticidal properties. These experiments are best left to researchers, certainly not to home gardeners!

As to pets (dogs, cats, gerbils, etc.) and livestock (horses, sheep, cattle, goats), numerous studies have shown that lantana leaves and berries *are* toxic to these animals. Livestock generally won't have access to them in your garden, but a curious puppy or kitten might be tempted to give it a try. If any of your animals ingest any part of the plant (or any other questionable substance), first you should call

- The ASPCA Animal Poison Control Center, staffed 24/7, 365 days a year, by veterinary toxicology experts. Their number is 1-888-426-4435, or you can contact them at https://www.aspca.org/pet-care/animal-poison-control. There is a $75 fee for a consultation. They will tell you if the substance is truly poisonous, will assign a case number, and will work with your own vet to resolve the problem.

If you do have a problem and your own veterinary practice is open, take the animal there after talking with the ASPCA.

If it's after hours and your own vet doesn't have an emergency line, call a veterinarian emergency clinic. There are three of them in Loudoun County, all open 365 days a year, 24/7.

- In Leesburg: The LifeCentre, 165 Fort Evans Road NE, Leesburg, 703-777-5755. A doctor is always present on the premises.
- In the Aldie/Route 50 area: Dulles South Animal Emergency & Referral Hospital, 25067 Elk Lick Road, South Riding. A doctor is always present on the premises.
- In Purcellville: Blue Ridge Veterinary Associates, 120 East Cornwall Lane, Purcellville, 540-338-7387. Doctors on call 15 minutes away.

Having these resources handily available is comforting at 1:00 in the morning when your furry friend just ate something questionable!

Lina Burton, Loudoun County Extension Master Gardener

Lantana. Ripened seeds, leaves, and flower. Photo By Franz Xaver - Own work, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=16412834.

The Garden Journal: A Chronicle of Growth

Then and Now

Anyone who has ever moved to a new home with zero real landscaping will understand the meaning of overwhelmed. That was me when my husband and I were transplanted to Ashburn in the mid '90s. We moved into a great house with a typically bare landscape of a third of an acre. I had too many plant ideas and questions, a definite lack of knowledge, and very little time to garden. We worked full-time, commuted quite a distance, and still had to finish buying furniture! So a pretty floral garden journal seemed like an easy way to begin a gargantuan task. I started writing things down and haven't stopped since. Twenty-five years and three journals later, keeping my own record has helped answer questions like:

- What could I plant in that spot that would survive?
- What DID I actually plant in that spot?!
- How many bags of mulch do we really need this spring?
- What year did we redo that garden bed? Plant that tree? Build those walls?
- Which vegetables are worth planting in this location?

Preorganized, tabbed, and tidy journals never appealed. How did someone else know how much space I needed for a given section?! And who decided what those sections would be, anyway? The format of my third and current journal is the same as the first: blank, lined pages. Inspirational quotes are nice, but each journal must be spiral-bound and dirt-resistant and preferably have pockets. My organization has gradually evolved into something that works for me, and the many entries over time are a study in how writing "garden stuff" down--and later, keeping garden photos--has helped me grow as a gardener. There is no one right way to do this--only the way that makes your garden adventures more productive and enjoyable! Following are a few notes from my journey:

The In-Between Years

Reviewing my journals for this article was nostalgic, eye-opening, funny, and informative. (No, I do not reread them all every year.) Many memories came back, reminding me of how little I knew, yet the major "aha" was that the journal entries faithfully reflected what was happening in my gardening life at the time. Early on, I made a map of my yard in the journal, labeled all the garden areas, real and imagined (G-1, G-2, G-3), and added to it over time. Some of the imagined areas became reality. During the years that I was a student in the Northern Virginia Community College Horticulture program, there were lots of plant lists with detailed scientific names. The year we decided to grow a vegetable garden, there were diagrams of ways to build raised beds, tips for vertical growing, recipes for soil mixes, and lists of vegetables to try. An interest in composting led to research on ways to compost in suburbia and extensive notes on vermiculture (worm composting) in a garage bin. One year I decided to inventory and record all the plants in each garden area. That lasted only until I realized that moving things around was one of my defining characteristics as a gardener! When I first experimented with varieties of

daffodils, pictures from the bulb catalog were pasted into the journal. As digital photography became the go-to, I kept visual records each year of garden areas and specific plants. Notes from LCMGA Symposium speakers appear multiple times. The fall that I retired from full-time work is commemorated by a design sketch for a "fountain garden" incorporating a stone path, plants, and an in-ground bubbler purchased with gift money. My husband and I built it together. I find that I no longer write down many of the things I did in the early years; it has become unnecessary. Each year's entries continue to reveal what I am working on and learning as a gardener.

No One Way

After all this time, I have a loose organization that I find helpful. All my journals are chronological, but in the latest I created some distinct sections. For example:

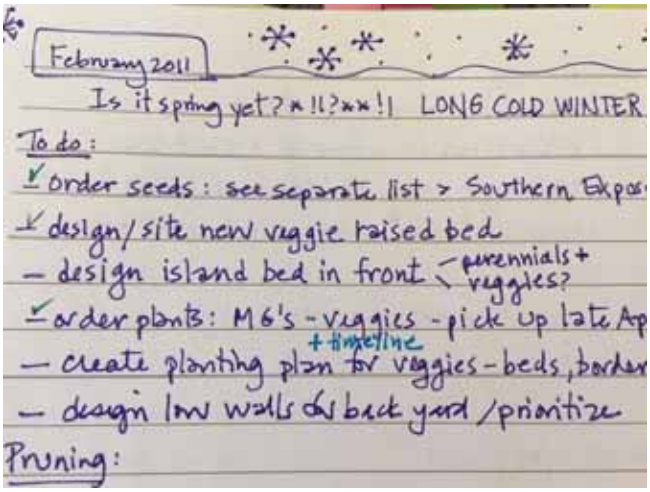
GARDEN IMPROVEMENTS: Entries by year. hardscape, new garden areas, redesigned areas, installation of significant plants.

PURCHASES: All purchases, including date, source, and cost. If a tree or shrub, where placed and success or not (Is it still living??). Receipts kept in an internal pocket.

PLANT POSSIBILITIES: Specific plants to consider, with common and scientific names.

TO DO: Always a very long section! Dated seasonally. Entries can be specific tasks ("Order 50 bags mulch.") or dreams ("Think about ways to link these two areas." "Redo corner area after removing ancient weigela."). A definite must for anyone who likes to check things off.

RESOURCES: Seed companies, local and national organizations, websites, books to read, dates of recurring native and local plant sales.



Other gardeners who journal have used many other categories, such as:

- Seasonal tasks.
- Vegetable planting dates, harvest dates, crop yields.
- Vegetable crop rotation diagrams by year.
- Calendars for planting (when to plant what); dividing perennials; fertilizing.
- Observations of plants, insects, weather.
- Photos for inspiration: container arrangements; garden spaces; plant combinations.
- Recommended plants for: sun or shade; pollinators; birds.
- List of plants with bloom times.
- List of plants installed and desired.
- List and pictures of beneficial insects.
- Recommended fertilizers, insect repellents.

I like my spiral notebook. You may prefer a ring binder, a folder that zips, or a pocket-size journal. Also, online journal templates and tips abound. Sites such as Pinterest, gardening blogs, and websites offer suggestions for organizing your notes in print or on a personal device. If you are a digital native, try some of the many apps out there that provide horticultural information and ways to store that information. I prefer to be able to lay my journal down on a garden bench for a bit while I work and not worry if it gets slightly dirty. Then I sit down on the bench with a cold drink, think about things, and write them down. The key is to do what works for you.

Why Bother When You Barely Have Time to Weed?

Why do some people love to journal and others find it a boring chore? Who knows? For me, recording garden accomplishments, dreams, questions, answers, successes, and failures is contemplative and satisfying. The act of writing or drawing allows me to stop, step back, and imagine new ways of doing something. Journaling reminds me of why I'm not planting X anymore. It celebrates my bumper crop of "Ultimate Opener" tomatoes and highlights the mistake of listening to that landscaper's recommendation. Photos remind me of the *before* and *after* of a garden space. They showcase brilliant plant combinations, often unplanned, and offer the beauty of May peonies in December. Pictures document the first green shoot to the final scarlet leaf, and even the hardscape in winter under snow. Saved, framed, shared, I find photos of a gardening life to be a source of happiness.

Journaling, in words and pictures, is also a welcome reminder that gardening is ever-changing and never done. Gardening is more a verb than a noun. If keeping a garden journal, print or digital, sounds even a little interesting to you, just do it! You won't know what lessons and joys it holds until you try it for yourself.

Jeanette Martino, Loudoun County Extension Master Gardener

Helping Bees Find Their Hives

Did you know that most honeybee hives are made to specific dimensions so that all the parts are interchangeable? Most of them are of the style called Langstrom, named after the designer. Did you notice that most beehives are painted white? They sometimes all look the same, one or two boxes high with the same types of base and roof. They are sort of aesthetically pleasing when you see 10 or 20 hives all lined up. You probably did not know that bees sometimes get confused when they come home to 10 or 20 of their "houses" that all look the same. The bee workers sometimes get confused and go to the wrong hive that looks like theirs. In such a case, they get a very rude reception. Each hive has a queen and 40,000 to 60,000 workers. Each queen has her own smell or pheromone, similar to a very heavy perfume. It permeates the whole hive and all the bees in that hive. When a bee arrives on the front porch with a load of nectar or pollen, the guards immediately know by the smell if that bee belongs to that hive. If it is an invader and is carrying nectar or pollen, the security guards strip the nectar or pollen away. If an invader doesn't get out quickly, five to ten of the security guards will jump on the invader and kill her.

In order to help and care for our 840,000 worker bees, we enlisted the help of our children and grandchildren. They painted some of the hives to help the bees find their way home. Each hive does not need to be painted, but bees have a mental image of where their home fits into the row. All the children who painted got to do their own thing. Some painted flowers, others made the hives look like homes. The flowers do not need to look like real flowers. The paintings are just there to help bees distinguish each of the homes from the others. I have included some examples of the painting. *Bee careful out there*. Give them some space and the bees will not bother you. They are too busy filling up their little saddle bags with pollen--yellow, orange, and all the various colors.

Photos by Joe Guirreri.

At the Holy Cross Abbey in Berryville, the monks have named their queen bees and labeled the hives with the queens' names. We are sure this helps the bees arrive at the correct hive!

Photo by Vern Conaway.

Joe Guirreri, Loudoun County Extension Master Gardener

Ornamental Cherry Disease

Loudoun had an extremely cool, wet spring, which provided ideal conditions for leaf spot or shot hole disease on ornamental cherry trees. The disease can be caused by a fungus (*Blumeriella jaapii)* or by a bacterium (*Xanthomonas pruni*). The Extension Master Gardener Help Desk has been receiving many reports of this problem across the county.

Symptoms.

By the latter part of May and the first half of June, small circular purple spots appear on the surface of mature leaves. The leaf spots gradually enlarge to about ¼-inch in diameter and turn reddish-brown. Lesions may then emerge to produce large, irregular spots.

Spots on cherry leaf

Under a microscope, on the undersides of infected leaves, sticky fungal spores form within the spots during periods of damp weather. After 6 to 8 weeks, the centers of the spots may dry up and drop out, giving a "shot-hole" appearance. Diseased leaves (frequently yellow) drop prematurely. Severely affected trees can show significant defoliation by midsummer.

If the weather cooperates, trees may be able to recover with cultural and mechanical controls.

1. Remove all leaves that have fallen from the trees. It is particularly important to remove all leaf litter in the fall to prevent overwintering of the fungal inoculum.
2. Remove any dead twigs or branches on the tree. (Double check to make sure they are dead--not just defoliated!)
3. Prune the tree to maximize air flow. Opening the canopy can increase sunlight penetration and air circulation. Any practice that promotes faster drying of leaves will reduce the risk of the disease.
4. Make sure there is proper drainage away from the tree and that any mulch is not piled up around the base of the tree. If an automatic sprinkler system is pointed at the base of the tree, redirect it.

If you have a large mature tree, you may need to call in an arborist to prune or treat it.

Chemical controls may be warranted if the tree is a high value specimen or the disease cycle is repeating over multiple years. To slow the disease, it is recommended that a regular application of a fungicide be started as soon as leaves are mature and continued throughout the summer. **Fungicides are for the most part prophylactic, not curative.**

Spraying should start before you see--or at the first sign of--any symptoms. Spraying is best done if applied before predicted rainy periods. The following is the list of chemicals recommended by the Virginia Cooperative Extension, listed by the effectiveness of the active ingredients. Look for these ingredients when purchasing a spray control product at a garden center.

Cherry leaf spot (*Blumeriella*)	Chlorothalonil Propiconazole Myclobutanil Neem oil Potassium bicarbonate	**Chemical Control:** To prevent the disease on ornamental cherries, fungicide applications are recommended at regular intervals,starting when leaves first become fully mature and continuing until late summer. **Cultural Control:** Rake and remove fallen leaves to prevent overwintering of fungal inoculum. **Precautions/Remarks:** Severe defoliation reduces winter hardiness. Prolonging leaf retention by controlling the disease will improve winter hardiness of the tree.

Chlorothalonil may have negative impacts on honeybees, so it is not recommended until after flowering petals have fallen.

Copper-based fungicides will also help to control the spread of the disease if it is bacterial in origin rather than fungal.

Captan is also a frequently recommended treatment for fungal diseases in fruit trees.

Always follow the manufacturer's directions for proper spraying application. The label is the law.

References:
https://extension.umd.edu/hgic/topics/cherry-shot-hole-flowering-cherries.
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Pruning Deciduous Trees:
https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/430/430-456/430-456_pdf.pdf.

Loudoun County Extension Master Gardener
Help Desk: LoudounMG@vt.edu
Becky Hutchings, EMG Volunteer
Diane Hayes, EMG Volunteer
Beth Sastre, LC VCE Commercial Horticulturist

Calling (Again) on Loudoun's Gardeners and Naturalists

As you are out and about in Loudoun County this summer please consider adding a new role for yourself as a citizen-scientist. No video chat required. Starting in late June and continuing through September, the Virginia Cooperative Extension office is asking everyone to actively look for adult spotted lanternfly (SLF), a destructive invasive pest. A quarantine to control SLF is in effect for Virginia's Frederick and Clark Counties, and SLF sightings have been identified in Fauquier County. Directly across the Potomac, Maryland counties Clark and Frederick have also reported individual sightings.

As you can see from these pictures, the SLF is pretty and easy to identify in the adult stage of its life cycle. The insect is one inch long, with grey wings that have spots and patterned tips; red patches can be seen when the SLF's wings are open.

If you think you have seen this insect hopping around your plants or on a tree, please take a photo, identify your location, and report your data to https://www.loudoun.gov/spottedlanternfly. At this web site, you can easily upload photos from your phone.

Don't worry--SLF does not sting or bite. It is better to get a false report than to miss a possible early sighting in one of Loudoun County's ZIP codes.

Beth Sastre, Commercial Horticulturist
Loudoun County Virginia Cooperative Extension

A Virtual Garden

In Feb 2020, the Smithsonian Institution launched *#SmithsonianOpenAccess* where you can search digital images from the Smithsonian's collections. Millions of images were released into the public domain, allowing use without asking permission. Great fun to explore! Try searching on a term like: Landscape/Trees/Plants/Flowers/Botanicals…
https://www.si.edu/openaccess

***Untitled (Flowers)*, 1916**
Bertha E. Perrie

Recommended Gardening Reads

I have gained some of the best ideas for my garden from examples I've seen in photographs. I can't easily visit gardens in England, Italy, or France on a Saturday, but magazines and/or books can bring the inspiration of travel up close. If you are not a reader, perhaps I can encourage you to become one. I hope my suggestions will help you expand your practical knowledge as well as inspire your creativity.

Magazines:

A favorite is ***Fine Gardening***, which is published bimonthly by Taunton Press, Inc. Its editor, Steve Aitken, is an avid gardener and has a unique, amusing sense of humor featured in the "Editor's Letter" at the beginning of each issue. The magazine offers a good balance between the technical or scientific aspects of gardening and the appearance and design of gardens. Its "Over the Fence" and "Readers Tips" offer useful suggestions. It is filled with gardening articles and lovely photographs, rather than advertisements. It often covers indoor gardening as well, and each issue is attentive to the time of year in which it is released. A "Regional Picks" section highlights plants, trees, and shrubs that grow especially well in each area of the country (not surprisingly, many are suitable for our area as well) and new varieties (from trials) are often featured. The magazine covers all aspects of gardening—including composting, tools, plant propagation, and simplified methods. Subscribers can also access the magazine's plant database, which I've found helpful and dependable.

Virginia Gardener is published nine times a year. Its claim that "our localized content raises the bar and separates us from the rest" is actually true insofar as gaining specific information about gardening in Virginia. Local garden experts contribute articles and bold, beautiful photography; there is no lack of inspiration and helpful solutions for tough gardening problems. Equal space is given to vegetables and herbs and to ornamental gardening as well as good practices for both. It encourages us to be mindful and conscientious as we garden. It includes a "Calendar of Events" for garden shows, events, and educational offerings specific to Virginia. It also limits its advertisements.

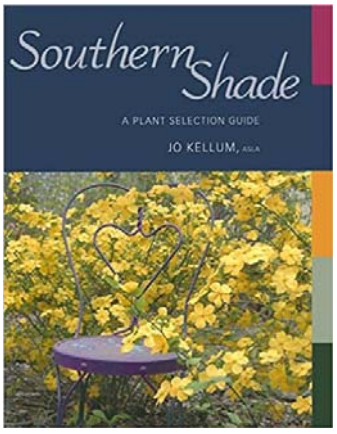
While a bit brief in length, ***Horticulture*** remains a very useful addition to my reading. It offers a regular section, "Science Matters," which recently offered "Going Viral," an article on both the positive (really??) and negative aspects of plant viruses. It often emphasizes native plants in articles and photos. "The Long Haul," covering the crucial importance of ensuring that native bees can find food when they need it and another article on providing native berries for the birds demanded I be more attentive in my own garden choices. Overall, it covers less about ornamentals and more on most every other area of gardening.

And finally I'll just mention ***Garden Gate***, (published bimonthly) despite its basic—even light--approach to gardening. While I may not always learn anything new, this remains simply a fun magazine to curl up with and enjoy. Its photographs encourage my creativity and spike my enthusiasm as gardens from all over the country, such as yours and mine, are highlighted. A recent issue featured late season sages, home grown greens, garden design for foundation

plantings, and what to do about boxwood blight--quite the variety of topics. It's worth its low subscription rate. I've often bought a subscription as a gift to whet the gardening appetite of a friend who is probably weary of my ongoing dialogue about plants and practices in the landscape!

Books:

I'll precede these two reviews by confessing my addiction to reading and collecting books on gardening and landscaping. I have an enormous collection of books that I read and reread and to which I attribute most of my gardening knowledge and understanding. The following are books that I repeatedly return to, always to learn something anew.



Southern Shade by Jo Kellum: Because my backyard has become mostly shaded over the past few years, and I like diversity within my garden, learning about various plants and shrubs that thrive in the shade has become increasingly important. This book is a comprehensive guide to bedding plants, shrubs, trees, groundcovers, and vines that fit this need perfectly. It gives careful attention to conditions needed to assure success with each variety (right plant, right place theory, once again!). I have benefited from its many recommendations in seeking out unfamiliar plants that love the shade. Each plant highlighted includes a "Getting Acquainted" section wherein specific details are given, as well as what it pairs well with, and whether it will tolerate growth in a container--all helpful to assure an interesting collection. All its information is specific to our region, Virginia being just on the border of identification as a southern garden.

Virginia Gardener's Guide by Jacqueline Heriteau: This book provides the what, where, when, how, and why of gardening in Virginia. It is a valuable resource on how to beautify and enjoy gardening in Virginia, specifically. There are more than 170 individual entries of the best plants for Virginia gardens in an easy-to-use format with full-color photographs of each. It provides a cross-referenced index with botanical and common names for easy plant location. Sections include annuals, deciduous and evergreen trees, bulbs, groundcovers, herbs, grasses, perennials, roses, shrubs, vines, and winter gardens. Because USDA hardiness zones vary from 6A to 8A in our state, this is an especially helpful guide. Colorful photos in the center section provide visuals to guide selection.

Tip*: If you want to expand your gardening library, be sure to check out McKay Used Books in Manassas. The store's selection is excellent, and the prices are low; it's well worth a 25-minute drive.*

Pamela McGraw, Loudoun County Extension Master Gardener