

Blount County Master Gardener Gazette

Spring 2022 Volume IV, Issue 1

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After a another year of social distancing due to the international COVID-19 pandemic, Spring comes as a welcome relief. 2021 found many of our Master Gardener projects put on hold and our monthly meetings held via video conferences. Going forward into 2022, we will continue our pandemic protocols. However, warmer weather brings opportunities for more outdoor activities including plant sales, seed swaps, and garden tours and visits to area botanical gardens and arboretums.

April and May are wonderful times to take wildflower hikes in the Smokies and our other state parks. Close to Blount County are Norris Dam State Park and Seven Islands State Birding Park. The trout lily photo on our masthead was taken by Becky Hornyak at Norris Dam. Check out the photos that Becky and I took on our walk along the Chestnut Top Trail in the GSMNP.

Now is the time to start planning your vegetable garden and building your raised beds. Start your own succulent collection with advice from Laurie Smalley. Elin Johnson shares her successes with self seeding flowers. Check out our Kids Korner for mentoring teens' gardening activities with Jaquie Stiver.

We have more sustainable gardening advice from Terri Lyon and tips on growing all types of iris from Mark Sheridan and Susan Daffron.

As Blount County Master Gardeners, we are here to assist with gardening questions. Please call 865-982-6430 to have them answered. If you want to learn more about the Tennessee Extension Master Gardener training and volunteer program, visit our website at:

bcmgtn.org

You can also engage with us on our Facebook page at:

https://www.facebook.com/BlountCountyMasterGardeners/

The Blount County Gazette is published quarterly. Our Summer issue will be published in June. If you would like to suggest topics or contribute to our next issue (June-August), please contact Louminda Torbett at Blount County Master Gardeners.

Trout lily photo by Becky Hornyak

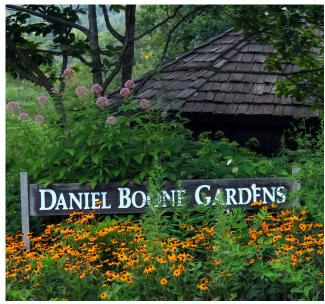


Gardens to Tour

Louminda Torbett, Master Gardener

Gardeners love to visit gardens and I am certainly one who does.

Thinking about the upcoming Dogwood Arts Festival in Knoxville got me wondering about other gardens to visit this spring.



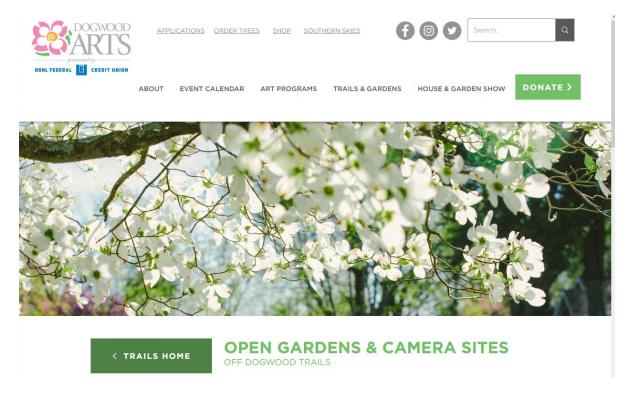
While perusing the latest edition of <u>The Trumpet Vine</u> newsletter from the Master Gardeners of Loudoun County, Virginia, I found a reference to a website with a treasure-trove of public and private garden listings by state (and also of Ireland).

The website is https://www.ilovegardens.com/

Since we are in East Tennessee I thought I would check out the listings for North Carolina (55) as well as for Tennessee (35). Some I was familiar with but many were new to me. As an aside I will tell you that the link to the Daniel Boone Native Gardens in Boone, NC is incorrect. The correct link is www.danielboonenativegardens.org.

The link for the open gardens and camera sites for the Dogwood Arts is https://www.dogwoodarts.com/additionalopengardens. These beautiful trails and gardens will be open from April 1-30.

Get out and enjoy our beautiful spring-blooming flowers and trees.



Spring Garden Tasks

UT Extension Institute of Agriculture Calendar

GARDEN TASKS FOR MARCH

- Plant fruit trees or transplants. Remove straw protection from strawberry plants before bloom.
- Assemble your spray materials to prepare for fruit season.
- Start seed for warm-season transplants. Tomato transplants need 6-8 weeks, so March seed starting means May transplants.
- Prepare garden soil if conditions allow. Remember that if you are tilling in a cover crop, a few weeks may be needed to decompose the cover crop material.
- Seed or transplant cool-season crops. Hardy cool-season crops are usually seeded or transplanted 4-6 weeks before the frost-free date while less cold hardy cool-season crops are usually started 2 weeks prior.
- Install row covers or low tunnels over early season transplants to increase day and night temperatures and support early season growth.
- Don't forget to harden off any transplants to reduce stress and loss once placed in the ground.

GARDEN TASKS FOR APRIL

- Finish site preparation. Use proper pre-plant fertilizer.
- Finish direct seeding and transplanting cool-season crops.
- Harvest may begin on the earliest seeded leafy crops or root crops.
- Begin purchasing transplants of warm-season crops.
- It is common to seed some direct seeded warm-season crops a bit before the frost-free date (beans, corn). Be cautious of soil temperatures, though, especially if you are seeding untreated seeds or supersweet corn.
- Transplants of warm-season crops can be planted in Tennessee in April after frost free dates. However, soil temperatures support root growth, and sometimes early transplant dates are not all that helpful due to cool soils.
- Harden off your transplants before placing them in the garden.

GARDEN TASKS FOR MAY

- Keep on the regular control sprays for fruit crops.
- Harvest cool-season crops, and watch for pests/diseases.
- Seed succession plantings of beans and sweet corn.
- Prepare for early season fertilization on small fruits blueberries and blackberries are often fertilized about a month after bud break.
- Prepare beds for transplants black plastic can warm the soil and speed early growth. Make sure that irrigation is provided if plastic mulch is used. Sometimes natural mulches, such as straw, are applied a few weeks after planting as they can reflect light and actually slow soil warming.
- Continue transplanting warm-season crops. Peppers and eggplants
 prefer even warmer soil conditions than tomatoes and are often
 planted later. Make sure that young transplants are watered in and
 given a starter fertilizer solution to support early growth.
- Set up your irrigation system as transplants are placed in the garden. Drip irrigation is best to maintain dry leaves and reduce disease risks.
- Set up stakes, trellises, cages and support systems for your plants.

You can download the entire 2022 Calendar at

https://extension.tennessee.edu/publications/Documents/W436.pdf



Spotted Lanternfly Alert





College of Agriculture, Human and Natural Sciences

Disaster Education Response Team



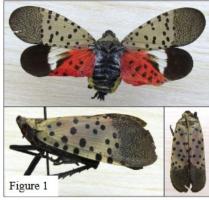
Spotted Lanternfly

Nadeer Youssef and Jason Oliver

The spotted lanternfly [Lycorma delicatula (White)] is an invasive pest first detected in Pennsylvania in 2014. It is currently spreading throughout Pennsylvania. It is native to China, India, and Vietnam; but has been accidently introduced into Japan, South Korea, and now the United States. Both the adult and nymph stages cause damage by feeding on the phloem of host plant branches. It has not been detected in Tennessee, but there should be great concern about preventing the establishment of this insect in the state because of its potential to negatively effect plants in the landscapes, nurseries, vineyards, orchards,

Identifying the Spotted Lanternfly

- Adults are 3/4 –1 inch (20.5-26.5 mm) long and 1/2 inch (12.7 mm) wide. The wings (tan with black spots) and body (black, white, and red) are uniquely colored and should be easy to distinguish from other North American insects (Figure 1).
 Adults are active from mid July through the first frost.
- Nymphs have a similar shape to the adults but lack wings. As
 the nymphs grow and mature, their body color pattern changes
 but will always have a combination of black, white, and red.
 Nymphs are present from late April through July.



Photos by Nadeer Youssef

Life Cycle and Hosts

and forest settings.

- The spotted lanternfly has a 1 year life cycle. Females lay
 clusters of eggs throughout the adult flight period, which hatch in late spring to early summer. Adults
 feed primarily on the tree of heaven and grapes. Nymphs develop throughout the summer and become
 adults in July.
- Important known hosts include almond, apple, apricot, cherry, grape, lilac, maple, nectarine, oak, peach, pine, plum, poplar, tree of heaven, and walnut.

Managing Spotted Lanternfly

- Be watchful for adults and nymphs on host plants. If found, collect and freeze specimen(s) and contact your local county extension agent or the Tennessee Department of Agriculture.
- Scraping egg clusters off branches and trunks and removing preferred hosts like tree of heaven and grape can reduce localized spotted lanternfly populations.
- Insecticides labeled for other phloem feeders have been used successfully to kill spotted lanternfly adults and nymphs
- Contact your local extension agent for additional information and recommendations.

Always follow pesticide label instructions.



Go to our website www.tnstate.edu/agriculture for additional Disaster Education Resources.



Herbicide Carryover in Hay, Manure, Compost and Grass Clippings

NC State Extension

According to a report by the NC State Extension

"Many farmers and home gardeners have reported damage to vegetable and flower crops after applying horse or livestock manure, compost, hay, or grass clippings to the soil. The symptoms reported include poor seed germination; death of young plants; twisted, cupped, and elongated leaves; misshapen fruit; and reduced yields. These symptoms can be caused by other factors, including diseases, insects, and herbicide drift. Another possibility for the source of these crop injuries should also be considered: the presence of certain herbicides in the manure, compost, hay, or grass clippings applied to the soil."

The Herbicides of Concern: "Aminopyralid, clopyralid, and picloram are in a class of herbicides known as *pyridine carboxylic acids*. They are registered for application to pasture, grain crops, residential lawns, commercial turf, certain vegetables and fruits, and roadsides (Table 1). They are used to control a wide variety of broadleaf weeds including several toxic plants that can sicken or kill animals that graze them or eat them in hay. Based on USDA-EPA and European Union agency evaluations, when these herbicides are applied to hay fields or pasture, the forage can be safely consumed by horses and livestock—including livestock produced for human consumption. These herbicides pass through the animal's digestive tract and are excreted in urine and manure. They can also remain active in the manure even *after* it is composted. The herbicides can also remain active in hay, straw, and grass clippings taken from treated areas. The herbicides leach into the soil with rainfall, irrigation, and dew. As with many other herbicides, they can remain active in the treated soil."

Table 2.	Crops	known	to be	sensit	ive t	Ю
picloram	, clopy	ralid, o	r amir	opyra	lid.	

Carrots Compositae family

Beans

Cotton Dahlias Eggplant Flowers, in general Grapes Legumes Mushrooms Lettuce Marigolds Peas Peppers Potatoes Spinach* Sugar beets* Roses, some types Strawberries* Sunflowers Tobacco

Tomatoes Umbelliferae family Vegetables, in general



For more information on how to prevent herbicide damage to nontarget plants, how to test for the presence of herbicides and responsible herbicide use, refer to the full report at https://content.ces.ncsu.edu/ herbicide-carryover

Plant affected by herbicide carryover in compost. Photo from https://extension.oregonstate.edu

Wildflowers Along Chestnut Top Trail

by Louminda Torbett, Blount County Master Gardener



In April of 2019 my fellow Master Gardener, Becky Hornyak, and I took advantage of a bright spring day to hike the first leg of the Chestnut Top Trail in the Great Smoky Mountains National Park looking for early wildflowers. We started from the parking lot at the "Y" on the outskirts of Townsend. According to the website hikinginthesmokys.com this portion of the trail "climbs steadily to gain almost 300 feet as it rises above the national park entrance road. Along this stretch you'll enjoy sporadic views of the mountains towards the east. If you look closely you may even notice the newest section of the Foothills Parkway high up in the mountains."



Dwarf crested iris

Along our hike we found many of the familiar wildflowers including white and yellow trilliums, violets, bishop's cap, dwarf crested iris, Solomon's seal, false Solomon's seal and fire pinks.



Longspur violets and white violets

False Solomon's seal



Spring beauty

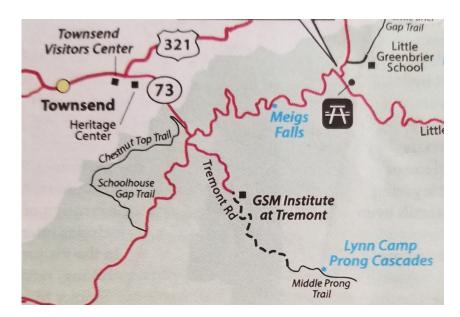
Some that were new to me included purple phacelia, cutleaf toothwort, dutchman's pipe, wood betony and Hooker's fairybells. We had overlooked the dutchman's pipe but a sharp-eyed fellow hiker pointed it out to us. Looking up we saw that the Carolina silverbell trees were also in bloom.





Dutchman's pipe

Hepatica Cutleaf toothwort



Parking is available directly across the road from the trailhead on Route 73. "Roughly two-thirds of a mile from the trailhead, just after completing the initial climb, hikers will find an opening in the canopy at a sharp bend in the trail that offers some decent views of the Townsend and Tuckaleechee Cove areas towards the northwest. Unfortunately, dense foliage will completely obstruct this view during the summer months.

After making a sharp turn towards the left, the trail flattens out for a short distance, before it begins climbing towards Schoolhouse Gap along a ridge known as Chestnut Top Lead." Source: hikinginthesmokys.com

We went early in the morning and had the trail pretty much to ourselves. By 11 AM we had finished our hike and the trail was getting crowded with other hikers.



Hooker's fairybells



Bees were busy with the Fernleaf purple phacelia

Eastern Bluebird Nesting Trail

by Edwina Nichols, Blount County Master Gardeners

On a beautiful Tuesday morning, the sun was shining and a faithful crew was out installing Bluebird Nesting Boxes on property Habitat for Humanity® allowed BCMG to use.

We installed 11 Nesting Boxes on the back side of a HABITAT housing project on Spurlock Street in Alcoa, Tennessee.

The boxes were constructed of cedar and attached to posts made of rebar covered with EMT metal conduit. Each post was fitted with a 4" PVC baffle to keep out predators. The Nesting Boxes were spaced at 100'-120' apart (closer than normal but gives opportunity for other native birds to nest). The boxes are facing the tree line. The tree line provides two benefits: 1) Food (berries and insects) for the parents while nesting and feeding the hatchlings/fledglings and 2) Protective cover when the fledglings take flight.

An introductory class was offered on February 17th for those that signed up to weekly monitor the Nesting Boxes beginning the first week of March. We are hoping it will not take long for the lovely Bluebirds to stake out their new homes.



Completed Bluebird Nesting Trail

I personally want to thank Mike Holt and Tom Carpenter for getting all the materials together and for the construction of the Nesting Boxes; to Rob Stevenson, HABITAT, for working with us and helping place stakes on the property for our Trail.

I also want to thank Tom Carpenter, Nancy Sentell, Anita Thompson and Mark Sheridan for the installation of the Nesting Boxes.

It will be an exciting time.

Edwina Nichols Project Coordinator BCMG-HABITAT Eastern Bluebird Nesting Trail







Building Raised Beds

by Louminda Torbett with Logan Hill, Blount County Master Gardeners

Since becoming a Master Gardener I have been spending some valuable time with a couple of local farmers whose small farm (Liles Acres Organic Farm) includes about 15 raised beds. Having never raised vegetables before and never having gardened in raised beds I had a lot to learn. I am certain I have much more to learn but wanted to share some of what I have learned on the basics of building raised beds.

RAISED BED LOCATION AND LAYOUT

- 1. Choose a location that will provide 6 to 8 hours of sunlight per day.
- 2. Seek out a level area for uniform water distribution and drainage.
- 3. Choose a location that is accessible to a water source.
- 4. Lay out your bed such that you can reach from either side to the middle from a kneeling position for weeding and for harvesting. A common width is 4'. (Ours were 5' wide.) Leave enough space between beds to allow use of a wheelbarrow or small lawn mower.

RAISED BED CONSTRUCTION

- Build the bed 6" to 12" in height or deeper if desired. Optionally you can build your raised bed to accommodate seated or standing gardening.
- Construct the form using wood, stone, brick, block or composite materials. If using wood, choose either cedar or redwood that is more decay resistant. Do not use treated wood for vegetable gardens.
- 3. Beds at the Liles Farm were constructed mostly of 2x8 boards with 2x4 top rails. (see detail)
- 4. Below are photos of raised beds constructed by Project Hope Alcoa for the area community. The taller one on the right needs twice the amount of soil but is convenient for Corner detail with top cap those who are physically challenged. The forms are 4'x10'.







Project Hope Raised Beds

SOIL

- Line the bottom of the raised beds with several layers of cardboard. This will suppress weeds then decompose to allow for good drainage. Logan Hill says this has worked really well for him. As a side note, Logan developed a STEM-based program called Project Hope Alcoa to teach area kids about gardening, nutrition, science, and money management. I really admire Logan for his dedication to these young men and women who are the future of our community.
- 2. Add 1 to 2 inches of native soil for the base. (We have lots of clay soil here in East Tennessee.)
- 3. Top the native soil with 2-3" of a compost/peat moss mix (1/4 peat moss to 3/4 compost or a 1/3 to 2/3 mix). Logan used composted horse manure available from Integrative Garden in Maryville, TN although other garden centers have similar product for sale.
- 4. Top with 2-3" of garden soil and turn the garden soil in with the compost/peat moss mix. (Taller beds will require twice as much soil).
- 5. Add earthworms (red wigglers are recommended by the Liles) and carefully turn into the soil by hand.



Finished frame with cardboard lining



Project Hope Raised Beds

PVC FRAMES FOR BED COVER

- 1. To protect late or early season crops from frost and to provide protection from garden pests, a non-woven garden/agricultural fabric laid over a framework of PVC hoops is a good option.
- 2. Construct the frames using 18" pieces of 1" PVC pipe at the corners of the beds and at intervals of about 4-6' apart for vertical supports. Drive these into the ground leaving about 6-8" sticking above the soil.
- 3. For 5' wide beds, construct the hoops using 90" lengths of ½" PVC. Place one end of the PVC into one vertical support then arc it over into the opposite vertical support. Continue down the length of the bed. This makes an enclosure that is tall enough for large vegetables such as cauliflower and broccoli. If your bed is 4' wide and/or if you don't need the height for the large vegetables, you can use shorter lengths of PVC pipe about 76" long.

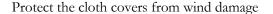
AGRICULTURAL FABRIC COVERS

- 1. Agricultural fabrics can extend your growing season by providing frost protection as well as providing some protection from insects while still allowing for air and light. Refer to the publication by Dr. Bumgarner listed at the end of this article for more detailed information on using these fabrics.
- 2. Drape all-purpose garden/agricultural cloth over the frame and secure using bricks or blocks. (This is where the 2x4 top cap comes in handy giving a flat surface on which to place the bricks. Use PVC clips or snap clamps to hold the cloth securely onto the frame especially during high winds. The clips are available from Territorial Seed Company and from Johnny's Seeds.
- 3. We used a polypropylene fabric from Knox Feed and Seed that came in 8' wide rolls and worked well with the 5' wide raised bed setup. If 8' is not available use a wider cloth. Or if your beds are 4' wide, then the 83" wide cloth will suffice.
- 4. Wind can be a big problem for this type of cover. Options to mitigate this problem include using hay bales or flat panel inserts at the ends of the rows or wrapping the cloth along the sides around 2x4's and securing with bricks or blocks.



PVC clamps

Insert 1/2" PVC hoops into 1" PVC supports driven into the corners of the beds







SUPPORTS FOR VINING PLANTS AND TOMATOES

Vining plants and tomatoes need extra support and I learned that hog wire makes the best support. The hog wire comes in panels and can be supported using metal tree stakes. Tie the panels to the metal stakes using wire.



In spite of the Covid pandemic, our team of area volunteer gardeners had a successful year of raised bed gardening. Here is our team with Sheri and Russell Liles of Liles Acres Organic Farm. Over 2000 pounds of produce from this garden was donated to local food banks.



Photo courtesy of Doug Finley

For more in depth information on raised beds there are two excellent publications available on the UT Extension website: One by Dr. Natalie Bumgarner at https://extension.tennessee.edu/publications/Documents/W346-E.pdf

Seedlings

by Elin Johnson, Blount County Master Gardener



I became interested in gardening when I was really young, and my first gardens were started with seeds. The first were zinnias. When I was 12 years old, Grandmother encouraged me to start a garden, and she designated an area in her garden where I could plant some flowers. I bought a packet of seeds—tall pink zinnias with large blossoms. Oh, I thought they were so pretty! In those days, the Monroe County Fair was held in front of the Tobacco Warehouse in Sweetwater every year and one of its features was a flower show. People would bring their flowers to be judged and zinnias belonged in one of the categories. Guess what? I won third place with one of my pink zinnias! I was hooked! This was the beginning of a lifetime of gardening—and zinnias have been featured in many of my gardens. They are a favorite of bees and butterflies, too. I visited the UT Gardens in late summer 2021. There were areas of several types of bush-type zinnias growing there, and they were absolutely alive with black bees.

I think the most obvious of resulting seedlings I've had in my gardens is shown in the picture above. One year I had a pot of yellow and purple violas at the top of my patio path that was built on a gentle slope. Rain water would sometimes wash down the path. The following year I began seeing tiny plants coming up between the patio stones. I recognized them and left them to grow. This was the result.

Marigolds are another annual that I've grown in many of my gardens. They are one of my very favorite flowers, and I've grown just about all of the many types. In particular I love the little French marigolds—small mounds of yellow or orange. They make lovely edging plants, and they are ridiculously easy to grow from seeds. This one grew in my garden in 2019, grown from a seed from the year before. Bees love them, too. I didn't have any this year, but my neighbors did, and I have enjoyed watching them across the street all summer.





I love columbines, too (and so do hummingbirds). Several years ago, I joined a "chat group" on the internet about Aquilegias, the Latin name for the beautiful flowers we call columbines. There were members from all over Europe, Canada, and the United States. They had a seed swap feature, and I obtained seeds from the United Kingdom. There were blue ones, pink, white, and different types of blossoms.

Here are some of the resulting beauties. I received an email from a man in Sweden, who asked if I was Swedish, since Elin is a Swedish name. (I'm not.) The chat group was really enjoyable, but it is no longer active. (Facebook has taken over.)









I have really enjoyed the results of the seeds I received, although over the years many of the resulting plants have been overtaken by our native yellow and red native columbines. Columbines are not completely perennial here. But they produce enormous quantities of seeds, and the seeds pollinated by the bees contain pollen from native plants if one grows nearby. These tend to be dominant, so over the years the seedlings revert to resemble the natives.







Seedlings from a pink one

Columbines came with me to my condo, and they have seeded themselves in both the front and back yards. But there was another flower that "wanted to be there" (Nancy Robinson's words), and it has come up here—*Verbena bonariensis*. It may be the very most wildlife-friendly plant I have ever grown. I've seen bees, butterflies and hummingbirds go to it, and goldfinches also visit.







Verbena bonariensis

Ferns are an ancient type of plant that don't reproduce with seeds. They produce spores and when they are happy their babies come up all over. A long time ago, I bought two pots of Japanese painted ferns. Those two original parents have resulted in a multitude of new ones. Sometimes the color varies. Some are green but most carry the silver and pink coloration of the original parents. My later gardens contained cinnamon ferns, autumn ferns, our native Christmas ferns, and others. But I never needed to buy painted ferns again. Surprise! They have even moved into my little condo garden via tiny beginnings in my containers.





In 2019 I planted celosias in some of my containers accompanied by lantanas. In late July 2021 I noticed a little seedling in the side of one of my hosta pots. I thought it looked somewhat familiar but I didn't know what it was. But I decided to leave it alone and see what developed. As it got larger, I discovered that it was a celosia seedling! It's lovely. But why did it wait two years before sprouting?





Celosia seedling

Lantana and Celosia

But there are some seedlings that are not welcome. What do you see in the picture below? The large light green leaves belong to a sycamore seedling. I cut it down one year but it came back the next. There is an enormous sycamore tree in our neighborhood that I absolutely love. Its top is visible over the fence in my back yard, and I sit in my swing and watch the birds fly in and out of it. But its seedlings blow into my yard in their thousands. I pull the tiny seedlings up in my containers and flower beds. (There are also mimosa trees over there and their seedlings are unwanted, too.) This young tree is beautiful, but it will have to be removed. There is not room in my tiny back yard for an 80-foot sycamore tree!



The black-eyed Susans grew from seed, too

Hardy Succulents in Tennessee

By Laurie Smalley, Blount County Master Gardener



Of course, not ALL succulents can dwell outdoors year-round but East Tennessee can be home to a variety of cold-hardy, outdoorloving succulents. Most Sempervivums -AKA Hens & Chicks- and many sedums large and small fall into this category.

Keep in mind that a succulent plant is just a plant that uses its leaves to store water. Many of the popular succulents marketed as house plants won't survive frost much less an East Tennessee winter, so know your stuff! Most of the echeverias sold locally also fall into the category of non-hardy.

While often grown in pots to provide the drainage they crave, these hardy succulents will

die if brought in from the cold during winter. Don't be fooled by their delicate looks and Fibonacci swirls. Sempervivums and hardy sedums are perfectly content to spend cold weather outdoors. In fact, place them where they can be enjoyed in winter months as cold temps will show their deepest coloring. We are talking reds, grays, purples, almost blacks, and some yellows and oranges. When the different types seem mostly green in the summer, it's okay.

Culture:

These plants require excellent, sharp drainage so any container must have adequate drainage holes. They don't mind getting completely saturated but will not tolerate wet for long periods. If your container has a rim around the bottom, either create some holes on the sides at the bottom or place it on a slightly uneven surface so the bottom lip to the pot does not prevent drainage. A well-placed pebble will do the trick!

Our usual Blount County soil is a bit heavy for most sempervivums. When planting semps directly in garden

beds success is not guaranteed. You'll have to amend the soil and/or let gravity work for you. They thrive tucked into the crevices of a patio where foot traffic is not an issue because there is usually a gravel base to provide the needed drainage. They also make good rock garden plants and can be planted in retaining walls or on lightly sloped areas. However, if you want sedums in your garden beds, go right ahead! They do just fine in a good garden soil. If you have irrigation, they may not thrive.

Semps and sedums (and all succulents for that matter) enjoy plenty of bright sun. Locate accordingly. Containers smaller than the one trade-gallon size or similar may appreciate less than 12 hours of full, strong sun but are going to need 6-8 hours as a rule.





For watering I rely solely on Mother Nature. Resist the urge to water even newly installed outdoor succulents! I give my planters a dose of Osmocote® when planting and each spring thereafter.

Creating a planter:

Choose a container having at least 6-10" of depth for the root zone for larger semps. Shallower containers may need more help from you in terms of shade or watering. As already covered, it will need good drainage.

Use a high-quality peat based potting media like Pro-Mix®. You can add in up to 10% or so of regular garden soil and mix. They really aren't fans of a sandy soil. If the mix is dry, it should be wet before planting. Add a dab of dishwashing liquid to your container and mix then add as much water as the mix will hold. Mound the wet mix into the pot, eliminating air pockets and creating a mounded surface that extends above the pot rim for best showing of the plants. The right technique will remind you of mud pie making! Use a pencil or wooden skewer to create a planting hole. New succulent starts should be allowed to callous over for a couple of days as a precaution against rot.

These succulents totally dislike being mulched with any organic mulch. Instead use stones, gravel or chicken grit. I once mulched a planter with ceramic tea pot lids!

Or just don't mulch at all. As the planter develops, the plants will form a mat.



In warmer months the semps may bloom. Enjoy the show. If you want to add to the several thousand named varieties of sempervivum, try some breeding! Be aware that once the mother plant blooms, it will decline and die. You are not doing anything wrong; the "chicks" are there to take over!

Sources:

The AgCentral Co-op has Pro-Mix® as does Knox seed

Ginger's in Maryville usually has a variety of succulents but many are not hardy.

Mountain Crest Gardens at https://mountaincrestgardens.com/hardy-succulents/ has good quality plants/starts.

Shop the Blount County Master Gardeners plant sale. I often donate some.

For quirky containers, visit yard sales with an eye to "Can I get a hole(s) in this thing?"



Iris

By Mark Sheridan and Susan Daffron, Blount County Master Gardeners



Most Southern gardens include some type of Iris. From Spring to early Summer, these beauties shine in most landscapes. Known for their beauty, abundant colors and ease of growing, Iris were a must have for our pollinator garden. Bees and butterflies are attracted to Iris. Colors are as abundant as the rainbow for which it was named: Iris, the goddess of the rainbow in Ancient Greek mythology. We have Bearded Iris, Japanese Iris, Dutch Iris, Siberian Iris and Dwarf Crested Iris (which are considered to be a ground cover) and more color combinations than we have counted.



There are two main groups of Iris, those grown from rhizomes and those grown from bulbs. Dutch Iris are grown from bulbs. Iris prefer full sun and rich, well-draining soil and are drought tolerant and deer resistant. They do very well even in our clay soil. They prefer their own garden area as over-crowding results in lack of blooms. It is best to divide Iris every 3 to 5 years or when you notice fewer blooms or the rhizomes are more abundant. The rhizomes prefer to be exposed to the sunlight, so only a shallow layer of mulch is tolerated. Iris make wonderful cut flower arrangements and their fragrance is like none other. We have a few that are remontant or flower again later in the summer.

Dutch Iris

Iris have been around for centuries. Ray Allen, Founder of AmericanMeadows.com states "anyone who studies Greek mythology learns that Iris, the name of the Goddess of the Rainbow, is surely one of the best assignments on Olympus. And because of the great elegance of the Iris bloom, it has been the symbol of monarchs and royal families throughout history. In fact, one of the earliest known artworks of an Iris is a fresco in King Minos' palace on the Greek Island of Crete. The palace dates from 2100 BC. Of course, the most famous royal use of the Iris as a symbol of power and position was that of the Bourbon Kings of France, including Louis XIV. The Iris was adapted on royal banners as the "Fleur de Lys", the elegant, three-sectioned symbol that disappeared from the French flag with their Revolution but is still quite common in the decorative arts. In fact, today it still proudly adorns the beautiful flag of the French-founded Province of Quebec in Canada."



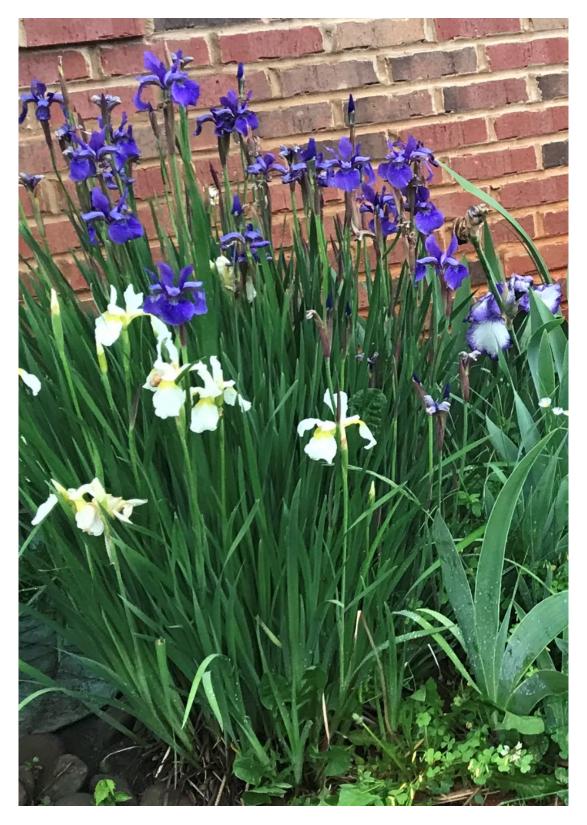
Dwarf Crested Iris



Yellow Japanese Iris



Japanese Iris



Siberian Iris

Photos by Mark Sheridan and Susan Daffron

Is Your Yard Smart?

by Terri Lyon, Blount County Master Gardener

Is Your Yard Smart?

My yard is on a cul-de-sac, so we don't get much foot traffic. But I often spot a pair of women walking down my street and stopping to examine my yard. One day I went over to greet them. It turned out they are mother and daughter, and one of the things they do when the daughter visits is wander the neighborhood.

We talked about my pollinator-friendly plants, and they asked about one of my trees, a sassafras. I broke off a twig and let them enjoy the aroma.

Before they continued their walk, the daughter said, "We like your yard. It's interesting." They didn't say gorgeous or spectacular, but still, I was flattered. Interesting is perfect for my garden.

My 'Interesting' Yard

I've been working for decades, a little bit at a time, to transform the cookie-cutter landscaped yard that came with our house. At first, my goals were centered around growing organic vegetables and fruit. But as I learned more about sustainability, I started reducing the size of my lawn, composting, and making my little part of Maryville more wildlife-friendly. I received a Certified Wildlife Habitat from the National Wildlife Federation.

The Path to an Interesting and Smart Yard

Then I learned about the Tennessee Smart Yards program from the UT/TSU Extension.

"We call it a Smart Yard — a yard that is in balance with the local environment for the benefit of both people and our ecosystem." https://tnyards.utk.edu/

Following the suggestions in the program means keeping your yard and surrounding areas ecologically sound:

- Supporting pollinators and wildlife
- Preventing pollution of our waterways
- Growing health food
- Being a role model for your children and grandchildren



How the Tennessee Smart Yard Program Works

The nine principles of the Tennessee Smart Yards Program are:

- 1. Right Plant, Right Place (plan your site, assess conditions, use natives)
- 2. Manage Soils and Mulch (protect surfaces and avoid runoff)
- 3. Reduce, Reuse, Recycle (recycle and compost)
- 4. Water Efficiently (manage water, use rain barrels)
- 5. Use Fertilizer Appropriately (test soil and fertilize properly)
- 6. Manage Yard Pests (use beneficial insects, avoid pesticides)
- 7. Reduce Stormwater Runoff and its Pollutants (capture rain, use permeable surfaces)
- 8. Provide for Wildlife (incorporate pollinator-friendly plants, bird feeders)
- 9. Protect Water's Edge (prevent runoff)

As you implement the suggested principles, you earn points toward a 'yardstick.' For example, protecting soil surfaces with vegetation to minimize erosion by rainfall and runoff provides 2 inches toward the goal of 36 inches.

Get 36 inches through your activities, and you can certify your yard.

Because we have different types of yards, the program offers over 70 inches worth of opportunities. For example, one of the areas is protecting water's edge, and my yard does not border a waterway.

My Experience

I downloaded the workbook and assessed my yard. I was delighted to find out that I reached the goal of 36 inches without any additional actions.

Master Gardeners have a head start since much of our education helps us create a healthy yard. For example, we learned how to test our soil and plant properly, manage water runoff, mulch, control pests, plan our landscape, use native plants, and garden organically.

You, too, may find that you don't have to take any actions to get your yard certified!

And a bonus: You'll also get Master gardeners hours: 5 hours CEU and 5 hours Volunteer.



How To Get Started

Go to the Tennessee Smart Yards website at: tnyards.utk.edu

- Step 1: Download the workbook and the yardstick. Options for tracking your progress include a spreadsheet and printables, so choose whatever works for you.
- Step 2: Watch the videos one for each Smart Yard principle.
- Step 3: Take actions toward your goal of 36 inches.
- Step 4: Certify Your Smart Yard.
- Step 5: Purchase and put up your yard sign. This is optional, but the \$30 sign cost supports the program. And it may inspire your neighbors.

Future Initiatives

The program coordinator, Dr. Andrea Ludwig, presented to a packed house at the February Blount County Master Gardener meeting.

She shared that the initial Tennessee Smart Yards program focuses on helping homeowners create ecologically friendly yards.

But, spoiler alert: a community program is coming in 2022. Five pilot programs are in progress in Tennessee, and the complete program will go live this year.

Get your yard certified if that is right for you. Then you'll be able to spread the word to your neighbors and mentor them through the process.

Finally, get involved in the Blount County initiative as it unfolds.



Dr. Andrea Ludwig, Program Director
UT Institute of Agriculture

Mentoring Teens' Gardening Projects

by Jaquie Stiver, Blount County Master Gardener

If you are looking for a rewarding challenge, then consider mentoring a teen working on a gardening or environmental project.

This year Girl Scouts USA is celebrating 110 years of opportunities for girls to grow strong, have fun and serve their communities. Boy Scouts USA is in its 112th year. Both organizations offer higher award experiences for their members. For Boy Scouts it is a series of ranks with skills and leadership responsibilities leading up to the Eagle Scout project. Girl Scouts also develop skills and leadership capabilities but have three possible higher awards culminating in the Gold Award. The sky is the limit on possible projects but many youths choose environmental related ones.

Blount County has benefited greatly from many projects led by teens. I have had the privilege of mentoring and participating in many of them. These projects have included pollinator gardens, vegetable gardens, reading gardens, invasive plant removal, plant overgrowth removal at cemeteries and Sam Houston Schoolhouse, and most recently a Native Tree Walk in Springbrook Park.





Kids Korner

Working as a mentor is a different game than leading a garden club or project. Instead of being the instigator and director, a mentor usually plays a behind-the-scenes role, and often follows the dreams and plans the youth have in mind. This role is challenging in many ways. First, we adults have some expertise because of our interests, experiences and because we are doers. We have to stop ourselves from taking the lead. Second, we have lost some of that youthful belief that anything is possible, we have to stop ourselves from setting limitations. Third, we are used to a more direct and timely plan. Stepping back and letting the teen take the reins and work on their time frame can be challenging. It is difficult being quiet as they stumble, go off track, and learn by failure before they rally and complete their project.

In truth the journey of the project is as or more valuable than the project itself. Learning about organization, guiding others, being flexible, and persevering are the skills that will serve these youths in their adulthood. The experience will give them valuable skills that will help them in their careers and community service. The confidence they gain allows them to tackle future challenges. The joy you will feel in assisting them from the sidelines is priceless.



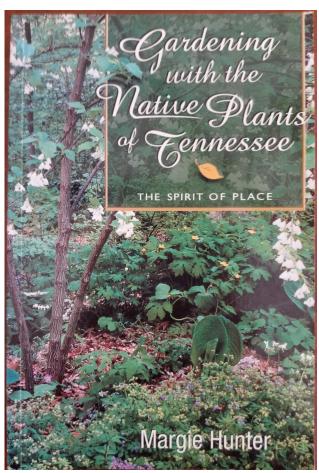
The Book Nook

Gardening with the Native Plants of Tennessee: The Spirit of Place by Margie Hunter

"An invaluable resource for the home or commercial gardener who wishes to plant native species."—Edward W. Chester, Austin Peay State University

The following review is adapted from the description on Amazon books:

In Gardening with the Native Plants of Tennessee, Margie Hunter gives gardeners the knowledge they need in order to nurture the natural heritage of Tennessee in their own gardens. Beginning with a survey of the state's ecology—including geology, geography, plant life and animal species—Hunter takes a holistic approach to the process of gardening with native plants. The book's main section provides detailed accounts of 450 species of wildflowers, ferns, grasses, vines, shrubs, and trees native to Tennessee and adjacent states. These descriptions, arranged according to plant type, include both scientific and common name, flowering and fruiting times, propagation methods, soil and light requirements, and distribution patterns within the state. Nearly 400 color photographs illustrate the species discussions.



The book is designed for the home gardener and includes area-specific information on native species and a comprehensive listing of plants. Appendixes refer readers to other sources of information and seeds, including mail-order nurseries, botanical gardens, state agencies, native plant organizations, and subject-specific conferences. A detailed bibliography also contributes to the reference value of this book for gardeners, landscapers, and nature lovers throughout Tennessee and in neighboring states.



March

- 3 Fort Loudon State Park volunteer day (Contact Ella Ellingson to volunteer)
- **5** UT Gardens EcoLOGICAL Gardening Symposium \$100 Garden Members, \$115 Non-members https://ag.tennessee.edu/utg/Lists/Calendar%20of%20Events/DispForm.aspx?ID=296
- 12 Plant Natives 2022! Symposium, Tennessee Valley Chapter of Wild Ones, via in person or ZOOM, 9AM-5:30PM UTC University Center, Chattanooga, TN \$65 Members, \$75 Non-members, tnvalleywildones.org
- 13 Spring Forward to Daylight Saving Time
- 16 Blount County Master Gardeners Monthly Meeting 6:30 pm via ZOOM or in person at the Blount County Public Library
- 17 Fort Loudon State Park volunteer day (Contact Ella Ellingson to volunteer)
- 19 Native Plant Sale & Expo, Tennessee Valley Chapter of Wild Ones, 9AM-3PM, First Horizon Pavilion, 1801 Carter Street, Chattanooga, TN



- 1-30 Dogwood Trails, Open Gardens & Camera Sites, Knoxville
- 5 Maryville College Groves Project Day 1, 2PM
- 6 Maryville College Groves Project Day 2, 2PM
- 8, 9 UT Arboretum Society Plant Sale
- 9 UT Gardens Spring Spectacular Plant Sale
- 23 Downtown Maryville Farmers' Market Opens
- 22 Last Spring Frost Date in Zone 7a The University of Tennessee Extension, Institute of Agriculture
- 22-24 Dogwood Arts Festival, World's Fair Park, Knoxville
- **26** Blount County Master Gardeners Monthly Meeting 6:30 pm via ZOOM or in person at the Blount County Public Library TEMG Friday Focus Series Live Talks and Tours via Zoom for Master Gardeners. Sign up at



- **21** Guided Nature Walk: Moss, Knoxville Botanical Garden & Arboretum, 10AM, \$10 non-members, http://knoxgarden.org/classes-events/workshops/
- **24** Blount County Master Gardeners Monthly Meeting 6:30 pm via ZOOM or in person at the Blount County Public Library

^{*} Items in *italics* are for Master Gardener members only.*

BCMG Note Cards For Sale

Susan Daffron, Membership Director, Blount County Master Gardeners

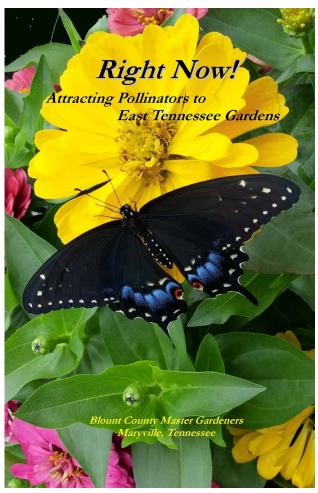
A fun thing BCMGA did in 2020 was the photo contest. We asked our members to photograph their gardens and submit pictures. One photo was selected each month to be the photo of the month. Many wonderful photos were submitted. Eight photos were selected to create a collection of note cards. We had them printed and they are now available for purchase at a cost of \$10 per set. The note cards are blank inside making them perfect for all occasions: birthdays, thinking of you, etc. They also make wonderful gifts for family and friends. To place your order, please go to https://bcmgtn.wildapricot.org/Flower-Theme-Note-Cards





Right Now! Attracting Pollinators to East Tennessee Gardens is a publication of the Blount County Master

Gardeners, with all articles written by our members. It features descriptions of 81 plants, about 2/3 of which are native to Tennessee, and photos of all those plants, most of which were taken by our members. In addition, there is an extensive chart of plants attractive to pollinators, including bloom time and whether the plant is a pollen source, a nectar source, or a host plant for butterfly larvae. Finally, there are website and book recommendations, and native plant, nursery, garden center, and online plant resources. *Right Now!* is available at these locations in Maryville: AG Central Co-op, Ginger's Flowers (seasonal), Out of Eden Garden Center, and Southland Books; in Knoxville at Wild Birds Unlimited and Stanley's Greenhouses; and by mail order through the BCMG website, bemgtn.org.



Blount County Master Gardeners

Blount County Master Gardeners Extension Office 1219 McArthur Road Maryville, TN 37804 Phone: (865) 518-2520

email: info@blountcountytnmastergardeners.org

We're on the Web at http://bcmgtn.org Like us on Facebook, too. Blount County Master Gardeners (BCMG) is a volunteer service organization with the goal of training volunteers who can provide the public with research-based information on a variety of horticultural topics. It is built upon solid visions, values, and community support.



