

Summer 2021 Volume III, Issue 2

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Welcome (almost) summer! After a dry April, late frosts, and a cooler-thannormal start to May, will we have a "normal" summer for gardening? Let's hope so!

In this issue, Elin Johnson shares her love of both lilies and Japanese maples. The Sustainable Gardening column of Terri Lyon introduces types of composting, and James Hutchison's Container Gardening Tips, Tricks & Techniques column explains maintenance of containers during the hot and dry conditions of summer.

Logan Hill introduces the idea of combining STEM (science, technology, engineering, and math) and gardening with children. Specifics of landscaping with Leyland cypress and beautyberry are detailed by Louminda Torbett.

BCMG news includes photographs from the successful April plant sale, and coverage of the awards ceremony, as well as an invitation to attend the next intern training course.

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, see the announcement on page 32 or visit our website at:

bcmgtn.org

You can also engage with us on Facebook:

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

The Blount County Gazette is published quarterly. If you would like to suggest topics or contribute content to our next issue, especially items for the Events Calendar, please contact the editors at bcmggazette@gmail.com.



Lilies in the Garden

by Elin Johnson, Blount County Master Gardener



Conca d'Or

I have always loved lilies. My grandmother, who was my role model in many ways, had a beautiful garden and was responsible for my interest in gardening from the time I was a child. She especially loved roses and faithfully kept her roses sprayed all summer. For thirty-three years I worked at a job where I commuted 25 miles to and 25 miles back every day. So the time I had to devote to my garden was extremely limited and I formed attachments to plants that didn't require as much maintenance as roses.

But she also grew many other flowers including lilies. I remember in Grandmother's garden daffodils, yellow daylilies, blue Siberian iris, orange Tiger lilies, and white Madonna lilies. Descendants of these plants have bloomed in my gardens for many years. Tiger lilies come up all over the place because of the little bulblets they produce along their stems. Some of her original plants came with me to my little condo garden including Tiger lily bulblets. Keeping these plants provide me with annual memories of that long-gone garden and my beloved Grandmother.



To me, lilies are wonderful for painting colorful vignettes in the garden. You can plant lilies that bloom at different times of the summer so they'll create beauty in your garden for two months or more. Here are a few that have provided pictures in my gardens.

The earliest to bloom in my gardens was 'Kiss Me Kate', a hybrid between Asiatic and Easter lilies. The tall one next to it was a yellow trumpet lily, 'Anaconda', which bloomed later, July here in East Tennessee. The trumpets are old-fashioned lilies that have been blooming in people's gardens for centuries. They are very tall and grow into beautiful clumps with gorgeous blooms. The very latest to bloom was the tall Lilium 'Black Beauty' (an Orienpet).

Kiss-Me-Kate







Orange Asiatic



Black Beauty



Red Asiatic

Asiatic lilies may be the most successful of the lilies. They come in many colors, bloom in June, and most of them are three feet tall or shorter. They are easy to grow; their clumps increase over time to make a beautiful spot of color in the border. Asiatics are not fragrant.





Pink Asiatic

Light Pink Asiatic

The Oriental lilies are late bloomers, are very fragrant, and are mid-sized in the border. Possibly the most popular oriental of all, the white variety Lilium 'Casa Blanca', can be found in many people's borders.



Orienpet lilies (or OT's) are hybrids between the orientals and trumpets. They are much in demand now and come in many colors. Some have inherited the height of the trumpets and they are very beautiful. They bloom in mid to late summer and some are fragrant. The first of these I grew was called 'American West' and it was very colorful—red and yellow. 'Conca d'Or' was the most spectacular lily I ever grew. And then I tried a pink one called 'Anastasia' which may be my favorite. I couldn't be without it so it now also blooms in my tiny condo garden.





American West Anastasia

There are lots of species lilies—Martagons, Madonnas, Regals, Tigers and the familiar Easter lilies. The red one pictured here is Lilium *specosium* 'Scarlet Delight' which bloomed beautifully for me. And tiger lilies bloomed outside my former breakfast room window, started from bulblets in clumps of daylilies I had planted there.



Scarlet Delight

Photos by Elin Johnson

My idea of a lovely garden always includes lilies. And over the years, I have loved showing my beautiful lilies to people who love gardens just as my Grandmother shared her garden with me. Gardening is a legacy to be shared and passed on to another generation, and to me, lilies are an essential part of the legacy.



Tiger Lilies

Leyland Cypress

by Louminda Torbett, Blount County Master Gardener

Leyland Cypress trees are commonly used for hedges, screen and windbreaks here in East Tennessee. Many home owners plant them because they are a fast-growing tree (3-4 feet/year) and can quickly provide desired privacy. However, this might or might not be the best choice for the homeowner.

Not everyone needs a 60' tall tree with a 20' spread. These trees need to be planted no closer than 12' apart. Closer planting means that the trees will be in competition for water, air circulation, and sunlight, leading to disease. "Air flow is very important and putting them closer will cause lots of problems and shading which causes the lower limbs to die out."

"Water is extremely important for these trees and will need to be provided for as long as you have this plant, a long term commitment for the Leyland cypress owner. They should be watered during any period of dry weather and should receive at least 1" of water per week. Make sure you place the water at the base and do not spray water on the foliage with sprinklers." "Avoiding moisture stress is essential to lessen the occurrence of the canker diseases they are susceptible to." (https://utextension.tennessee.edu/)

Browned out needles is the tree reacting to environmental stress, sometimes from shading and sometimes from needle blight or from canker on the limbs and trunks. The main canker disease is seiridium canker. "There is no control for this disease other than to prune out the infected plant part. Pruning out infected parts of the tree and sterilizing pruners with alcohol or Lysol after ever cut is a good idea." "If it is needle blight, three sprays ten days apart with a fungicide with the active ingredient (a.i.) chlorothalonil is the prescribed treatment. Leyland Cypress trees are very susceptible to many diseases and insects."



Leyland Cypress Hedge



Browned out needles on Leyland Cypress

Evergreen options to Leyland Cypress include Eastern Arborvitae (*Thuja occidentalis L.*) and Wax Myrtle (*Morella cerifera*)



Eastern arborvitae is another fast growing tree (3' per year) and can grow to 40-60 ft. tall, but under cultivation will probably be no taller than 30 ft. Plants are susceptible to strong wind, snow, and ice damage, and young plants need protection from winter browsers, such as deer. The species tolerates air pollution and heat as long as it is rooted in cool, moist soil; be prepared to water this tree during dry periods. The highly aromatic plant provides food and cover for birds. (Source: http://wildflower.org)

Wax Myrtle (southern bayberry) grows 3-5' per year, is a multi-trunked, evergreen shrub, and can reach 20 ft. in height. It serves as an excellent screen plant, with both standard and dwarf varieties available. Because there are separate male and female plants, if you want berries you must have male plants close enough to the berry-producing female plants for pollination to occur. Wax myrtle requires constant moisture to get established, but is both drought- and flood-tolerant once established. If temperature goes below zero degrees F, it will defoliate, not re-leafing until spring. It attracts birds and butterflies and is the larval host of the Red-Banded Hairstreak. (Source: http://wildflower.org)



When planning a privacy hedge, consider including a diversity of species. Diversity reduces the risk of diseases and pests spreading across your property or potentially destroying your entire hedge. It also provides additional shelter and food for wildlife. Avoid planting your trees in a straight line but alternate along two rows about 32 inches apart, to look like the edge of a saw.

Other native plants that work well in privacy hedges include Common Ninebark (*Physocarpus opulifolius L.*), Magnolia Grandiflora (*Magnolia Grandiflora L.*) and American Holly (*Ilex opaca* 'Aiton').

Summer Garden Tasks

UT Extension Institute of Agriculture

GARDEN TASKS FOR JUNE

- It is not too late to plant annuals. Plants such as sunflowers, zinnias, Mexican sunflower, cosmos, basil and dill can still be direct-seeded.
- Mulch your vegetable garden as well as your ornamentals. The mulch conserves moisture and prevents
 the splashing of water, thereby reducing the spread of disease. It also adds organic matter to the soil and
 prevents many weeds.
- Trim back catmint (Nepeta) after its first flush of flowers to promote new growth and a second flush of blooms.
- Harvest most herbs just before flowering when the leaves contain the maximum essential oils.
- Daylilies are in peak bloom in June. Plant in full sun for the best flower production.
- Once daffodil foliage has turned yellow, you can mow or cut it down.
- To keep squash, cucumber and bean plants abundantly producing, harvest them frequently.
- Water your plants in the morning, to conserve water and reduce evaporation. Infrequent, deep watering is
 better than frequent, shallow watering, since deep watering promotes deep root growth. For best results,
 deep-water trees and shrubs once or twice a week and flowers two to three times a week. Most plants
 need one inch of rainfall per week
- Be on the lookout for mosquitoes! Avoid standing water. Make sure your gutters are draining properly, and change the water in birdbaths every three to four days. In areas where standing water cannot be avoided, use environmentally friendly mosquito dunks. These dunks are made from a naturally occurring bacterium called Bti (Bacillus thruingiensis israelensis). Dunks can be purchased at nurseries and most home improvement stores.
- Powdery mildew is also more likely to be a problem if we are receiving abundant rainfall. Keep an eye on
 plants like yarrow, asters, azaleas, coreopsis, dogwoods, euonymus, gaillardia, gerbera daisy, honeysuckle,
 hydrangea, lilac, monarda, phlox, pulmonaria, roses, rudbeckia, scabiosa, spirea, verbena and zinnias for
 powdery mildew. (For more information on powdery mildew: https://extension.tennessee.edu/
 publications/Documents/sp370b.pdf)

GARDEN TASKS FOR JULY

- Layering easily propagates many plants. Hydrangeas, viburnums, weigela, trumpet honeysuckle, jessamine, and climbing roses are a few plants that will root if the stems are fastened down and covered with soil.
- Cut old flower heads off *Hydrangea arborescens*, such as 'Annabelle,' to get a second but smaller flush of flowers.
- Crape myrtles should not be fertilized after mid-July to allow them time to properly harden off by fall.
- Keep birdbaths clean and filled with water throughout the summer.
- Start planning your fall vegetable garden. Late July is the time to start seeding your winter broccoli, cabbage, cauliflower and Brussels sprouts to be transplanted into the garden in mid-August.
- Raise the height of your mower to reduce stress on your lawn and to conserve moisture in the ground. For best results mow 2" for Bermuda grass, 1-2" for zoysia and 2.5-3" for fescue.
- Pinch back chrysanthemums and asters one last time no later than mid-July.
- Keep perennials deadheaded to keep them flowering. Remove fading flowers down to a leaf node or new bud.
- Cut back by one-third early-planted annuals that are getting leggy or out of control to keep them looking good into the fall.

GARDEN TASKS FOR AUGUST

- Begin collecting seeds of annuals and perennials for next year's garden or your local seed library. Cut seed heads and place in a brown paper bag to dry, labeling each bag with the name of the plant.
- Avoid fertilizing most trees and shrubs from August to November. Fertilize roses one last time to encourage new growth and late summer/early fall flowers.
- To reduce the number of pests on your fruit trees, pick and destroy all fallen fruit.
- Control your weeds before they go to seed and do not add weeds with mature seeds to the compost pile.
- Gather herbs and flowers for drying and preserving mid-morning, just after the dew has dried off but before the sun causes them to wilt.
- Many trees and shrubs are now setting fruit and flower buds for next season, so it is important for the
 plants to have sufficient water at this time. A lack of water now will reduce next season's crop of fruit or
 flowers. Use mulch to help conserve moisture and keep the soil temperature cooler during the dog days
 of August. Also, use soaker hoses to water deeply and minimize water loss due to evaporation.
- Sow pansies, ornamental kale and cabbage, and Swiss chard seeds in a good quality potting medium. By late September or early October they should be ready to transplant into the garden.
- For late crops of beets, carrots, collards, kale, lettuce, spinach, turnips, mustards, and radish, sow seeds
 before the middle of the month. Transplants of broccoli, cabbage, cauliflower, and onions can be planted
 mid- to late-August.
- Divide and transplant bearded iris during the month of August. Cut back the foliage by two-thirds, dig
 and divide rhizomes, and remove any dead portions. Check for iris borers and replant in a sunny, welldrained location with one-third of the rhizome above the existing soil level. Water well.
- August is also a good time to dig and divide daylilies, using a sharp shovel to split the clumps into desirable sizes. Cut back foliage to 5 inches and replant in a sunny location.
- Order spring-flowering bulbs in August and September to be planted in October and November.
- Avoid pruning trees and shrubs starting in late August, particularly hedging plants such as boxwood, hemlock, and hollies, as doing so this late in the season can stimulate new growth that will not harden off before frost Delay pruning any tree or shrub until the plant is dormant. Any major pruning should be done in late winter.

Source: https://ag.tennessee.edu/utg/Pages/monthlytasks.aspx#AnchorTop



Sustainable Gardening

Terri Lyon, Blount County Master Gardener

How to Use Your Stuff to Make Your Garden a Better Place

"The garden suggests there might be a place where we can meet nature halfway." ~ Michael Pollan

I love the Michael Pollan quote for its suggestion that we reimagine *why* we garden. That our garden is a place where we can serve our needs and honor nature's needs.

Managing Your Stuff To Make The Garden a Better Place

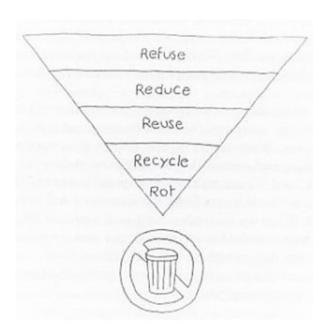
Browsing through the Museum of Appalachia, I was struck by a sign on the wall. It was a quote from a frontier woman:

"Everything we had we made."

To survive, she had to create everything from scratch. Fortunately, that is not true for us. Still, this woman's quote is a reminder that we can try a different approach to our consumption, to better our lives and help the environment.

Waste can be a resource.

Bea Johnson, the author of Zero Waste Home: The Ultimate Guide to Simplifying Your Life and Reducing Your Waste, summarizes her approach in this graphic:



Johnson applies the 5 R's to households, but it certainly holds true for gardens, too. In this article, I will focus on Rot, but let's take a quick peek at the other R's: Refuse, Reduce, Reuse, and Recycle.

Refuse: Say No to Giveaways

This interesting addition of 'refuse' to the traditional 'reduce, reuse, recycle' approach focuses on the stuff we accumulate for free. Do you accept free gardening supplies, such as seeds that you never use? Ask the person to donate them to the seed library instead.

Reduce: The Impact of Your Consumption

If you don't have a way to manage your purchases, you end up with more than you need. And it can sneak up on you. How many different types of fertilizer do you have, and do you end up buying more because you can't find the one you need? Another example is neglecting the upkeep of garden equipment, a problem I have. Better care would mean I don't end up sending them to the landfill.

Reuse: Upcycling Can Make the World a Better Place

I'm inspired to try to get by with what I have. For example, I use plastic containers as tiny greenhouses. Master Gardeners seem to excel at this step.

Recycle: The Decision to Toss It

Do you have gardening equipment that you rarely use? Storing and maintaining stuff like this can be a burden. Why not gift it to someone else who needs it?

And, you may be surprised at the recycling options available locally. Go to the Earth911 website, put in your zip code, and search on 'garden tools.' Blount County has several options for tool recycling.

Rot: Build Your Soil

Rot is another addition to the traditional 3 R's. Besides reducing the waste that leaves my house, I'm motivated by the opportunity to make compost for my garden.

Composting is undoubtedly a place where we can meet nature halfway.

My composting efforts include the following three traditional methods:

Compost Bins

I have several containers in my backyard that I upcycled from trash cans. I layer yard materials, food waste, and shredded paper ,and let nature take its course. I've noticed that worms crawl through the drainage holes and live in my bins. After a year, I have gorgeous compost.

Leaf Mold

We have many large trees, so my husband rakes up the leaves and mulches them with the lawnmower. I let them sit for a year and then add the resulting leaf mold as mulch in my garden beds.

Brush Piles

I created a brush pile mainly to provide an environment for wild critters. But it is also a method of composting. The logs and large sticks take years to break down, but the resulting compost is spectacular.

I also use two less traditional compost methods:

Bokashi

Bokashi is a Japanese style of composting that is a form of fermentation. The resulting compost has been broken down into the perfect food for the critters in your soil.

The starter is a powder with effective microorganisms. I put my kitchen scraps in, sprinkle on a handful of the bokashi starter, and seal the bin.

When it is full, I let it sit for two weeks. Then I bury the compost in the garden. This technique works well if you need compost quickly.

Bokashi bins with spigots in the bottom allow you to use the 'bokashi tea,' diluted with water, on your plants. But I use an upcycled kitty litter container for my bin. It works great.

To get started with bokashi, you can download the guide from the New Mexico State Master Gardener website.



Vermicomposting

Worm bins: put food waste in and get fantastic compost out.

You can use worm castings as side-dressing and, mixed with water, as a 'worm tea.' Your plants will love it in either form.

"Vermicompost has a profound effect on plants. It boosts the nutrients available to plants, helping seeds to germinate more quickly, grow faster, develop better root systems and produce higher yields...vermicompost also helps suppress plant diseases and insect pests," according to the NC State Extension website.

For years I had an upcycled, homemade worm bin. But recently, I've moved on to one that can be kept in the house. I did this mainly because the worms can't be too cold or too hot.

After much research, I purchased the *Urban Worm Bag*. I put kitchen scraps in the top, which draws the worms up. The castings they leave behind are harvested from the bottom.

Worms Eat My Garbage by Mary Appelhof is a good resource for getting started in vermicomposting.

The Five R's Make the Garden a Better Place

Sustainable gardening means giving back what you take away. Rather than depleting the soil, you keep it enriched. Ideally, your sustainability means your children and grandchildren will enjoy the land as much as you do.

Use the 5 R's to, as Michael Pollan says, "meet nature halfway."



Treemergency: Mulch Volcanoes are Erupting in Landscapes!

Joe Boggs, Ohio State University Extension/OSU Department of Entomology Reprinted with Permission of the Author

Mulch piled to stratospheric heights around tree trunks has been called many things (some not printable) such as *pyramid mulch* and *mountain mulch*. My personal favorites are *mulch volcanoes* (or volcano mulch) for stratovolcano-like creations and *mulch mounds* for those that resemble shield volcanoes.





These mulch monstrosities have been a source of continual frustration for anyone who cares for trees or cares about trees. Yes, despite years of educational efforts, we just can't seem to stamp out the abominable practice.

Adding insult to injury (or the coup de grâce), mulch volcanoes are often accompanied by "tree moats" created

by excavating a moat-like ring around trees or shrubs at about the dripline, or slightly beyond. This is done with an edger or a shovel. In either case, there always appears to be a concerted effort to sever roots growing beyond the excavation zone.



Why do these horticultural horrors appeal to people? Tree moats take extra time. Mulch volcanoes cost more money. Both can cause slow tree death. Perhaps that's the problem: they don't kill trees right away!

Leave it to the Bard to provide the perfect metaphor in King Henry VI Part III, Act 2, scene 1:

"And many strokes, though with a little axe,

Hew down and fell the hardest-timbered oak."

Volcano mulch and tree moats are the little axes.







Mulch Done Wrong

Volcano mulch does not kill trees outright; if it did, people wouldn't do it. Instead, it produces subtle, long-term ill effects that are mostly hidden from our view.

1. **Bark Damage** Tree bark is dead, dry tissue that protects trees from a wide range of challenges such as dehydration, oxidation, and direct access by plant pests and pathogens to the living tissue beneath. Mulch piled against tree trunks can retain water, elevating the moisture content of the bark, making it susceptible to decay. The result is analogous to what happens if we suffer severe skin damage.

2. Root Dehydration Although bark mulch may at first appear light and airy, it ultimately becomes compacted as it degrades to interfere with oxygen reaching tree root cells. Trees respond by growing a secondary root system into the mulch; it's the same response seen in trees planted too deep in the soil. However, the roots growing into the mulch can become exposed and dehydrate as old mulch eventually degrades and disappears.



3. Stem Girdling Roots Secondary roots growing into mulch piled high on the trunk will encounter the slopes of mulch volcanoes causing the roots to turn; they can't grow into thin air! Eventually, these roots encircle the tree trunk and merge with the stem tissue. As these errant roots increase girth, they gradually girdle the trunk and restrict vascular flow. Thus, they are know as "stem girdling roots."



- 4. **No Water Infiltration** As the organic mulch decomposes and dries out, it will eventually start to repel water; it becomes hydrophobic. You can observe hydrophobicity of dry organic matter when you try to moisten a bag of dry peat moss. Of course, water repellency ultimately causes infiltrating roots to dehydrate.
- 5. **Tree Stress** The deleterious nature of volcano mulch is not immediately apparent. While moisture starvation and vascular strangulation can ultimately kill a tree, along the way they produce tree stress. This can induce trees to drop their defenses against infestations by opportunistic insect pests such as native borers or infections by plant pathogens. Of course, the pests and diseases get blamed if a tree succumbs, not the volcano mulch that set into motion the tree's demise in the first place.

Mulch Done Right

Organic mulches such as aged bark mulch are a wonderful thing. The mulch moderates soil temperature, preserves soil moisture, suppresses weeds, and as the organic mulch slowly decays, it contributes to the organic content of the underlying soil. If used properly, the dark colors enhance the landscape aesthetics. Of course, the availability of organic mulch dyes make other colors available; shopping for mulch can be like using an artist's palette.

In 2017, I highlighted an outstanding example of tree mulching in Glenwood Gardens, Great Parks of Hamilton County [GPHC, Ohio]. I'm including a few of the images from that Alert or you can read the entire report at https://bygl.osu.edu/node/721. Jerry Frankenhoff (Urban Forester, GPHC) told me that the mulch job was performed by a group of volunteers...They worked with staff members...on Earth Day.



Their application of mulch followed all of the general recommendations for using hardwood mulch around trees. The mulch rings were as large in diameter as practical and mulch depths were no more than 2-3 inches. Mulch that found its way onto the tree trunks was pulled away from the trunk flare. What a fantastic Earth Day statement!





Japanese Maples (A Love Story)

by Elin Johnson, Blount County Master Gardener



I planted my first Japanese maple many years ago at my garden on Chestnut Street in Sweetwater (my favorite). I don't remember exactly when, probably in the early 1980's, or what kind it was. The picture of the red tree (above), made in 2008, was my beautiful *Acer palmatum* 'Sieryu' tree. 'Sieryu' is the only threadleaf variety that makes a tall tree. It is green in the spring through summer but gorgeous bright red in the fall.

Little seedlings or grafts of the little maples are rather inexpensive. That's a good way to do it—grow them in pots until they are larger, and then plant them in the ground. I have had quite a few in my gardens and would like to show you some of my favorites.

There are different types. By far the most popular are the *Acer palmatum* hybrids. The familiar threadleaf varieties are included in this genus. 'Tamukeyama' is one of the most popular varieties, and you see it in many land-scape schemes. It is colorful all year, dark red in spring and summer, and brilliant scarlet in the fall. Another of my favorites was *A*. 'Waterfall'. *A*. 'Tamukeyama' (above) was planted in the raised bed in the front yard of my second garden at Fairlane Drive and a lovely red peony 'Buckeye Belle' accompanied it in late spring.

There are tall varieties of *Acer palmatum atropur-pureum*, including the popular 'Bloodgood'. A great many of its seedlings have been sold, and they grow quickly into beautiful specimen trees 15 to 20' tall. One of them grew at the garden on Chestnut Street. When I moved to my second garden at Fairlane, one had been planted two feet from the house, and the previous owners had been cutting it back regularly because it was obviously too large for its location. I had someone doing work with a backhoe shortly after I moved in, so it was moved out into the yard. It quickly grew into a beautiful tree and provided dark red color year around.



Another type is the "full moon" maple, *Acer japonicum*. Their leaves are different, more rounded, but they also provide beautiful companions for your garden. My favorite in this category has been *Acer japonicum* 'Aconitifolium'. It had been growing in my Chestnut Street garden, but when I moved to Fairlane it went with me, and was planted as a specimen tree in the front yard. It was about 15' tall when I moved after eight years. It's shown here in summer, spring and fall (next page).



Acer japonicum 'Aconitifolium' - summer, spring and fall

One year a long time ago when the East Tennessee Hosta Society held its yearly plant sale, there was a vendor from Oak Ridge who was selling bonsai. He had had very little success, so I bought a little bowl containing a Japanese maple seedling. I failed at bonsai because I felt sorry for the little tree and couldn't bring myself to cut it back like I was supposed to. So it was planted in the ground. The small yellow tree here is that tree after several years. I may not have succeeded at bonsai, but was glad I bought the tree.





There is a variety of small maple that grows on the west coast of the US that is virtually identical to a Japanese maple. Named *Acer circinatum*, it's nicknamed "vine maple" because its branches tend to grow long. Its leaves are just like its cousin's, and it has similar brilliant fall colors. One was present in the Chestnut Street garden, and it grew to be pretty large, maybe 20' tall. This was its fall color (photo at left).

The first year at Fairlane, I was developing a bed under a cherry tree and ordered some ferns from a company in Washington State. In one of the pots, I noticed a tiny maple seedling. So, it was put into a pot of its own, and later moved to a location at the edge of the deck. I wrote to ask the owner of the nursery if she might know what it was, but she said they had both Japanese and vine maples, so it could be either. This is what it looked like (photo at right) in spring 2017. You can also see a miniature behind it that was growing in a pot—its name was 'Sharp's Pygmy'.

The picture below shows three of the maples mentioned here: the red *Acer palmatum* moved away from the house, an *Acer circinatum* tree that developed from a seedling moved from the Chestnut Street house and, in the right corner, leaves from the unknown seedling that arrived in the fern pot.







One other maple in the Fairlane garden that I want to mention is *Acer palmatum* 'Sango-kaku', the coral bark maple. An oak tree in the back yard died, and this maple was planted to take its place (the most expensive plant purchase I ever made, because it was rather large). This photo (left) was made in April, but its fall color is bright yellow. I wasn't there to see it grow to mature size, but did enjoy it for a couple of years. It's absolutely gorgeous!

My home is now a condo in Knoxville, and I've had to leave my beautiful maples behind, but not completely—there are four miniatures in containers in the back yard that keep me company now. The following two, *Acer palmatum* 'Coonara Pygmy' and 'Shishigashira' provide fall color in my tiny back yard. Both of them have lived in their pots for a number of years. But my memory of all the others (and several that aren't mentioned here) will stay with me forever. By the way, some of my maples (including these two) were purchased from my friend, Brian White, who has a good selection of Japanese maples.





Photos by Elin Johnson

Planting for Pollinators

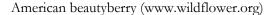
Louminda Torbett, Blount County Master Gardener

Native vs. Non-native Beautyberry

How can you tell the difference between native beautyberry (*Callicarpa americana*) and non-native beautyberry (*Callicarpa japonica, Callicarpa bodinieri, Callicarpa dichotoma* and other cultivars)?

From www.wildflower.org, "American beautyberry is a wonderful, large understory shrub with a naturally loose and graceful arching form. In the fall and early winter, the branches are laden with magenta purple (sometimes white) berry clusters that look spectacular as the leaves drop in autumn." Although the flowers provide some benefit as a nectar source for butterflies, it is the berries that provide food for the birds in late winter when food is scarce.







Japanese beautyberry (www.lewisginter.org)

The most noticeable difference to the casual observer between the native and the non-native beautyberries is the <u>arrangement of the berries along the stem</u>. The berries of the American beautyberry are clustered tightly around the stem. The berries of the non-native shrubs are held further away from the stem on what is called a peduncle.

Another key difference is that the <u>leaves</u> of the American beautyberry are textured while those of the Callicarpa japonica are smooth. You have to look closely.

Both types of beautyberries make a great addition to a garden but, although the non-native beautyberries have not been tagged as invasive, the native shrubs are generally hardier and require less care.

Beautyberry prefers part shade to full sun and moist soil. It is very tolerant of many types of soil including sandy loam, medium loam, clay loam, clay and calcareous soil.

Gardens to Tour

Louminda Torbett, Blount County Master Gardener

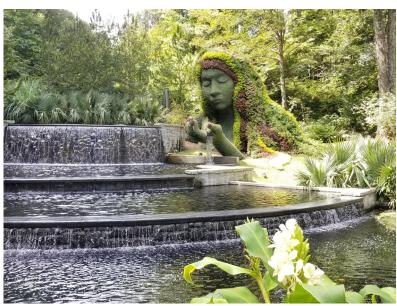
We have worked hard all spring and summer gardening is ahead of us. If you are like me, you usually get to take a break and tour other gardens in the spring or fall. However, summer is a great time to take a little time off and get inspiration from gardens and arboretums to see what is growing and thriving in the summer and bring home ideas for use next year.

Gibbs Gardens, Ball Ground, Georgia

Voted in 2020 at Best American Botanical Gardens, Gibbs Gardens is located in North Georgia, an hour north of Atlanta ,and about 2 3/4 hours south of Maryville. A residential estate garden of 220 acres, the house and gardens were designed and built by Atlanta landscaper Jim Gibbs. Allow 3 1/2 to 4 hours for your visit. For more information see their website at www.gibbsgardens.com.



Atlanta Botanical Gardens, Atlanta, Georgia



Just over 3 hours from Maryville are the Atlanta Botanical Gardens. Only 30 acres located in mid-town Atlanta, this is a lovely garden with a nice restaurant for lunch. Besides the variety of plants there are sculptures, water features, and a collection of glass art by Dale Chihuly. For more information see their website at https://atlantabg.org/

Kids in the Garden: STEM Activities

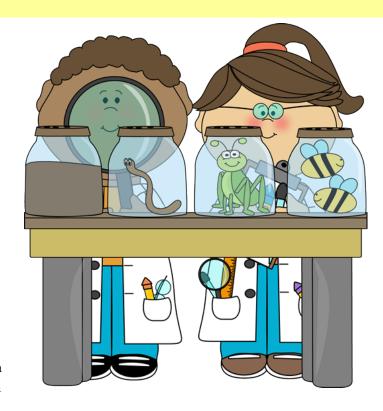
Logan Hill, Blount County Master Gardener

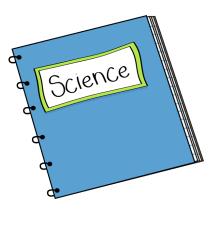
Editors' note: STEM is an acronym for Science, Technology, Engineering, and Math. Logan Hill is the project leader for the BCMG-sponsored Project H.O.P.E. which incorporates STEM activities in gardening with middle school-aged children.

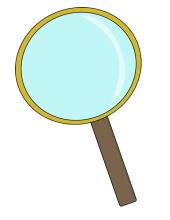
What you don't know, you don't know...

During my school days, I had great teachers who encouraged me and others to be the best and to overcome the many obstacles that would be put in our way. Those were invaluable lessons in the 50's and 60's!

As my professional career advanced in the food industry, I wanted to "give back" and, with the support of my company and colleagues, I established several youth educational programs in schools where I worked. My focus was centered on academic excellence in education with emphasis on science.







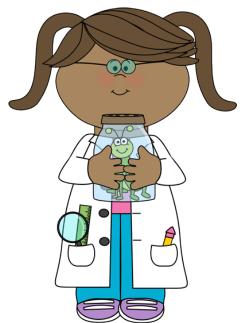
I discovered, as a food scientist, that the students I encountered had no idea what that was and, in most cases, had very limited exposure with individuals who were scientists. Again, what you don't know, you don't know! Unless they had teachers like I had, their imagination of this STEM world was really limited! So, my objective was to shine some light on science during their early educational development.

After retirement and moving back home, my interest in exposing youth to science continued. In talking to the local students, science and math are still viewed as difficult subjects. Many of the students do not understand STEM and, therefore, do not embrace science and math in their early school years. That apprehension is carried into high school and, in some cases, impacts their decisions not to pursue STEM degrees in college.

Knowledge is power! By showing students how everyday skills in the garden have science and math connections, STEM becomes a less intimidating concept! This should lead to a higher degree of acceptance of STEM going forward.

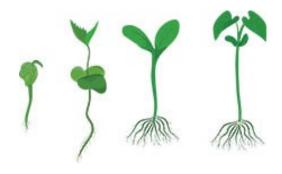
I have a big garden and the community has lots of school children and senior citizens. Thus, Project H.O.P.E. (Helping Our People Earn & Learn) was born and became a great platform for middle school students to learn about STEM through gardening. With an all-star class of innovative and smart Blount County Master Gardeners and community scientist/workers, Project H.O.P.E. is able to demonstrate how science, technology, engineering, and math are expressed in the growing of fruits and vegetables. This leads to students embracing STEM in middle school and hopefully loving (not fearing) these disciplines in high school and beyond.

A STEM bonus is ...some of these students might pursue academic and/or professional careers in agriculture (business and technology). In Project H.O.P.E., they help feed a community of senior citizens! In the future, they could potentially help feed the world...and isn't this the ultimate purpose of STEM?



Suggested Activities:

- 1. Measuring the size of a raised bed, and calculating how much soil is needed to fill it
- 2. Planting two different types of the same plant to observe which grows best in local conditions
- 3. Planting the same plant in two different conditions (for example, full sun and partial shade) to observe where it does best
- 4. Observing comparative sizes of vegetables grown in raised beds with controlled soil conditions and those grown in the garden; determining the reasons for the difference (chemistry effect of the P, K & N)
 - 5. Determining the true plant harvest time and comparing it to the stated time on the transplant tag
 - 6. Establishing straight rows in the garden using measured stakes and string

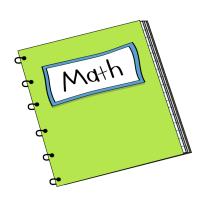


For more information: projecthopealcoa.org

https://www.schoolgardenproject.org/programs/stem

https://www.kaplanco.com/ii/gardening-to-promote-stem

https://www.aces.edu/blog/topics/lawn-garden-urban/stem-in-the-garden-teacher-training-workshop/



Container Tips, Tricks, & Techniques

James Hutchison, Blount County Master Gardener

Care and Maintenance for Healthy Containers

We all want to live a long, healthy, and productive life. We want our container plantings thriving and blooming - living a long healthy summer, too. Our summer annuals with their showy display are often the mainstay of our colorful containers. As you drag out those nice clean containers that you put in the potting shed last fall, keep these tips in mind for easy summer maintenance.

Ensure Good Drainage

Add extra holes to a pot using an electric drill and a mason-ry bit or enlarge existing holes with a regular drill bit on plastic. Make a drainage layer with stone or packing "peanuts". I just use broken shards of old terra cotta pots to cover the good holes I've made. Some gardeners will invest in container "feet" to lift the container up off the deck or concrete for added air circulation. That's fine, but not required. However, NEVER put outdoor pots in saucers. Stagnant water can cause pest outbreaks and root rot. Fill pots with your container media and plant your plants so that the final "ground level" is about 1 inch or so below the rim. This will leave room for watering without spilling over.



Ornamental millet 'Purple Majesty,' calibrachoa, and purple verbena in container with copper spike sculpture.

Use Big Pots

I like using large containers. There's more room for a big lush dramatic display, plus big pots give the plants more room for root growth, and will need to be watered less often.

Give Them Some Air

To ensure good air circulation, arrange pots with some space in between them. Large containers look great with a collection of smaller containers around them. Just don't crowd them all together. You'll be inviting pests and fungi to the patio party!

Water Soil Not the Plants

Whether using a hose or watering can, water directly into the soil. If need be, lift the foliage and stick the rosette or hose wand under the foliage to get at the soil. Many plants, especially those with thick fuzzy leaves, resent having their foliage wet. Watering in the morning is preferred, but if you do have to do evening watering be especially vigilant about this. Plants are more susceptible to fungal diseases if the foliage stays wet overnight.

How Often Should I Water?

In spring, when you've just completed your container masterpiece, you may find that watering a couple times a week is enough. The finger method is the best detector. Plants need to dry out a bit in between watering so don't overdo it. When the plants have gotten larger, say around June 1st, you'll be watering more often, perhaps every other day. Containers in shade may need half that. By August, you are surely watering every day and sometimes twice if a container is small. Small hanging baskets are notorious for needing that! Another thing I watch is the wind. Windy conditions will dry out your containers quickly.

Fertilization

Use a time-release fertilizer in your container media when you first plant. Also begin a water soluble instant fertilizing program right away - every two weeks is great! I usually stop fertilizing in mid-August. If you can, fertilize in the morning and not during the heat of the day.

Deadhead and Prune

A little maintenance of deadheading and pruning back is often needed. Some plants really want to take over and can get kind of pushy. To keep your display looking its best, rotate the container every couple of weeks and keep the pruners handy. Containers look best if they're kept in shape all around and not allowed to get lopsided.

Now, stand back and enjoy your composition! It will be time to clean up and put containers away again before you know it!



I was surprised when watering one of my containers to find a "walking stick.." Purple angelonia and setcreasea (sometimes called Purple Queen) must have held the right scent for this creature. She stayed around for a good week or more!

Scenes from the BCMG Plant Sale, April 17, 2021

Dragan Stefanovic, Photographer and Blount County Master Gardener















BCMG Awards Ceremony, April 27, 2021

2020 Awards

500 Volunteer Hours: Logan Hill

200 Volunteer Hours: James Hutchison, Steve Kelly, Mark Seder

100 Volunteer Hours: Janine Brouillette, Teri Brushaber, Tom Carpenter, Susan Daffron, Mike d'Aprile, Ella Ellingson

15 years: Mary Alford

10 years: Janice Church, Diane Cockerham, Donna Dixon, Ella Ellingson, Beth Gilley, Cindy Hopson, Patricia Jarnagin, Julie Labhart, Reena Lieber, Sue Salter, Laurie Smalley, Kitty Strawbridge

5 years: Linda Ayers, Patricia Bryant, Cheryl Coleman, Susan Daffron, Maryann Gerber, Kay Goodwin, Becky Hornyak, Elaine Jollay, Crystal Lasky, Mark Mason, Mark Seder, Mark Sheridan, Dragan Stefanovic, Jacquie Stiver, Nan Taylor, Louminda Torbett

Master Gardener of the Year: Logan Hill

Outstanding Community Service: Tom Carpenter

Behind the Scenes Service: Rosemarie Cirina

Eager Interns (first to reach 40 volunteer hours): Steve Kelly and Joni Northcutt

2019 Awards (postponed from 2020)

300 Volunteer Hours: Janine Brouillette, Maryann Gerber, Mark Seder

200 Volunteer Hours: James Hutchison, Deborah Talbot, Louminda Torbett

100 Volunteer Hours: Susan Daffron, Cheryl Ferrone, Logan Hill, Mike Holt, Becky Hornyak, Dudley Leath, Reena Lieber, Mark Sheridan, Nan Taylor, Sandra Widmeyer

20 years: Melinda Siegler

15 years: Brenda Gregory, Bruce Koopika, Rita Loveday, Charlotte Miller, Carol Morton, Nancy Robinson, Shelly Robinson, Cindy Stuart, Sandy Vandenberg, Joan Worley

10 years: Jim Cunningham, Lena Cunningham, Dudley Leath

5 years: Rosemarie Cirina, Jean Davidson, Nelda Griffith, Frances Presnel, Dianne Rocco, Linda Spannaus

Master Gardener of the Year: Louminda Torbett

Outstanding Community Service: Maryann Gerber and Mark Seder

Behind the Scenes Service: Nan Taylor

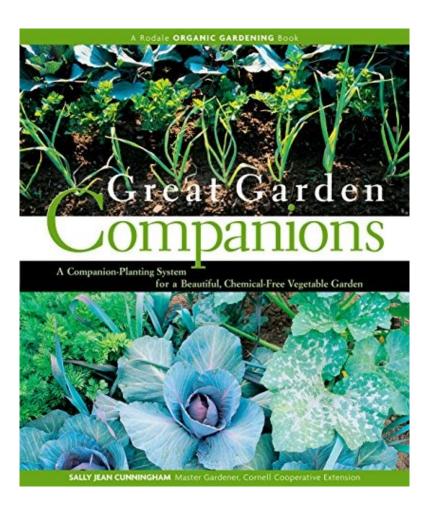
Eager Intern (first to reach 40 volunteer hours): Janine Brouillette

The Book Nook

Great Garden Companions by Sally Jean Cunningham

Whether you are a beginner or a seasoned gardener, this book has so much to offer. The author, a Master Gardener associated with the Cornell Cooperative Extension, discusses how to use companion planting and natural pest-control techniques for your own garden. I read the book cover to cover and tagged so many pages it positively bristled with Post-It Notes. Here are just a few examples of what you will find in this book.

- How to use perennial flowers and herbs in the vegetable garden.
- Rotation planting year to year.
- Detailed information on beneficial insects and the plants that attract them.
- Tips on using mulch and cover crops to improve soil and reduce watering and weeding.
- Garden design ideas.
- Seasonal to-do lists.
- And lots of pictures!



BCMG Note Cards

The photo note cards are \$10 per set and 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

The note cards feature Honey Bee on Crimson Clover by Sandy Vandenberg; Sunflowers by Sharlee Hatten; Eastern Tiger Swallowtail by Dan Curry; Coneflowers and Russian Sage by Mary Alford; Morning Glory and Bumble Bee by Brandi McCray; Spicebush Swallowtail on Tithonia by Wanda Banks; Green Pepper by Corinne D'Aprile, and Bee on Autumn Clematisby Thomas Car penter.

Enjoy sending and giving these beautiful note cards!





JUNE

- 12 Upscale Your Pots, UT Gardens, Knoxville, 10 a.m.-12 noon
- 15 Native Plant Seminar—Tennessee Plant Conservation Alliance, Cooper Breeden, 7:30 p.m. https://zoom.us/j/95933234646?pwd=cHhBeUNuaGdWbitDTEIqbFE3bmk4Zz09
- 17 Canning Clinic—Pickles by UT Extension and Blount County Public Library Register at https://forms.gle/fT9CaGKHBLSafFRJ6
- **18** The Smokies Herbarium, Janice Bitner, 1-3 p.m., part of the 6-week Science at Sugarlands virtual series Sign up for Zoom link at https://dlia.org/sas. Previous programs are posted to YouTube.
- 22 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 https://forms.gle/bg6HaoSDSGHE5Dc4A

JULY

- 12 Master Gardener Class Information Session and Pre-Registration, 6:30 p.m., Blount County Public Library (for more information, see page 33 of this newsletter)
- 16 Birds of the Smokies, Keith Watson, 1-3 p.m., Science at Sugarlands virtual series (see link in June)
- **20** Native Plant Seminar—Native Plant Propagation, Meredith Clebsch, 7:30 p.m. (see link in June)
- 27 Blount County Master Gardeners Monthly Meeting 6:30 pm via ZOOM or in person at the Blount County Public Library

AUGUST

- 11 Master Gardener Classes Begin, 5:30-8:30 p.m., Blount County Public Library
- 17 Native Plant Seminar—Pollination Strategies of Native Orchids, Bart Jones, 7:30 p.m. (see link in June)
- 20 Waterbears of the Smokies, Dave Bartels, 1-3 p.m., Science at Sugarlands virtual series (see link in June)
- **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.**

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 two-thirds of which are native to Tennessee, and photos of all the 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.



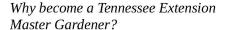






Master Gardener Classes

Blount County has a wonderful group of Master Gardeners who spend many hours contributing to gardens throughout our community. Most Master Gardeners, however, take the classes for their own personal knowledge then find themselves part of a wonderful community of fellow gardeners. Join us for a no-obligation information night on *July 12*, 2021.



Help improve the lives of those in your community through horticulture.

Receive initial training and education across a range of horticultural crops.

Connect with others in your area who are interested in plants and gardens of all kinds.

Have access to continuing education in both horticultural and organizational areas.

Participate in Extension outreach events that impact youth and adults.



Information & Pre-registrationJULY 12, 2021

Beginning at 6:30 p.m.

Classes begin: August 11 thru October 27, 2021

> Location: Blount County Library 508 N Cusick St. Maryville, TN 37804

Every Wednesday for 12 weeks 5:30 p.m. - 8:30 p.m.

Blount County Master Gardeners' projects include a partnership with Habitat for Humanity, Project Hope a youth-and science-based program to teach middle school students STEM through gardening, Liles Organic Community Farm, the Annual Plant Sale, the Shakespeare Garden at the Blount County Public Library, the Townsend River Walk, and the Maryville College Grove project, to name a few.

Questions? Contact James Hutchison at jhutch3670@att.net Website: www.bcmgtn.org

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.