



Blount County Master Gardener

Spring 2021 Volume III, Issue 1

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After a year of social distancing due to the international COVID-19 pandemic, Spring comes as a welcome relief. 2020 found many of our Master Gardener projects put on hold and our monthly meetings held via video conferences. Going forward into 2021, we will be maintaining pandemic protocols. However, warmer weather brings opportunities for more outdoor activities including garden tours (see the article on nearby gardens to visit for inspiration). Nursery centers will be opening for business. For those of us who have ordered seeds and transplants online, our orders will be arriving soon! The arrival of daffodils is another harbinger of spring (see page 20).

Now is the time to start planning your vegetable garden with crop rotation in mind. Elin Johnson gives advice on plants to use in containers, and James Hutchison writes about soils and mixes for them. Check out our Kids Korner for fun out-of-doors activities with children. Make plans now for dealing with those pesky Japanese beetles when they inevitably arrive.

Terri Lyon, a 2020 graduate of the intern class, introduces a new column on Sustainable Gardening. Learn about indoor gardening projects tested by Rosemarie Cirina during the winter months. Every issue this year will also have information on native landscape plants for pollinators.

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 bcmggazette@gmail.com.



Planting for Pollinators

by Becky Hornyak, Blount County Master Gardener

We're introducing a new column with this issue that will focus on gardening for pollinators. When choosing a new plant for your yard, we recommend making a little extra effort to search for native plants instead of buying what your neighbor has or what the local big box store offers. In a recent article, Doug Tallamy concluded that "the widespread displacement of native plant communities by non-native plants... is a key cause of insect declines" or what is called the insect apocalypse. Native plants are adapted to local and regional climate and soil conditions, so they require less water and fertilizer. Planting native plants promotes biodiversity, restores regional landscapes, recreates functioning ecosystems, and prevents the introduction and spread of invasive species. Native plants contain nectar and pollen resources for our native pollinator species and act as larval hosts for butterflies, many of whom are specialists like monarchs, which only lay eggs on one specific plant.

Pollinators require both pollen (protein) and nectar (carbohydrates). The common landscape plant known as Butterfly bush (*buddleia*), for example, provides nectar for adult butterflies, which is why you see so many on the plants. However, it is not a larval host plant for any species, and is listed as potentially invasive by the Tennessee Exotic Pest Plant Council (www.TNEPPC.org).

Native alternatives to Butterfly bush are:

New Jersey tea	<i>Ceanothus americanus</i>	deciduous shrub 3-4' tall	Late spring summer bloom	Larval host
Buttonbush	<i>Cephalanthus occidentalis</i>	deciduous shrub 6-	Summer bloom	Pollen and nectar source
Joe-pye weed	<i>Eutrochium fistulosum</i>	wildflower	Summer bloom	Larval host
Black-eyed Susan	<i>Rudbeckia spp.</i>	wildflower	Summer bloom	Pollen and nectar source, larval host
Coneflowers	<i>Echinacea spp.</i>	wildflower	Summer bloom	Pollen and nectar source
Milkweed	<i>Asclepias spp.</i>	wildflower	Summer bloom	Pollen and nectar source, larval host



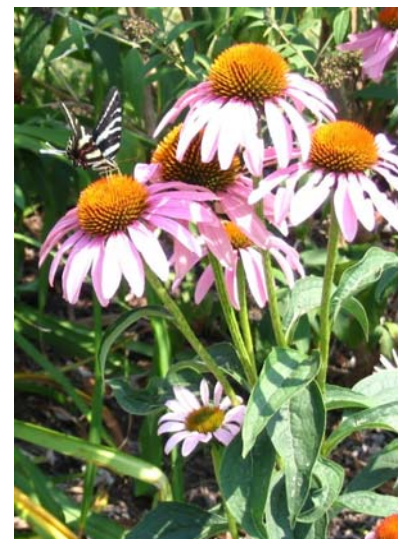
Joe-pye weed



Buttonbush



Orange Milkweed



Coneflower

Those Pesky Japanese Beetles

by Louminda Torbett, Blount County Master Gardener



Grubs in the lawn or garden are the larval offspring of three types of beetles: Japanese beetle, European chafer and June beetle. It is the Japanese beetle and its larvae that cause the most damage. Adult Japanese beetles feed on over 300 plant varieties beginning in mid-summer, and, although they live only about 30-45 days, they can do considerable damage. Grubs of the Japanese beetle feed on the roots of turfgrass and other plants causing the grass to brown and die. One or two grubs are not going to do significant damage but an infestation of 15 or more grubs per square foot of lawn will develop patches of dead and dying grass.

If you live here in East Tennessee and have loamy soil, you probably have grubs. If you have dense clay-based soil like mine, you probably do not have much of a problem. That is because Japanese beetles like to lay their eggs where there is soft, loamy moist soil.

Author and horticulturist Jessica Walliser has the following recommendations for preventing grubs:

- If you fertilize your lawn, use natural rather than synthetic fertilization. Grubs are found more often in lawns that are fed chemical fertilizers.
- Stop watering the lawn during the summer and allow the grass to go dormant. Female beetles will seek out soft, damp soil in which to lay their eggs. Their larvae will thrive in lawns that are frequently and shallowly irrigated.
- Mow the lawn at a height no shorter than three to four inches. Female beetles prefer tightly-cut lawns with a full-sun exposure in which to lay their eggs.



GETTING RID OF GRUBS

Seeing a few grubs in your soil is no cause for concern. I tend to pinch them between my fingers if I find them in my garden. Unless your lawn develops brown patches that easily peel back or you find 15 or more grubs per square foot of lawn, just ignore them. And for goodness sake do not go out and buy lawn chemicals just because the big box store is having a promotional sale.

Beneficial nematodes (*Heterorhabditis bacteriophora*) are naturally occurring microscopic predators of grubs and a good method of organic control. The miniscule worm-like creatures kill grubs throughout the growing season. They do not harm other insects, humans, pets, or the soil. There are many articles on beneficial nematodes if you want more detail on how they kill the grubs.

Purchase beneficial nematodes from a reputable source and carefully follow the instructions.

Note that nematodes are living organisms and can only be stored for a short period of time. They are sensitive to sunlight and dessication (drying out) so apply early in the morning or in the evening when temperatures are cooler. Water lightly before and after application. Apply in spring when the soil temperatures are above 60 degrees F.

Photos courtesy of Dr. Scott Stewart UT IPM Extension

Milky spore (*Paenibacillus popilliae*), another organic control method, is a bacterium that is applied to the soil in either a powdered or granular form. Japanese beetle grubs consume the spores that then reproduce within the body of the grub, eventually killing it and releasing more spores. It is best applied in late summer or early fall when grubs are actively growing and located in the upper layer of the soil. Soil temperature must be above 65 degrees F. Apply just before rainfall or water in lightly after application. When applied according to label instructions, milky spore can remain effective for ten or more years. University of Tennessee Extension notes that research results have been inconsistent in demonstrating the effectiveness of milky spore.

Chemical pesticides: Please do not use chemical pesticides to kill the grubs. Most of the chemicals are made from neonicotinoids. These chemicals are systemic, meaning they are absorbed by the roots then carried throughout the plant's vascular system where they are also found in the pollen and nectar. When they are applied on the lawn, they are also absorbed by nearby trees, shrubs, and flowers where pollinators feed. These chemicals have recently been implicated in the decline of many insect species including native bees and fireflies as well as birds that feed on the insects.

GETTING RID OF JAPANESE BEETLES

Manually: Go into your garden in early morning with a bucket of soapy water. The beetles are more sluggish in cool morning temperatures. When you see the beetles on your plants, knock the beetles into the bucket of water or squash them with your fingers.

Traps: Japanese beetle traps are not recommended, even though large numbers of adult beetles can be caught in the traps. Trapping alone will control only a small percentage of the beetles and will attract more Japanese beetles to the area. I learned that the hard way when I lived in Massachusetts. I used the soft sided traps and did capture many of the beetles. However, the crows discovered they could peck holes in the plastic for a tasty meal. What they did not eat were released back into my yard and garden!

Optimal Growing Conditions and Habitat Manipulation: Diseased and injured trees and plants are especially susceptible to attack by beetles. So, keep your trees and plants protected from disease and injury. Also, prematurely ripening or diseased fruit is very attractive to beetles. Remove this fruit from the trees and the ground. The odor of such fruit will attract beetles, which can then attack healthy fruit.

Physical Barriers:

It is possible to protect some plants with fine netting to prevent the beetles from doing damage. However, certain plants require pollination during blooming, so do not cover the plants until the fruit has set.

University of Tennessee Extension <https://extension.tennessee.edu/publications/Documents/PB946.pdf>

Jessica Walliser <https://savvygardening.com/grub-worm/>

University of Minnesota Extension <https://extension.umn.edu/yard-and-garden-insects/japanese-beetles#non-chemical-management-options-1591111>



Spring Garden Tasks

UT Extension Institute of Agriculture Calendar 2021

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.
- Don't let weeds get started in the garden.

You can download the entire 2021 Calendar at

<https://www.uthort.com/2018-tennessee-home-vegetable-garden-calendar/>



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Blueberries

UT Extension Institute of Agriculture

Types of blueberries commonly grown in Tennessee are northern highbush (*Vaccinium corymbosum*), rabbiteye (*Vaccinium virgatum* syn. *V. ashei*), and southern highbush. Southern highbush has genetics of both the other two types. Rabbiteye blueberries are a great place to begin for homeowners as they can be somewhat more forgiving than highbush.

Rabbiteye

These are actually native to the southern US and have wider adaptability in terms of soil and management. They tend to be longer lived and more vigorous than highbush. Make sure to select cultivars with sufficient chilling requirements because many lower chilling cultivars suffer frost damage on early blooms. Rabbiteye have a later harvest season than highbush and will be ripe in July and August. Most rabbiteye varieties have resistance to anthracnose fruit rot and Phomopsis twig blight.

Older cultivars known to perform well in Tennessee – Tifblue, Premier, Brightwell, Powderblue

Newer Cultivars of interest – Titan, Ochlocknee, Vernon, Columbus

Highbush

These blueberries natively grow in areas that are moist or bog-like and prefer high organic matter sites that do not dry out. In mid-south Tennessee locations, northern highbush often perform best in cooler regions (they have greater chilling requirements) and generally require irrigation. They can be more disease prone and have a shorter lifespan versus rabbiteye. In recent years, genetics from both the northern type highbush and native southern blueberry species are being used to breed southern highbush for growing in climates not suitable for northern highbush. Make sure to select higher chilling southern highbush.

Northern highbush cultivars to consider – Duke, Bluecrop, Spartan, Chandler

Southern highbush to consider – Legacy, Ozark Blue, Summit, Sweetheart



Photo from UT Extension Institute of Agriculture Calendar 2021

Containers—Mix & Match

by Elin Johnson, Blount County Master Gardener

Mix and match the colors
Your imagination can go wild.
Invent a marvelous color scheme
That will make the viewers smile.



I can remember when everyone's ideal container had red geraniums surrounded with white petunias. I'm not saying they were not beautiful—they were. But today's wonderful array of beautiful plants means a gardener can choose a different color scheme, not only for different years, but for different seasons in the same pot.

The choices are seemingly endless, and every year new plants show up in the garden centers: sun coleus in a wonderful array of colors; petunias and million bells in a range of colors my grandmother could not have imagined; purple alternantheras; cannas with black, chartreuse and red foliage; container sized elephant ears and dahlias; spiky, tall angelonias; and helichrysums, bacobas, and dichondras to drape over the side. The gardener can compose his/her own masterpieces using plants—a very rewarding activity.

I had new decks built at both of my houses in Sweetwater, and on both I installed an arch on one end where I could display a large hanging basket. This turned out to be something I really enjoyed.



Not all of my ideas are successful, however. When I had the brick terrace built at my house on Chestnut Street, I thought I wanted a water feature. So, I picked out a concrete container complete with a descending fountain. I sat on the deck and enjoyed the sound of the water and my cat, Little Sister, enjoyed drinking out of the top level and pretending she was fishing. I was **so** proud of it. But then hot weather arrived and algae began to grow. I discovered that it was almost impossible to clean it out—it was too heavy to tilt and didn't have a drainage hole. The task of cleaning it was a terrible ordeal. I would siphon as much water as possible, but had to clean the bottom couple of inches of water by soaking a towel and wringing it out.





It was a dirty, time-consuming job.

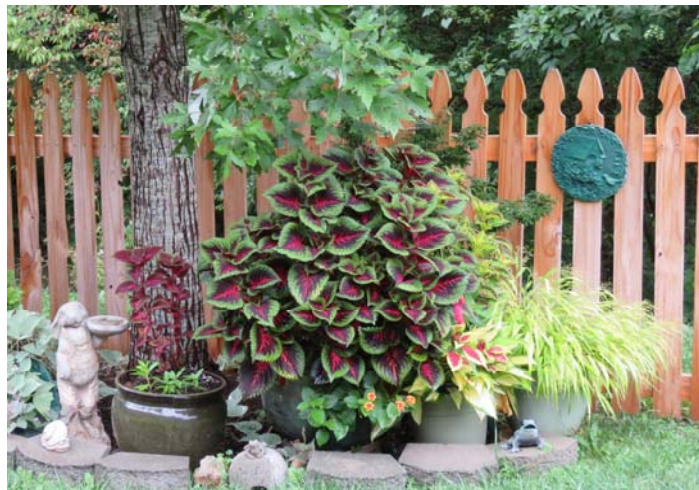
So, the next year I removed the pump, re-opened the hole in the bottom where the electric cord had been installed, and filled it with potting soil and plants. It became one of my favorite projects. Each fall I would plant violas and bulbs. The violas would keep me company through the winter, and in spring the tulips would bloom (See photo at left). Then every summer I would choose a different combination of annuals.

This is the same pot in early July (photo at right) with blue petunias, lavender angelonias and yellow marigolds.

I have become a container addict—every year more have been

added. I have tried hypertufa troughs, colored ceramic pots, terracotta, concrete and plastic. I don't seem to be able to resist buying new ones every year. The troughs are my favorites.

One use for my pots has been to start Japanese maples and conifers in them, then let them grow for a couple of years until they are large enough to transplant into the garden. Hostas are my first love, but since I now live in a condo and my property is small, there is no room for a great many large ones. So, the small and mini hostas I have now are all displayed in pots. And almost all my summer flowers bloom in one kind of container or another here, and they change from year to year; here's the same view in 2019 and 2020.



Got a hole in the border?
 Got a boring spot?
 No problem. The solution
 is insertion of a pot.

Container Gardening Tips, Tricks, & Techniques

by James Hutchison, Blount County Master Gardener

Container Soils and Mixes

Once you've chosen your containers, it's time to think about the growing medium. Container media is quite different from regular garden soil. A fairly lightweight and porous mix is needed for container gardening.

Soil straight from the garden usually cannot be used in a container because it is too heavy. Clay soil consists of extremely small (microscopic) particles and in a container the bad qualities of clay are exaggerated. It holds too much moisture when wet, resulting in too little air for the roots, and it has a tendency to pull away from the sides of the pot when dry.

Here is a planter in my back yard with several containers. There are Big Bounce Impatiens, Big Leaf Begonias, Caladium, Purple Queen, and Tradescantia Zebrina. I like to keep watering cans close by.



Container mixes must be porous in order to support plants, because roots require both air and water. All container mixes must drain rapidly yet retain enough moisture to keep the roots evenly moist. Container media is often referred to as soilless or artificial media, because it contains no soil at all. These specialty blends are composed of various things such as peat, vermiculite, bark and coir fiber. There are many container medium products available under different trade names and sizes available at your local greenhouse or garden center. Find one you like and stick with it.

Now your clean containers are filled with the right mixture, (I'm a big believer in time release fertilizer) and you have an array of beautiful plants to create your composition. Remember that the regular gardening rules apply. Plant the specimens at the same level they were in the nursery container. Fill all voids with the media and water gently. Until your plants find their "feet" a hose may be too forceful. Then stand back and enjoy!!

Sharing Your Love of Nature and Gardening with Kids

by Jaquie Stiver, Blount County Master Gardener

Looking to share your love of gardening or nature with kids but not sure how? Under think it! Yes, just keep it simple and have fun yourself. Why? Because sometimes overthinking causes us to think the kids won't be interested, that we don't know enough about a certain topic, there isn't enough time or that we're not good at it.

Really, kids and adults just want to be noticed, listened to and spent time with. So, if you must, fake it until you make it and convince yourself that the kids in your life would rather do nothing else than spend some time outdoors with you. Make a simple plan and invite them to join in. If you believe it will be fun and are convincing, others will usually buy into your enthusiasm and follow along!

Get started by picking a theme or topic. Something you enjoy or are interested in is easiest. As an example, I will share what I plan to do with my 4th-7th grade Earth Club members at school. Our club meets for one hour and fifteen minutes once or twice a month.

The theme is birds. We meet outside after school and start with a snack. While we eat, we will look at birds we can see from the playground. Usually there are; robins, mocking-birds, blue jays, doves, cardinals and regularly a hawk or vulture. Next everyone gets to pick a bird book to look through and find one fact to share. Not everyone is comfortable sharing but most do and of course some want to share many facts. Next everyone draws a bird or two. I have pens, markers, crayons and colored pencils. Most jump right in but for the ones who complain they just can't, I pull out my latest attempt at drawing a bird. I tell them I'm not a gifted artist either but I have gotten better with practice and so will they. Those who want to share their pictures may and those who prefer to get back to looking at the books have that option.



Next we will talk a bit about the benefits of birds in the environment and for our gardens. We cover ways to make our yards attractive to birds and usually talk about habitat loss and impact of chemicals and cats. Our closing activity is to make pinecone bird feeders (all you need is a pinecone, peanut butter, bird seed and a piece of yarn). Each student makes one to hang at school and one to take home. They are encouraged to share what they have learned with their family and try to identify the birds they see at their house.

If you are sharing your love of birds with a child, especially a younger one, you might pick one or two of the above activities and spend 15 or 20 minutes together. Truthfully the hardest part is getting started. Once you get going time disappears and the joy of experiencing nature together takes over. So, get started, pick a theme, believe it will be successful, jump in and have fun!

Photo courtesy of Bob Hornyak

Kids' Korner

Looking for Inspiration? Gardens to Tour

by Becky Hornyak, Blount County Master Gardener

UT Arboretum (<https://utarboretum.tennessee.edu>)

Located at 901 S. Illinois Avenue, Oak Ridge, “the UT Arboretum is a project of the University of Tennessee Forest Resources AgResearch and Education Center. It generally hosts more than 30,000 visitors annually. This 250 acre research and education facility has over 2,500 native and exotic woody plant specimens that represent 800 species, varieties, and cultivars.

There are over seven miles of trails, with plant collections visible from different trails. Collections include dogwoods, junipers, cherries, oaks, hollies, and dwarf conifers. Depending on the time of visit, there are many wildflowers to see, including bloodroot, cardinal flower, crane fly orchid, downy rattlesnake plantain, Indian pink, jack-in-the-pulpit, and several varieties of trillium.

The Arboretum Society offers virtual education programs. In January, discussions were snowbird species seen in this region and creating safe crossings for wildlife on I-40. (<https://utarboretumsociety.org>)

UT Gardens—Crossville (<https://ag/tennessee.edu/plateaugardens/Pages/default.aspx>)

UT Gardens-Crossville, also referred to as the Plateau Discovery Gardens, is located within the University of Tennessee Plateau AgResearch and Education Center and “has grown to become a demonstration garden designed for visitors and residents of the Plateau, and more specifically, Cumberland County. It is a collaborative effort between UT Plateau AgResearch and Education Center, UT Extension-Cumberland County, and the Cumberland County Master Gardener Association.”

There is a children’s garden and, during our August visit, there were large collections of coleus, hydrangeas, and grasses, as well as plants in interesting containers. Located off Highway 70 at 320 Experiment Station Road, Crossville, beside the Plateau AgResearch and Education Center.



UT Arboretum in April



Entrance to UT Gardens—Crossville in August

Townsend River Walk & Arboretum (www.townsendriverwalk.com)

A project of the Tuckaleechee Garden Club in collaboration with the City of Townsend, the River Walk is located between the Little River and Highway 321. The Arboretum was certified by the Tennessee Urban Forestry Council in 2011 and re-certified in 2016. Thirty-five of the trees are tagged with numbers for ease of identification, have signs giving information about them, and include QR codes for further information.

A pollinator garden was added in 2020 as a memorial to past members of the garden club. The BCMGA supports the River Walk with funding and volunteer hours. The River Walk is pretty in all four seasons. In winter, it is an excellent place to learn to identify trees without their leaves.

The River Walk is open 7 days a week from dawn to dusk. Parking is available at the Tuckaleechee Camp Ground United Methodist Church.



Entrance in February; yellow twig dogwood; Lenten roses (*Helleborus* spp.)



Experiments in Indoor Gardening

by Rosemarie Cirina, Blount County Master Gardener

Organic Mushrooms

I turned a porch that has heat and air into a greenhouse of fun activities during this pandemic. I like to experiment with different vegetables, plus my kids think I need something to do :) My first experiment is an Organic Oyster Mushroom Kit. I think most of us know how mushrooms are started outside. This was fun to see them grow inside. The basic procedure was:

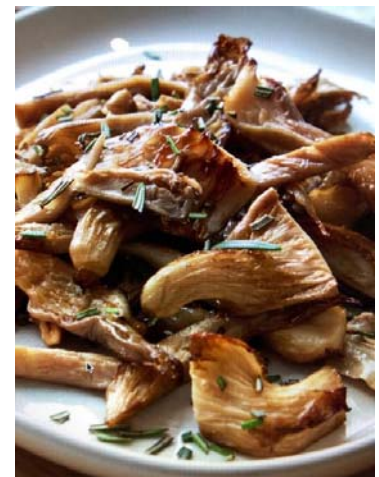
1. Remove the front panel and cut a x on the bag.
2. Scrape away some of the white layer.
3. Remove from bag and soak upside down overnight in a bowl.
4. Find a cozy place after you have woken up the organic mushrooms, shake off excess water and place back in bag. Face away from the light for one week till they start growing.
5. Keep them hydrated.
6. Use them in your favorite recipes. The result shown below is rosemary sautéed oyster mushrooms.



Avocado Tree

There are diverse ways to grow an avocado tree from its seed. The most common method is to put toothpicks in the middle of the seed after it is prepped and lay it across a glass jar filled half way with water. I never had too much luck with that method. This year my grandson gave me a Avo seed starter for avocado seeds. It has been fun for me and would be good to use with kids. (See next page for photos of this experiment.)

1. Remove pit from the flesh. Peeling the seed will speed up germination.
2. Place the broad end facing down.
3. Fill with water almost to the brim.
4. Place in warm, sunny spot, but out of direct sunlight.
5. Replenish water as needed
6. Wait to the avocado sprouts. It will crack in half first.
7. See sprouts in about 2-3 weeks
8. Put in soil when sprouts are about 3 inches long.
9. Watch it grow (weeks 6-8).
10. Will it bear avocados? With care, you'll know in a few years!





Lemon Tree

Lemons sprout easily from seed found inside the fruit, or so I was told. Be sure to use an organic lemon since non-organic lemons usually contain non-germinating seeds.

1. Remove the seeds. I used four seeds to make sure I had one that propagated.
2. Do not let the seeds dry like regular seeds. Drying lemon seeds reduces the germination rate drastically.
3. Wash the seeds in plain water to remove any sugar or pulp sticking to them.
4. Moisten a paper towel and put the seed in the middle. Wrap in plastic wrap and put in a plastic bag.
5. Place in a dark area for 1-3 weeks until seeds start to germinate.
6. Use potting soil in a planting pot that is 6 inches deep.
7. Place it in a sunny location. The tree can be outside in the summers, but would need to be brought inside during TN winters. It takes 2-3 years for a tree to produce fruit.



Tomatoes in a Mason Jar

My last experiment was a tomato kit using a mason jar, which has become popular for growing herbs, etc., for home use. The kit came with a 64 oz. mason jar, custom organic soil blend, two organic fertilizer spikes, and organic tomato seeds.

The jar has a self-water tube inside that is filled once a week. Once the seeds start to germinate, you add one fertilizer spike. I had eight seeds germinate, so I thinned it to two in the jar and put a couple of the other sprouts in planters. Then I took it one step further and took cuttings from the original plant. I placed pebbles in a small mason jar, added the cuttings, and filled it with water. It propagated in two weeks. The tomatoes are delicious!



Sustainable Gardening

by Terri Lyon, Blount County Master Gardener

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

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.

With sustainable gardening, you can make sure you are meeting in that halfway place. Sustainable gardening means considering something other than the traditional landscape type, with lots of grass and non-native plants. Instead, it is a landscape that maximizes diversity more naturally. Because of your attention to the ecosystem, your landscape is more resilient, with fewer pest problems, less water runoff, and richer soil. You nurture the environment instead of depleting it.



My path to sustainable gardening started with organic gardening. Back then, I tended to focus less on flowers and more on vegetable gardening. Since I was raising food for my family, it was an easy choice to use organic techniques to minimize toxin exposure. I started composting and experimented with different ways to enrich the soil, including compost, Bokashi, and worm bins.

But it wasn't until later that I realized the impact of some gardening techniques on the ecosystem. Lawns, specifically. So, I've been steadily reducing my lawn, year by year. After a decade, I am still working on it.

Gardening for pollinators was the next step for me. I put in a butterfly garden and with varieties that encourage pollinators to visit my yard.

Then came birds. Because a flock of chickens attacked my mother when she was little, she loathed birds. So, my family never pointed out birds, fed them, or provided birdbaths. When I moved from Florida to Tennessee, I became enchanted with cardinals. Now we have a yard that nurtures birds, plus binoculars to get a closer look at the less showy but still unique species.

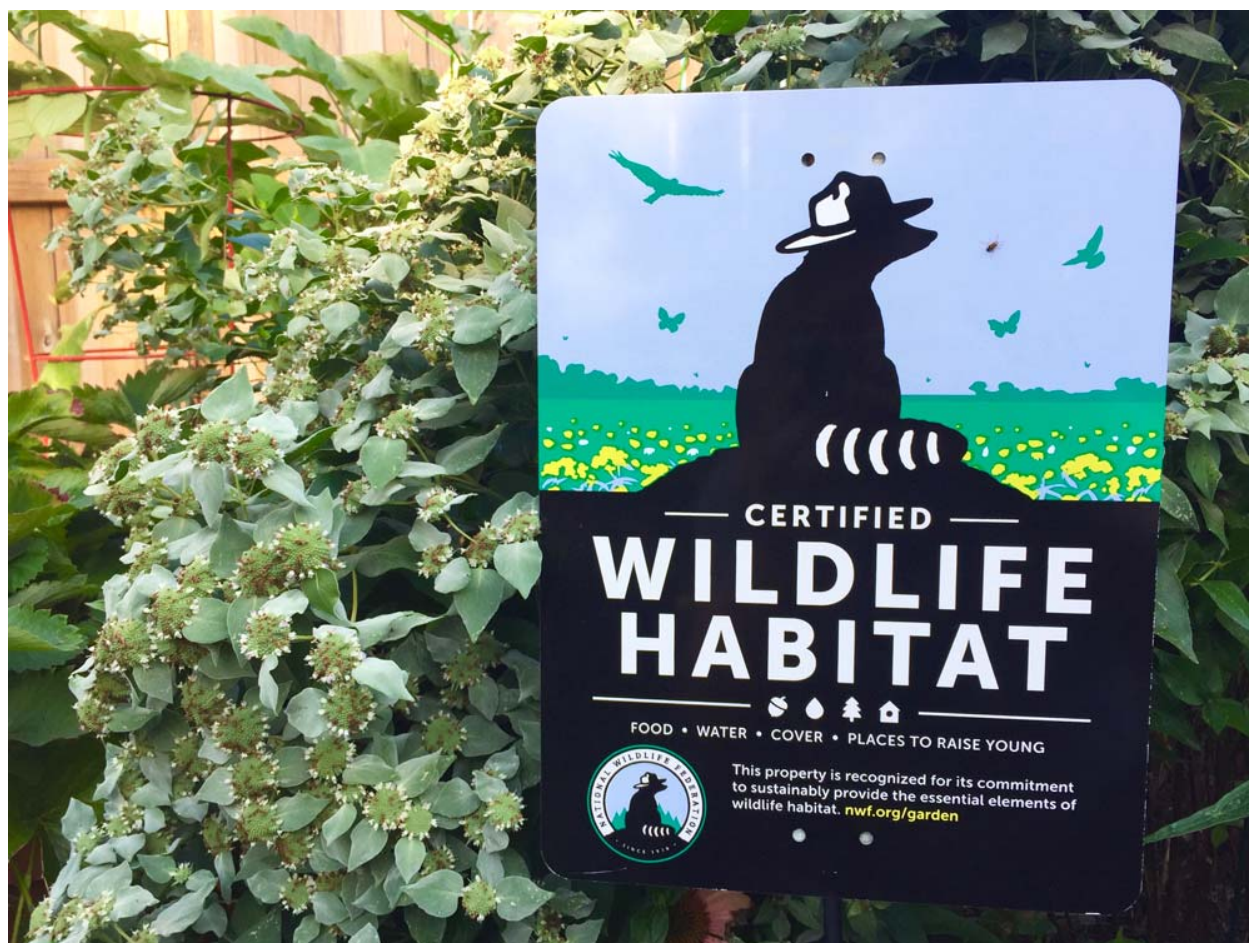
Although I was late in appreciating birds, I have been an animal lover all my life. I have not eaten meat for 36 years and quit eggs and dairy products 6 years ago. At the same time, I realized the impact of factory farming on the environment. Because of this, I don't use animal products in my garden. No manure or animal-based fertilizers (my worm bin might violate this rule.)

Becoming a master gardener was another step in my path. In my classes, I learned about the resiliency of native plants. How the water flow from our landscapes into the waterways can cause pollution. This education has helped me so much, and I hope I can help others, too.

The most recent step in my path is getting my yard certified as a National Wildlife Foundation [Wildlife Habitat](#). To qualify, you must include various sustainable gardening practices to support the wildlife, including soil and water conservation, using native plants, and organic methods.

I am still walking the sustainable gardening path. I confess to having some non-native plants in my yard that I hope to gradually replace with natives. I've made mistakes along the way. But as our Master Gardener teachers told us, "Try something. If that doesn't work, try something different."

In future newsletters, I will show you how you can improve your garden's sustainability and meet nature halfway.



Terri Lyon's garden is a National Wildlife Federation Certified Wildlife Habitat.

Plotting a Vegetable Garden for Crop Rotation

by Becky Hornyak, Blount County Master Gardener

According to Natalie Bumgarner, Assistant Professor and UT Extension Residential and Consumer Horticulture Specialist (in “The Tennessee Vegetable Garden”, UT Publication W 346-B), there are several reasons to plan your garden layout on paper or in a gardening computer program prior to overturning the first trowel full of soil: space allocation, estimation of the amount of seed required, and plant location. Space allocation includes the space between rows as well as the space between individual plants. Having a plan in front of you can also help with visualization of future crop rotation.



Vegetable and herb garden as created in 2016



Early in the season, when sections are easy to see

This article assumes the soil is prepared, with considerations for soil, light, space, and water already made, but nothing is on paper yet. My husband has found it easiest to use graph paper to make a scale drawing of our garden (see next page), which has four sections divided by mulch paths, one for herbs, and three for vegetables. The three sections for vegetables facilitates a three-year rotation of crops. The *Tennessee Master Gardener Handbook* suggests groupings in vegetable gardens by plant families, and then moving each family every year. This rotation will reduce the probability of insect infestations, soil-borne bacterial and fungal diseases, and disease-causing nematodes to which all the family members are susceptible, and which can occur if the same plants are grown in the same spot year after year.

Suggestions for crop groupings are –

Group A: cantaloupe, cucumber, pumpkin, squash, and watermelon

Group B: Brussels sprouts, cabbage, cauliflower, collards, lettuce, mustard, radish, rutabaga, spinach, Swiss chard, and turnip

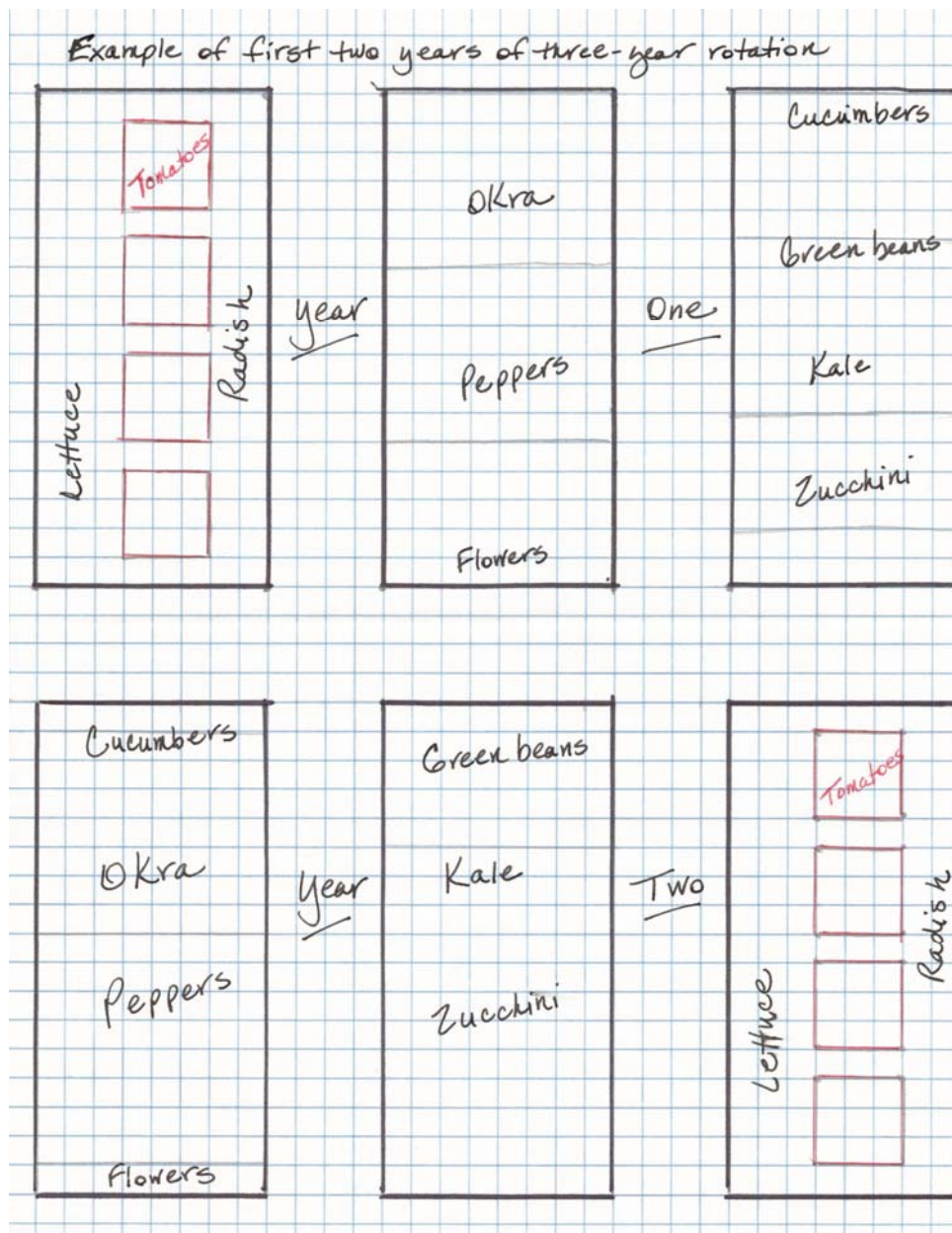
Group C: eggplant, Irish potato, okra, pepper, and tomato

Group D: carrot, garlic, shallot, sweet potato, and beet

Group E: sweet corn

Group F: bean, cowpea, and pea

With three sections and six groups, it is easy to plan the current year's plant locations and visualize what the layout will look like over the next two years.



Daffodils

by Elin Johnson, Blount County Master Gardener

*A house with daffodils in it is a house lit up,
whether or no the sun be shining outside.
Daffodils in a green bowl—and let it snow if it will.*

A. A. Milne

*The flowers of late winter and early spring
occupy places in our hearts
well out of proportion to their size.*

Gertrude S. Wister



I have loved daffodils all my life. When I was a little girl, we had daffodils that bloomed in our yard in the spring. I don't think Mother had planted them—she was not much of a gardener. But the people who had lived in the house previously had planted a number of blooming shrubs, perennials, and bulbs that bloomed every year. So, I grew up loving flowers, and particularly the bright, yellow daffodils that appeared in spring.



This daffodil's name is 'Sweetness'.

There were wonderful daffodils in my grandmother's yard. She had been planting them for a long time, and there was an area in her back yard where they had naturalized. The ground was carpeted with yellow in the spring, and she always allowed me to pick a bouquet. I wish I had color pictures of her garden, but those were the days when snapshots were all black and white. In my memory, though, her garden still exists in vivid color, not just in spring but all summer long.



I have planted daffodils everywhere I have lived. There were many in the Chestnut Street garden, and at the garden on Fairlane there were many more. This has been a really cold winter, and the daffodils are late to bloom this February; most years many are already in bloom. And the Daffodil Society has their annual show in mid-March when a lot of the late varieties are in bloom.



This is the first line of a poem I wrote some years ago, and it describes my feeling when the daffodils bloom.

“My relief is indescribable when golden daffodils bloom.

Spring's return renews my spirits.

Winter is behind—the progression has begun!”

Every year I search the ground anxiously to look for the little green blades to appear. They are there now—the promise of beauty to come. I grew up calling all of them “jonquils”, but now know that *jonquilla* is the name of one type of daffodil—fragrant ones. *Narcissus* is the name that applies to all of them.



There are now a number of divisions of daffodils. The best known is Division 1—Trumpets, the big golden beauties that everyone is familiar with. Then there is Division 2—Large Cup. They are of course, large, come with petals of yellow and white and have cups that are flatter than the trumpets but come in a wide variety of colors from white to bright orange. The picture above is ‘Ice Follies’, a Large Cup variety that is a great perennializer.

Other divisions are named for unique qualities—Double, Triandrus (many with small white flowers), Cyclamineus that displays petals that are reflexed back from the trumpet, and Jonquilla that display one to five flowers to a stem and are usually fragrant. Tazettas display stems with many flowers to a stem. And then there are the Split Coronas with trumpets that are divided. There are several others that are specialized.

The miniatures are very popular. A variety named ‘Tete-a-Tete’ is probably the best known and you can probably find it in pots at your favorite grocery store in the spring. Several of the miniatures are part of a division named Bulbocodium. Their trumpets are shaped very differently and are called “hoop petticoat” daffodils.

Whichever you choose, they are the quintessential flower that represents spring. And yes, my spirits soar when they bloom! Even in the very small garden area at my condo, there are some of these beauties to lift my spirits.

Happy spring!



The Book Nook

The Pollinator Victory: Garden Win the War on Pollinator Decline with Ecological Gardening by Kim Eierman

This is an excellent book for both beginning and seasoned gardeners who are interested in creating or transitioning their garden or landscape to support pollinators. Starting with the basics on the importance and types of pollinators the book leads you through design and maintenance of a pollinator victory garden. Included are chapters on:

- The importance of pollinators and the specific threats to their survival
- How to provide food for pollinators using native perennials, trees, and shrubs that bloom in succession
- Detailed profiles of the major pollinator types and how to attract and support each one
- Basics of site assessment, planning, and planting goals
- Project ideas for pollinator islands, landscape edges, foundation plantings, meadowscapes, and other pollinator-friendly lawn alternatives

<https://www.ecobeneficial.com/store/book/>

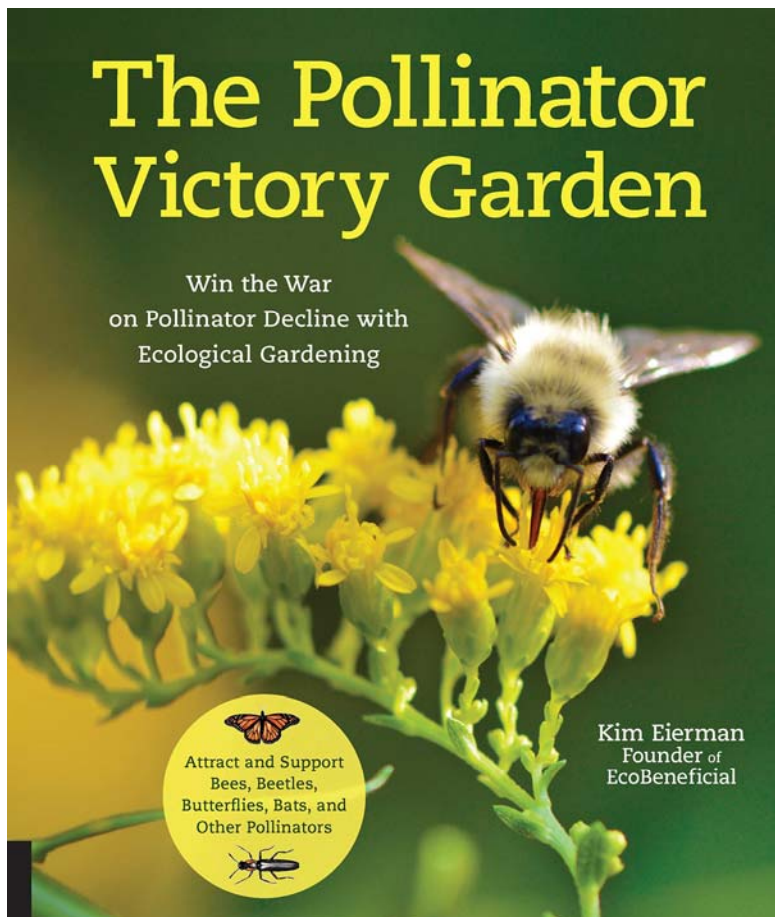


Photo Contest Keeps BCMGs in Touch during Pandemic

When the pandemic led us to monthly Zoom meetings, Board President Mike Holt had an idea to keep members active and engaged—sharing photos of our gardens with each other. Four months with themes led to four photo contest winners (Mary Alford, Sandy Vandenberg, Corinne d’Aprile, and Brandi McCray), awarded \$25 gift certificates to local garden shops. Below are some of the other worthy entries. You can see why it was tough to choose one winner each time! This activity led to an unexpected outcome—Susan Daffron, Membership Director, suggested creating note cards featuring winning photos. *See next page for information on ordering these cards.*

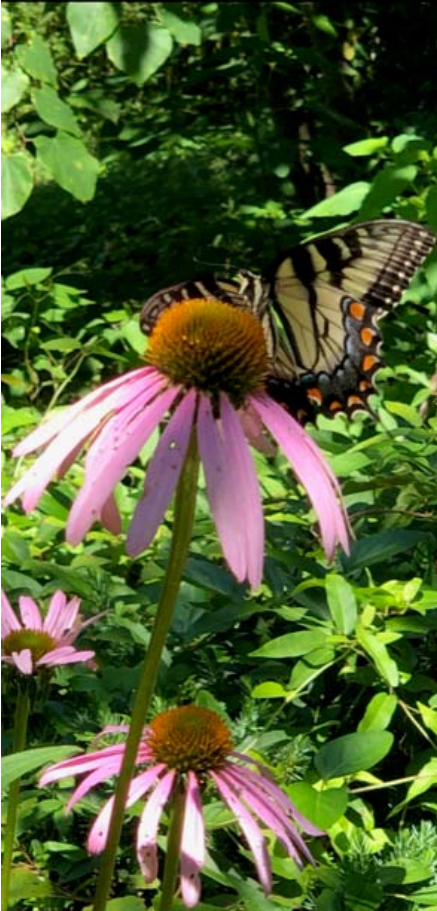


Photo Credits—

Upper left: Ruth Wall

Lower left: Diane Vickers

Upper right: Jean Jackson

Lower right: Suzanne Richter



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>



March



14 Spring Forward to Daylight Saving Time

20 First Day of Spring!

19-21 Plant Natives 2021! Virtual Symposium of the Tennessee Valley Chapter of Wild Ones. Speakers include Doug Tallamy, Larry Mellichamp, Benjamin Vogt, Michael Gaige, Jim Costa, Patricia Howell, and Drew Lanham. <https://tnvalleywildones.org/plant-natives-2021>

20 Tennessee Tree Day, Tennessee Environmental Council, order online, \$1.99 donation per tree

23 *Blount County Master Gardeners Monthly Meeting - 6:30 pm via ZOOM or in person at the Blount County Public Library*

29-4/5 Spring Plant Sale at UT Gardens, Knoxville; pickup April 9-10

TEMG Friday Focus Series Live Talks and Tours via Zoom for Master Gardeners. Sign up at <https://forms.gle/bg6HaoSDSGHE5Dc4A>

April

1 DIY Daisy Arrangements, UT Gardens, Knoxville, 5-7 p.m.

17 Blount County Master Gardeners Plant Sale at The Shed at Harley Davidson (*See page 25 for details*)

Downtown Maryville Farmers' Market Opens

22 Last Spring Frost Date in Knoxville (weather.gov/media/ohx/PDF/frostfreezeprobs.pdf)

24 Blount County Friends of the Library Community Market Opens

27 *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>

May

8 Give Your Plants a Boot (or Two!), UT Gardens, Knoxville, 2-4 p.m.

8-16 Virtual Spring Wildflower Pilgrimage iNaturalist Event

www.wildflowerpilgrimage.org/home-virtual-swfp.htm

13 Spring Flowering Tree and Shrub Walk, UT Gardens, Knoxville, 9-11 a.m.

25 *Blount County Master Gardeners Monthly Meeting - 6:30 pm via ZOOM or in person at the Blount County Public Library*

TEMG May Month of Connection with a statewide series of People, Parks and Plants Events—Live Tours via Zoom from State Parks Across Tennessee. Sign up at <https://forms.gle/bg6HaoSDSGHE5Dc4A>

May 7-Meeman-Shelby Forest

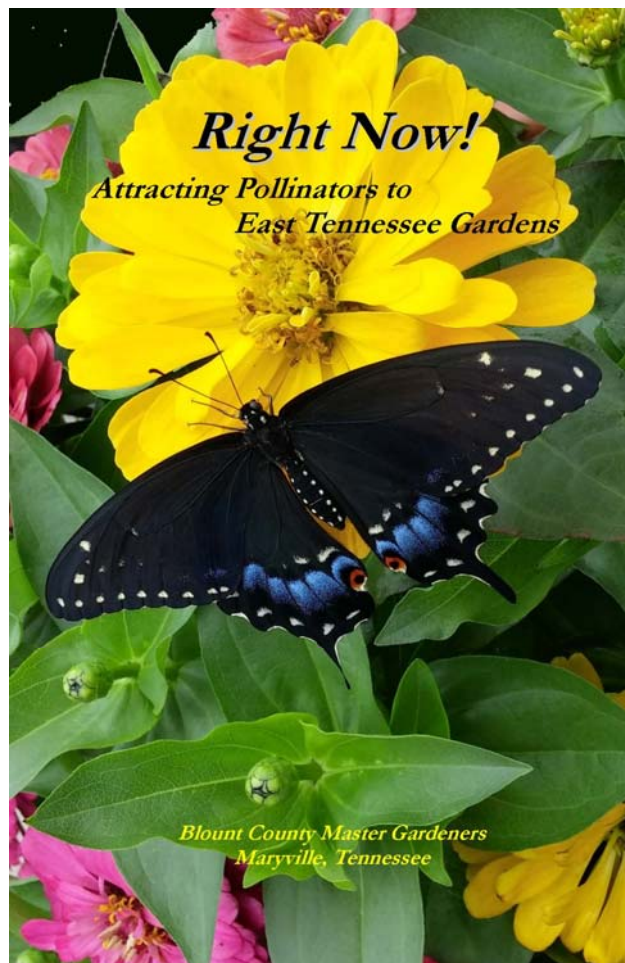
May 21-Seven Islands

May 14-Cedars of Lebanon

May 28-Montgomery Bell

* 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 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, bcmgtn.org.



Blount County Master Gardeners

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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.

We're on the Web at <http://bcmgtn.org>
 Like us on Facebook, too.



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