After a record breaking hot summer, we are looking forward to some cool, crisp autumn days. Take advantage of the cooler weather and warm soil that allows you to plant bulbs, plant trees, shrubs, seed your lawn, and plant perennials so they will be established for next year. This is also a good time to clean out and sanitize your pots and containers and disinfect your garden tools before putting them up for winter storage. Finally, take some time to take stock of what worked or did not work in your garden this year and make notes about what you would do differently next year to make your garden flourish.

As Blount County Master Gardeners, we are here to assist you with any of your gardening questions. Please reach out to our Certified Plant Health Advisors by calling 865-982-6430. If you want to learn more about the program, visit our website at bcmgtn.org. We invite you to join us by attending one of our many workshops listed on our calendar at the end of our newsletter or on our website. You can engage with us on our Facebook page at https://www.facebook.com/BlountCountyMasterGardeners/

If you like digging in dirt and helping your community, then consider joining the next Master Gardening Class. Applications are now being taken for the upcoming Master Gardener Training class of 2020. The 13 week class is scheduled to begin January 15. An application is available on our website and at the Blount County Extension Office, 1219 McArthur Road, Maryville, TN 37804. The training includes 40 hours of horticultural classes and are taught by professors and other industry professionals who share their knowledge and experience.

To receive more information, we will host an informational session on Tuesday, December 3, 2019 at 6:30 in the Dorothy Herron Room at the Blount County Public Library. The 2020 classes will be held Wednesday evenings from 5:30 to 9 pm at the Blount County Public Library. Please call 865-982-6430 for more information.

The Blount County Gazette is published quarterly. Our Winter issue will be published in December. If you would like to contribute to our Winter issue (Dec—Feb), please submit your articles and pictures by Nov 20 to bemggazette@gmail.com. We would love to hear from you! Any gardening topic, wildlife, pest or plant disease spotlight, areas of interest to visit, or areas of community education would be of interest.
Value the Holes in Your Leaves
by Becky and Bob Hornyak, Blount County Master Gardeners

Because we want our yards and flower beds to look nice, many of us think that beauty equals perfection—not chewed up leaves and pitiful petals! Too often, we go to great lengths to get rid of every insect we find. It takes a while for it to sink into our heads that almost every insect “pest” is food for another species. By killing these “pests” we may also be killing the species that depend upon them for food, such as birds. Chickadees need 7,500 caterpillars per clutch of young!

A global review of insect populations reported a loss of 41% in the last 10 years. Drive along a country road at dusk in the summer and it will dawn on you that many less insects are hitting the windshield than did just a few years ago.

Insects have a role in the cycle of plant life, moving the energy plants have taken in from the sun up the food chain. Sometimes we need to leave a plant alone and let the insects have at it! Aphids, for example, are food for beneficial insects like lady beetles, hoverflies, minute pirate bugs, big-eyed bugs, lacewings, and parasitoid wasps. Parasitoid wasps are tiny, harmless to humans, and also feed on scales and whiteflies.

Plants will recover from their role as food. The first year we had a milkweed plant, caterpillars consumed it until only the stalks remained when it was just 18” high, and it came right back and grew taller.

There are ways to deal with pest problems without harming beneficial insects and pollinators. Insecticidal soaps can work. Flick Japanese beetles into a can of soapy water to kill them, or apply milky spore to the lawn to cut down on them. Learn about Integrated Pest Management (https://trace.tennessee.edu/utk_agexdise/7/).

Choose native species that are more resistant to pests. And, finally, avoid neonicotinoides (imidacloprid, acetamiprid, dinotefuran, clothianidin, thiamethoxam, and carbaryl [Sevin]) which affect non-targeted bugs, including bees, and can reside in plant tissues, remaining deadly to pollinators for several years.

*Statement by Jennifer Cruse-Sanders of State Botanical Gardens of Georgia
Ah summer, one of my favorite times for gardening, the flowers are blooming and the vegetables are ripening. Lots of things in the garden to feed the body and soul. My little garden patch not only feeds Fred and me but a bunch of pests found it appetizing too.

The white flies struck first. I noticed holes in my green bean's leaves and I saw little flies when I rustled the plant's leaves. To try and control this problem, I first blasted the green beans with the water hose. There were too many for it to be effective. Then I used an insecticidal soap. The soap works but it has its drawbacks: it kills beneficial insects and it's a chore to use. The soap has to be sprayed every week and if not the flies came back with a vengeance. I didn't. The white flies did come back with a vengeance and I cursed myself for not having planted marigolds. I have never had a bad white fly problem before but I have always planted marigolds and sunflowers.

Next tomato worms struck my little patch. I went out one morning and spotted a big fat worm at the top of a plant. I don't know how it got there. The plants were inspected just the night before and there was no evidence of worms. I looked for more but did not spot any until the next day. I quickly squashed the evil looking horned worms. Tomato worms were not the only pest to besiege my tomato plants. Beautiful red ripe tomatoes ended up half eaten. I put this down to a combination of birds and a cute little skunk I saw bouncing around like Pepe La Pew from cartoons. The birds I figured, got the tomatoes at the top of the plants and the skunk got those near the bottom. Next year I will net the plants to keep the birds away.

If all this was not bad enough, the Japanese beetles started eating anything and everything. I first tried to squish the bugs but there were just too many. I gave up and just got the "Bag-a-Bug" trap. It worked great but I had to replace the bag every four or five days.

Even after my garden has come under attack, I still consider it a success. I have eaten numerous salads, sandwiches, green beans, peas, and I even canned a couple pints of tomato sauce so far. I've got to smell the flowers, see the butterflies, and hear the birds sing. What I've learned from this garden that I will carry forth to next year: plant marigolds and sunflowers to deter the pest insects. Plant more tomatoes because even if I net the plants and take other precautions, I am still going to lose some to the animals that call my back yard home. Summer time and the living is easy -- not when pests want to eat your garden.
Every year the apples, blackberries, peaches, grapes, strawberries and blueberries produce on my five acre property. Canning has allowed my family to enjoy them in jellies, jams and canned fruit all year around. According to the Kerr recipe booklet, “Foods that are properly canned and properly processed will keep an indefinite period.”

Fruits and vegetables that are acidic may be canned using the boiling water bath method. Filled jars are placed under water and gentle boiled for a given amount of time. This process is also used for pickles, tomatoes and tomato sauce.

Low acidic vegetables such as squash, pumpkin, corn, beans and greens require a pressure canner. I was disappointed with canning corn. It tasted just like canned corn from the store. I prefer to freeze corn - a better fresh from the garden taste.

Kerr and Ball offer very good canning booklets. They emphasize the importance of sterilizing jars and lids, and using sound fruits and vegetables. My Mirro pressure cooker came with an excellent instruction booklet with detailed directions for canning fruits and vegetables.

I challenge myself to make one new item each year. Last year I canned yellow squash. It worked very well in squash casserole. This year I made grape juice. My summers are devoted to tending the garden and putting up the produce. There is a wonderful sense of accomplishment when I look at all those colorful jars. Each year I put a picture of my rainbow of canned goods on Facebook. I’m looking forward to making apple pies, spaghetti and chili from the rainbow.
This summer, I had the pleasure of working with the kids and staff of the Friends of Porter Extended School Program. “The purpose of the Extended School Program is to provide an environment in which children can be safe and educationally stimulated during the hours when there is no adult supervision in their home,” according to Lisa McCarter, the program director. Lisa had originally reached out to the Master Gardeners to create an education event for the kids.

“Porter Friends applied for a Farm Bureau grant that is offered each year,” said Renea Wilson, staff member for Porter Friends. “We were able to purchase landscape fabric and six raised garden beds with the grant that we received.” Renea and her team did an excellent job of creating the garden and filling the beds with soil, and even had lots of produce growing in their gardens when we came to visit.

On June 26th, Master Gardener Marietta Mason, UT Extension Intern Tiaa Cottrell, and myself visited Porter Elementary gardens and had a chance to speak with the kids about vegetable gardening. We covered topics such as basic needs of plants, companion planting, and “good” and “bad” bugs. Following our talk, we ventured out to the raised beds. We direct sowed lots of seeds, including beans, buckwheat and basil. Many of the seeds were donated by Innovative Hydroponic Supply on Old Knoxville Highway. We also transplanted some plants that were donated by the AgCentral Co-op in Maryville.

“The children were excited to sow seeds and plant the peppers and watermelons that the Master Gardeners brought with them. The children ask each day if they can go pick the produce and water the garden. They have learned valuable gardening skills that they may have never learned otherwise,” said Renea. “It was an amazing opportunity to witness the care and understanding children have for our environment,” said Tiaa. “It is very rewarding to watch students get excited about gardening,” said Marietta. “They loved to explore the gardens and learn how their food was growing.” Marietta and her husband Mark, also a BCMG, continue to read gardening books to the kids; Marietta says that the hands-on experience helped them answer questions with enthusiasm. We look forward to continuing our work with Porter Friends and are so excited for everything they have accomplished.
Time to Winterize the Garden
by Reena Lieber, Blount County Master Gardener

August heat is barely a memory and I'm telling you to winterize your garden. Really? It's really one of the more important chores of established gardens but is frequently let go. Often the only thing many people know to do is to plant bulbs. However, early fall is one of the best times to transplant and plant new perennials, and to prevent problems before they happen.

Most gardeners don't want to hear that there is still lots to do as we enter the last quarter of the year. After the hard work of battling heat, drought, bugs and diseases it is often understandable that we feel like taking some time off, and it is easy to let it all go until spring. Winterize now and you'll be happy you did come next spring! The most important chores you can perform in the fall are:

Planting and Transplanting
Many perennial plants will put in roots and add healthy growth in warm days and cool nights of early fall before they go dormant. Some perennials will even grow from seed and overwinter as small plants ready to grow when warm weather returns. Spring blooming bulbs and rhizomes can be planted as the soil cools down in late fall.

Garden Cleanup
Clean up leaves and debris from around all plants so that sources of fungal, bacterial and viral infections don't have a chance to lie in the dirt ready to re-infect plants in the spring. This includes digging out and discarding sick plants. Everything in this category should not be composted, but should be thrown away. To protect roots from winter's extremes, healthy compost, new mulch or fresh leaf litter from trees can be applied once everything is clean.

Tool Cleanup
Once the garden has been cleaned and winterized spend a day repairing and cleaning tools. This is the time to remove dirt and disinfect all trowels, rakes, shovels, pruners and shears. Clean and disinfect plant pots before storing for use in the spring. Hang the tools up if at all possible. Keep a list of what tools need replacing and keep an eye out for some bargains over the winter and early spring.

Make Compost
As the leaves come down from the trees and the last lawn clippings are made in the fall it is an ideal time to begin a compost pile. Add kitchen fruit and vegetable scraps all winter and you'll have a head start on compost come April! Be sure not to add diseased leaves and stems.

Make Plans
Assess what went right as well as what went wrong during the growing season. Plan on replacing failures with different plants and think about encouraging pollinators and good insects with native and 'nativars' (cultivated versions of native plants). Natives are usually more disease and problem resistant while still providing food and habitat for wildlife. This is also a good time to lay out a new garden and draw up plans for spring shopping. Once the catalogs start arriving in January you'll be ready!
Now is the time to enjoy planning kid-friendly summer gardening activities and projects to keep your children engaged in creative and imaginative learning.

- Parts of a plant: Work with students to create a list of all the parts of a plant that can be eaten and think of examples of each. (Stem: celery; Leaf: lettuce, cabbage, Seed: corn, peas), Flowers: cauliflower, watermelon, Roots: potatoes, carrots). Your child can practice this skill when helping in the garden or visiting the grocery store.

- Math in the Garden using rulers to measure plants in centimeters or inches or the space between plants. Older children can calculate area or perimeter of garden.

- Look around the garden and discuss all the beneficial insects that are found, and how they help the garden and our environment. Children can look for ladybugs, grasshoppers, spiders, bees, caterpillars, butterflies, and worms. Children can also learn about ants, how they live and work and have different jobs. You may even expand this activity by getting an ant farm for inside. Be sure to tell your child not to touch the ants, since some ants bite.

- As the growing season comes to an end, there are more insects in the garden. This is a great time of the year to have children investigate the insects in the garden habitat. Which insects are pollinators and which are leaf eaters. Learning to tell the difference between pests and beneficial insects is an important skill for children.

Books available at Blount County Public Library

As the sun sets, and the night animals come out, the moonflower unfurls and blooms in the night air. We learn how moths drink, bats “see”, bumblebees sleep, and how to plant your own moonflowers.

We Sing & Learn Bugs introduces your child to lovable hosts such as the ladybug, grasshopper, spiders, ants, honeybee, caterpillars, and butterflies with a sing along tape.

Imagine if plants had superhero qualities - well a lot of plants really do! Some protect themselves from forest fires and voracious leaf-eating insects and also survive hostile environments. The book has bold photographs and illustrations and fun facts.
Garden Surplus? Alternatives to Canning
by Becky and Bob Hornyak, Blount County Master Gardeners

Cherry Tomatoes: Pickled

1 c. white vinegar  
2 tsp. sugar or equivalent sugar alternative  
1 c. water  
4 tsp. kosher salt
Bring to boil in saucepan, then let cool 20 minutes.
Pierce 1 pint (25-30) cherry tomatoes several times with toothpick. Toss in large bowl with ¼ c. chopped fresh dill and 2 diced or thinly sliced garlic cloves; pour vinegar mixture over all. Let stand at room temperature, then pour into quart jar.
Refrigerate for up to one month. Tasty on salads or with other pickled vegetables.

Cucumbers: Microwave Bread & Butter Pickles

2-3 cucumbers (3 cups), sliced  
½ c. sugar or equivalent sugar alternative  
½ small onion, sliced  
½ c. white vinegar  
½ tsp. mustard seed  
½ tsp. celery seed  
1 tsp. salt  
¼ tsp. turmeric
Microwave on high 7 minutes, stirring halfway through. Put in jars and refrigerate.

Okra: Frozen

Wash; remove stems. Blanch 3-5 minutes depending on pod size. Cool and cut into 1-inch pieces. Put in bag or container to use in soup or pasta sauces. Can also be frozen whole, then sliced when partially thawed. Great in soups and New Orleans style dishes.

Tomatoes: Frozen

Our old Ball Blue Book: The Guide to Home Canning and Freezing does not cover freezing tomatoes, but we have been doing it for many years. They’ll be watery when thawed, and won’t have as much flavor as canned tomatoes, but are good for soups and sauces.
Select sound, ripe tomatoes. Wash and core, removing any spots. Place in boiling water for a few minutes until the skin loosens. Transfer into ice-water bath. When cool enough to handle, remove skin and squeeze out seeds. Cut into quarters, put into bag or container.
If you have fresh herbs, dice and throw in (basil, parsley, dill, etc.).

Zucchini: Frozen Options

Shred zucchini using grater. Freeze 3 cups in bag or container to use in bread or muffins.
Cut into bite-sized pieces and freeze in bag or container for soups or pasta sauces.

For all frozen items, we recommend dating the bag or container and using within 12 months.
Fall Tasks for the Garden

Tasks for September

- Keep picking warm-season crops. Canning, freezing and drying are all options for preservation. [extension.tennessee.edu/publications/Documents/W346-I.pdf](extension.tennessee.edu/publications/Documents/W346-I.pdf)
- Later planted beans, tomatoes, summer squash and other warm-season crops may require frequent attention in scouting and pest management to ensure good yields.
- Make sure that fall cool-season crops are properly watered and fertilized. Germination and early growth of leafy crops and brassicas require even moisture and appropriate nitrogen levels.
- Transplant and direct seed fall cool-season crops. Keep in mind that days to harvest estimates often need to be lengthened in the cooler and lower light days of fall.

Tasks for October

- Continue picking any remaining warm- or early cool-season crops. [extension.tennessee.edu/publications/Documents/W346-I.pdf](extension.tennessee.edu/publications/Documents/W346-I.pdf)
- Keep an eye on soil moisture levels and manage pests as warm-season fruiting crop harvests finish and cool-season begins.
- Ensure that fall cool-season crops are properly watered and fertilized. As temperatures cool, less water will be needed.
- October is still a great time to seed cover crops. [extension.tennessee.edu/publications/Documents/W346-G.pdf](extension.tennessee.edu/publications/Documents/W346-G.pdf)
- Take soil tests and make adjustments to pH as recommended.

Tasks for November

- Finish the picking of remaining warm-season crops. If frost is approaching, unripe tomatoes can be harvested to preserve the last of the crop. [extension.tennessee.edu/publications/Documents/W346-H.pdf](extension.tennessee.edu/publications/Documents/W346-H.pdf)
- Make sure to remove crop debris from the garden that was diseased to reduce inoculum.
- Fall is a great time to set up a compost pile with the (disease-free) debris from your garden along with leaf and lawn clippings. [www2.ca.uky.edu/agcomm/pubs/hof/hof75/hof75.pdf](www2.ca.uky.edu/agcomm/pubs/hof/hof75/hof75.pdf)
- Ensure that fall cool-season crops are properly watered, fertilized and harvested. As temperatures cool, less water will be needed.
- There are some cover crops that can still be seeded in November, so don’t assume that a late fall crop prevents you from seeding a cover crop in your garden to protect it for the winter. [extension.tennessee.edu/publications/Documents/W235-G.pdf](extension.tennessee.edu/publications/Documents/W235-G.pdf)
Fire ants in your vegetable garden? How do you control them? By Maryann Gerber

This year we have received more questions about how to control fire ants in the vegetable garden. First, be sure they are fire ants. Check the UT Extension publication on how to ID fire ants. (see below) The small black ants as well as a few other that do not bite/sting can be good for your garden. Fire ants can cause a threat to humans that may be allergic to their sting and for gardeners who do not wish to be stung!

http://fireants.utk.edu/management/urban.html

Many Extension publications on fire ants are geared toward the farmer or for lawns, but I found a factsheet from Clemson University Extension that is geared to the vegetable gardener….’Controlling Fire Ants in the Vegetable Garden.’ This factsheet provides lots of good information in an understandable format for the homeowner. Click on the link below.

https://hgic.clemson.edu/factsheet/controlling-fire-ants-in-the-vegetable-garden/

A quick summary of the Clemson Extension factsheet … the best way to treat fire ants in the home garden, is by treating each mound with bait or liquid mound drenches. Baits are granular and contain spinofad or pyroproxifen both labeled for use in the garden. Spinofad is a metabolite produced by soil organisms for those of you looking for a more organic option. You should be able to get these products at your local garden store or Co-op. Be sure the label on the product you select states that it for use in vegetable gardens. Follow the directions carefully!

Liquid mound drenches can contain spinofad or other chemicals. Be sure to check the label for use in the vegetable garden and follow the directions on the bottle carefully! This factsheet includes helpful information about what not to use and why.

For those of you who do not wish to use any chemical treatment, you can try just digging the mound(s) to disturb the ants and hopefully they will move out of the garden. Do not use gasoline, as it is toxic and you can get hurt! The University of Minnesota Extension cautions against the boiling water method indicating the burn from boiling water spills will be more painful/harmful than the ant stings!

Hope this helps you with your decision on how to control your fire ants. And, we definitely want you to control them as they are an ongoing threat to agriculture in East Tennessee.

Garden herb tip for today: by Rosemarie Ciriina

Why does parsley turn white. We have had another hot humid summer with allot of rain.

You need to keep it trimmed for circulation, otherwise blight or leaf spot also accrues

More than likely, the parsley has white leaf tips because of an environmental issue. This may be overexposure to wind or sun that is damaging the plants cells. ... Another reason for parsley with white leaf tips is lack of water. Just as too much wind or sun can stress the plant, so can drought.

Yellowing of leaves can be crown rot. You need to water in the morning so it dries out.
What’s Eating My Kale?
by Louminda Torbett, Blount County Master Gardener

Our “Ask a Master Gardener” booth at the Maryville Farmer’s Market sometimes yields a “Stump a Master Gardener” question. This month a local farmer stopped by to ask us what was eating her kale. Luckily one master gardener was on hand who knew the answer. The colorful pest was identified as a harlequin bug.

Harlequin bugs attack nearly all crucifers including cauliflower, cabbage, kale, garden cress, bok choy, broccoli, Brussels sprouts, etc. Adults and nymphs pierce stalks, leaves, and veins with their needle-like mouthparts and extract plant juices. Stems and leaves injured in this manner develop irregular cloudy spots around the puncture wound. Young plants are likely to wilt, turn brown, and eventually die; while older plants are only stunted. Harlequin bugs overwinter as adults throughout most of their range. They remain active throughout the mild winters, but hibernate among plant debris during the harsh winters. Adults emerge early in spring.

Organic control of harlequin bugs requires “breaking the cycle.” The grower was advised to remove the kale bed and replant in another part of the farm. The current kale bed should not be used for any type of crucifer for a year.

Sources: University of Maryland Extension https://extension.umd.edu/hgic/topics/harlequin-bug-vegetables
National Integrated Pest Management Database https://ipmdata.ipmcenters.org/

Harlequin Bug Photo Credit Whitney Cranshaw, Colorado State University, Bugwood.org
The Blount Seed Library is offered by the Blount County Public Library under the Southern Appalachian Studies Program. The seed library works just like checking out a book from the library. If you already have a library card you can check out up to five packages of seeds per month. The seed catalog is located near the Reference desk in Adult Services. There are a variety of flower, herb and vegetable seeds to choose from and you simply fill out a card with the date, the names of the seeds you have selected, and your library card number. All that is asked is that you donate back to the library some of the seeds you grew to help keep the program running.

To save your seeds you will need to remove the seeds from your fully ripened vegetables, herbs or flower heads, spreading them out on a newspaper and leaving them in a ventilated area until completely dry. When the seeds are completely dry place them in a container such as a plastic bag or an empty medicine bottle for storage. To find out more information about seed saving, you can pick up a seed saving guide at the library when you check out your seeds, which includes the seed saving protocol, and a list of books and websites to help you get started. If you have any seeds you would like to donate bring them to the reference desk at the library.

Seed Return Form Link: [https://www.blounttn.org/DocumentCenter/View/19377/Seed-Return-Form](https://www.blounttn.org/DocumentCenter/View/19377/Seed-Return-Form)

Please check out our new Master Seed Saver Program & Application [https://www.blounttn.org/DocumentCenter/View/19266/Master-Seed-Savers-Club-Application---Rules](https://www.blounttn.org/DocumentCenter/View/19266/Master-Seed-Savers-Club-Application---Rules)

For more information about the Blount County Public Seed Library you can visit the website at [www.blountlibrary.org/1464/Seed-Library](http://www.blountlibrary.org/1464/Seed-Library).

Hope to see you at the seed library!
Master Gardening comes with many rewards. In June I had the opportunity to teach a lesson on tomatoes to the group of children in Project Hope. We covered four varieties of tomatoes, how to trim the suckers and why. We looked at color, tomato rot, blight, reason for fungus, temperature, weather and what varieties are used for certain foods. We compared two sauces to their content and nutritional values.

We ended with each student making two small Pizzas using both sauces and comparing for taste. The children also had a lesson on how to toss pizza dough.

A nice group of children and the group is headed by Logan Hill.
June 8, several of our Habitat partner families picked up plants which were donated from the Spring plant sale and over the last few months. They are headed to their new yards! Thanks Susan Daffron and John Wilson.

Photos are of donated plants and our Habitat partner with plants at their new home.

Our next Habitat Plant event will be October 19 at the Blount County Extension Office. All donated plants must be there by October 18.

New Publication! Diagnosis of Ornamental Plant Diseases, W 834.

https://extension.tennessee.edu/publications/Documents/W834.pdf

This is an introduction to the plant diseases that are common to the ornamental plants we grow in our gardens and landscapes. It includes tips on how to diagnose problems and is well illustrated with over 50 images. We hope this will be useful for Extension agents and master gardeners, as well as green industry personnel and the gardening public.
Growing Roses: The Noisettes
by Kim Chaney-Bay, Blount County Master Gardener

If you’ve ever been to, or seen photos of, Charleston, South Carolina then you’ve probably seen Noisette roses. This class of graceful shrubs and climbers is part of the wider group of “old garden roses” and their heritage is uniquely American. They were the first class of roses bred in the United States. Not only do they do well in Charleston, their birthplace, but they also do well in East Tennessee.

While Noisettes have a refined and delicate appearance, most are hardy in zone 7a. They tend to thrive in the heat and humidity of Southern gardens. The Noisettes need 6-8 hours of full sun, regular watering, healthy soil with good drainage, and mulch. Their white, pale pink, peach, and soft yellow flowers appear in clusters and look lovely hanging down from arbors and sturdy trellises. The flower petals often have a whorled pattern that is referred to as “quartered”.

The Noisettes are the first rose in the western world to be truly remontant. In 1811, the first of the class, ‘Champneys Pink Cluster’, arose from a cross between a musk rose and a China rose on the property of South Carolina resident John Champneys. He gave a seed or seedling to his botanist neighbor Philip Noisette, who produced a rose eventually named ‘Blush Noisette’. Philip Noisette then sent the rose to his brother, Louis Claude, a nurseryman in Paris. The French loved the heavy clustering bloom, the musky scent, and the healthy growth. They eventually crossed ‘Blush Noisette’ with Tea roses to expand the class.

In the southern US, generations of crossed Noisette seedlings continued to spring up, all related yet unique. Over the past few decades, rose enthusiasts have been finding old Noisettes, still vigorous and beautiful even after years of neglect. These “found” roses have been collected from cemeteries, old homesteads, and family sources; with the original name unknown, they are often given a “study” name. One such found rose even calls Knoxville home – it is called ‘Old Gray Cemetery Noisette’ and is now available in the trade.

I have had success growing ‘Lamarque’ (pictured) and ‘Creprescule’, both Tea Noisettes. For me, pests are more of a problem than disease, most notably aphids (which I spray off with the hose) and sawfly larvae (which I wipe off). I fertilize my roses twice a year with Epsom salts and alfalfa meal and only lightly prune as needed.
In early spring, Blount County erupts in clouds of white puffballs. Driveways and roads are lined with drifts of white blossoms, and many people feel spring is finally here when they see them. In recent years, the more negative aspects of these ubiquitous trees of springtime snow have become obvious. The most obvious is the tendency for the more mature trees in the landscape to split in the ugliest way possible. Another is the special goat-in-a-locker-room smell that comes with the pretty flowers. The surprising new reason to hate a once extremely popular tree is that the offspring of what was supposed to be a sterile tree are popping up everywhere  

**This picture (when the blooms look their prettiest) shows a whole wooded area being taken over by these new fast growing invaders.**

**Callery Pear (Pyrus calleryana) and Its Surprise Lesson**  
Bradford Pears are just one of several ornamental pear trees, called Callery Pears, that originate from Asia (parts of China, Taiwan and Korea). They were introduced into the US when pressure was on in the horticultural world to find pears resistant to fire blight. Initially, the Bradford Pear - the most promising of several blight resistant varieties - was readily sold here before the earliest specimens had a chance to be observed at maturity. Only then does it display characteristic structural weakness which frequently results with the splitting of large limbs.  

Bradford Pear is a cold hardy early bloomer, can be planted in a variety of tough conditions, is initially easy to care for, and drops its beautiful leaves later than many other landscape trees. Even Lady Bird Johnson promoted the Bradford Pear by planting one in Washington, D.C.. It has 3 season beauty: spring flowers, summer shape and fall color. It grows fairly quickly and is fairly resistant to many of the problems fruit trees are known for. When the weak structure of mature Bradford Pears became apparent, there was a great deal of pressure to find a replacement that would be a stronger specimen but have very similar characteristics. Other Callery Pears were bred and began to be sold. One notable variety was marketed as the Cleveland Pear. However, about that time, the surprising new problem arose: although touted as sterile trees, offspring began to appear.  

It was found that that the sterile tress could in fact cross pollinate with other varieties. These new variety trees were often planted between original pear trees in urban and suburban landscapes, resulting in pollination across very fertile relatives. Dropping fruit generated volunteer sprouts beneath the parent. Far worse, the fruit seeds were carried off by birds and spread far afield. These offspring trees were highly competitive, and soon whole fields and roadside edges were overcome with them. As a result, America has another invasive species to add to the list; and as these structurally weak trees mature, many of them fail.  

**Replacing Bradfords Wisely**  
Before jumping to the next big thing in landscaping, we hope the lessons learned from the introduction of the Bradford and its cousins, as well as from other invasive such as the Empress Tree and the Mimosa, will stick. Each of these imports has become a problem for local habitats that are fast losing native wildlife. If at all possible look for plants that are native to the East Tennessee area, or are from close neighboring states. A good bet is nativar specimens. The name means native cultivars - natives that have undergone selection and breeding. Sometimes the only difference is a natural mutation someone discovered in a naturally growing specimen and preserved in a garden setting.  

**Continued on Next Page**
Recommended alternatives to Callery Pears (includes Bradford Pears) It's hard to find a tree to replace the Bradford that isn't another "import", but various sources have made recommendations for native trees or their nativar offspring. The following varieties includes the most promising choices for right here in Blount County.

- **Eastern Redbud (Cercis canadensis):** Although they supposedly are short lived, I've seen many fine older specimens in and around Blount County, especially when planted out and away from other landscaping such as this one is in my neighborhood. The flowers actually highlight the twisted branches of the tree since they form directly along the branches. As a group, their drawbacks are a short lifespan, and they can sometimes succumb to Botryosphaeria canker. They tolerate a wide range of conditions, except for continually wet soil.

- **Red Buckeye (Aesculus pavia)** is another favorite recommendation. Its a lovely small tree with amazing tubular flowers. To some, the blooms look a little like clusters of small red firecrackers; and it has been given the nickname of firecracker tree. It blooms for a longer period and is known to attract hummingbirds.

- **Yellowwood (Cladrastis kentukea)** has beautiful long trailing bunches of white flowers that appear a little like white Wisteria. The fall leaf color is a pretty yellow. Maps of the trees show Blount County as being one of its natural homes. The only downside that several sources have noted is that young trees can take as much as 12 or more years for it to flower.

- **Downy Serviceberry (Amelanchier rubra) or Alleghany Serviceberry (Amelanchier laevis):** Another fruit tree which has small berries, similar in appearance to blueberries, that ripen in the summer following delicate white blossoms in spring. Old timers may remember this as Shadblow or Juneberry. Most varieties tend to a red leaf color in the fall. The Tennessee Exotic Pest Plant Council recommends 'Snowcloud' for its upright form.

- **Plum trees (Prunus family of trees):** Plum trees will have more of the diseases of fruit trees like blights but are on the list because they are beautiful natives that attract pollinators and make edible fruits as well as pretty fall color. The most recommended are the Chokeberry, Mexican Plum, and Chickasaw Plum.

  * **Chokecherry (Prunus virginiana):** This small tree has deep purple red leaves in the fall, and its other common name is Bitterberry. In shadier conditions, it does better than many of the ornamentals on this list. It is often listed as either a shrub or a tree, but in reality is a shrubby tree that can eventually grow over 20 feet. Its berries attract a great deal of wildlife, and the nativar 'Schubert’ is the one with the most beautiful fall color. Some sources list the same tree as Canada Red. Despite a long record of use in native medicinal practices, a drawback is that all parts of the tree except for the fruit's flesh, can be toxic if ingested by children or livestock.

  * **Mexican Plum (Prunus mexicana):** Unlike another native, the American Plum tree, the Mexican plum is often described as a good free standing tree having few or no suckers. This quality has made it popular for grafting at the rootstock. Of the Bradford Pear substitutes discussed, it comes closest to the mature size of a Bradford.
The summer has been a very hot humid one for all of us. I hope you all have been cutting back and preserving your herbs throughout the summer months. I have been in the garden trimming, to prevent fungus and increases the growth of the herb.

I started processing my herbs for the winter in late June: using drying, microwave and freezer methods. This year I had to put my herbs on my air-conditioned porch for better quality and drying. The first batch I did with my windows opened on my porch, produced moisture in the herbs and fungus. It had to do with our humidity this summer and heat.

The first picture shows my garden after being cut back three times. You can see from the next picture it grows back if you keep up with the care to maintain it.

I used a homemade screen on my air-conditioned porch which brought in a lot of light for drying. I preserve the herbs in large Mason Jars as well as small ones. I mentioned this in the first article. Once you crush your herbs you extract the oils. By using this method you preserve the favor of the herbs throughout the year and just crush a little at a time as needed.

Fall is a prefect time to plant a Herb Garden:
Examine your garden. Pull out any herbs that have not survived the summer and remove weeds.
Bring in all herbs if you have room into your house that are in containers.

How to prepare your garden for the fall:
Hardy perennial herbs such as oregano, parsley, thyme, chives, sorrel, lavender, lemon balm and mint can be planted now for a head start on spring. If you already have those herbs in your garden then cut them back to at least 6 inches. They will produce new shoots in the spring. I have had good luck with all of the above herbs. I have some for 15 years. Some herbs that are good to plant are oregano, thyme, and sage adapt very well.

I want to mention the colder the climate, the more your plants run the risk of not surviving. Some cold hardy herbs, mint, thyme, oregano, sage, and chives adapt very well. In areas of frost, they grow as perennials and go dormant in the winter coming back with new growth in spring. My dill, rosemary, stevia, tarragon, savory and sorrel have all come back from last year, along with the above mentioned herbs as well. The ones I usually plant every year are basil, and sometimes Italian parsley and lavender if it does not come back from the previous year.
July Flower Gardens by Maryann Loiacono presentation was on how to design, select and plant flowers to brighten up your garden. She also discussed how to select your site, start plants from seed and information on annual and perennial plants to make your garden beautiful all season long.

In August, Elin Johnson presented a wonderful workshop titled – Stop, Look, and Listen (Your yard is full of Wonders!) It was a one-hour presentation full of information for children and adults. It covered trees flowers, bugs, pets, birds, animals like bunnies and squirrels – there are so many wonderful things to see and hear if you just slow down and pay attention. She presented beautiful poetry of nature and multitude slides of plants, flowers, insects, birds, landscapes that can be found all around if we only took the time to be still for a moment and enjoy the beauty around us.

Seed Saving 101 with Ben Cohen was presented on August 28 in conjunction with the Seed Library. He is the author of the book *From Our Seeds & Their Keepers, A Collection of Stories*. Ben presented how and when to harvest seeds from a number of traditional garden vegetables and focused on harvesting, cleaning, and storage of seeds. He also touched on the basics of pollination and interspecies crossing and isolation. He has a new book *Saving Our Seeds: The Practice & Philosophy* due out in September.
In the last issue I promised a discussion on “containers”. Container, pot, vessel, holder, and barrel are a few words we use to describe a container. There are many possible containers for gardening. Clay, wood, plastic and metal are all suitable materials for containers. Old shoes or boots, bicycle baskets (lined with moss), rusted out antique wagons, wheelbarrows - your imagination is the only limit to what might be used for a container. Anything that holds soil AND has drainage holes in the bottom may be transformed into a container suitable for growing plant materials.

Consider eye appeal, convenience and cost when choosing a container. Also think about how easy it will be to keep the plants healthy. Watering habits must be considered….Plants don’t like wet feet. Don’t leave plant saucers under your containers. The only exception being on 2nd floor balconies - you probably should think twice before watering and having it drip down to the neighbor’s space below.

Barbara Wise offers sage advice for all gardeners in her book, Container Gardening for All Seasons. Wise reminds gardeners: “Plan before you plant” and offers up “The Ten Commandments of Container Gardening,” including “Thou shalt let the sun guide you in everything you do” and “Thou shalt always loosen the root ball of plants before planting them in a container”. Another important commandment from Wise, “Thou shalt know who your plant’s friends are,” she writes, on the importance of matching plants with similar watering and light needs in the same container.

Next time you see a garage sale - stop in and eye things with a mind to re-purpose something for your collection of plant containers. One of my commandments - single containers look lonely. Group a bunch together and they’ll look much happier!

In each issue of this newsletter, I’ll feature a few tips, answer your questions and offer a photo of an interesting container composition. Here’s where you come in. Send me your questions, photos of a great container you spotted or one of your own containers. I’d like this column to be driven by you, the reader, so get busy and send me a question and/or photo and we’ll discuss the good, the bad, and the ugly. Send me a question or photo for future columns - jhutch3670@att.net

This photo depicts an 18 to 20 inch diameter terra cotta container with just three plants, a calibrachoa, one of the varieties of a sun coleus and nemesia. Simple and exceptional color to accent the painted wall of a neighboring structure as I recall it. This friend of mine has a patio that is lined with containers and she does elaborate displays each year of fine annuals like these. Very showy!
"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, Out of Eden Garden Center, and Salon Nouvelle; in Lenoir City at Meadow View; in Knoxville at Wild Birds Unlimited; and by mail order through the BCMG website, bcmgtn.org.
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.

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We’re on the Web at http://bcmgttn.org and Facebook!

- 9/5 - 9/7 Blount County Library Pre-Owned Book Sale 10 - 4pm (This is a great chance to pick up your gardening, insects, trees/plant books for only $1-$2.)
- 9/6 - 9/15 Tennessee Valley Fair
- 9/14 & 6/28 Farmers Market Booth
- 9/10/19 Speaker Series—Preparing for a Fall Garden & Putting Your Garden to Bed by Bob Hornyak (7pm at the Blount County Library/Sharon Lawson Rm)
- 9/27 & 9/28 Fall Festival & Old Timers Day Townsend Visitor Center
- 9/28/19 Blue Ribbon Country Fair - Heritage Center, Townsend, Tn

- 10/1/19 Maryville College Harvest Craft Festival
- 10/8/19 Native Plants and Pollinators by Becky Hornyak and Louminda Torbett (7 pm in the Sharon Lawson Room at the Library)
- 10/16/19 Woods & Wildlife UT Ag Field Day Oak Ridge
- 10/12 & 10/26 Farmers Market Booth
- 11/12/19 Yardstick Gardening by Nicky Linneman (7 pm in the Sharon Lawson Room at the Library)
- 11/19/19 Blount County Master Gardener Meeting (6:30 pm in the Sharon Lawson Room at the Library)