For the Cherokee County Master Gardeners

Volume XXIV, Issue 3 April/May 2017

WHAT'S HAPPENING

APRIL

April 4 - Kids Kamp @ Papa's Pantry, 10am

April 6 - Demo Garden workday Sr. Center. 10am

April 6 - Betty's Celebration of Life Event, 11:30 to 1:30 @Sr. Center, bring sack lunch and a chair

April 6 - GMGA Quarterly Board Meeting, MGs invited

April 7&8 - Hall County Expo

April 13 - Papa's Pantry Workday, 10am

April 18 - Monthly Meeting

April 20 - Demo Garden Workday, 10am

April 22 - 4-H Rabies Clinic

April 25 - Master Gardener Appreciation Day @Griffin Research & Education Garden, 11am to 2pm

April 25 - Seed Separating

April 27—Papa's Pantry, 10am

April 29 - Gardening Summit @Sr. Center, 10 to 2

MAY

May 4 - Demo Garden Workday 10am @ Senior Center

May 5 - Plant Sale setup, 10am

May 6 - Plant Sale 10 to 1

May 13 - Lecture on Gardening With Native Plants, 10am @Sr. Center

May 18 - Demo Garden Workday, 10am @ Sr Center



Editor's Corner

By Marcia Winchester, Cherokee County Master Gardener



Not all plants are equal when it comes to pollinators. Pollinators, like humans, have favorite food sources. I love strawberries, but Brussels sprouts not so much. Some plants attract a lot of pollinators and others not very many. I have a St. John's wort shrub (*Hypericum frondosum* 'Sunburst') near my sidewalk. As he was walking his dogs, a neighbor commented on the number of bumble bees covering it as it bloomed. The fuzzy deep yellow flowers are a bee magnet. In fact, all St. John's wort plants attract a variety of bees.

I love pollinators, and over the years I keep adding plants that attract them. I have plants that bloom from February to December constantly providing food for butterflies, caterpillars, bees, and hummingbirds. Ants and beetles also serve as pollinators for many plants; however, I never happen to see them. On a trip to Costa Rica I learned that cacao trees (from which chocolate is derived) are pollinated by mosquitoes.

I have a large deck that I've filled with pots of both annuals and perennials. I have a hummingbird feeder on the deck also. In the spring the hummers fly from the feeder to the *Heuchera americana* blooms getting nectar. In the summer both the hummers and the butterflies enjoy *Plumbago auriculata*. I have a number of native azaleas (*Rhododendron* spp.) with staggered blooming times that pollinators love. Cardinal flower (*Lobelia cardinalis*) and *Heuchera villosa* attract pollinators in the late summer. Summer annuals guaranteed to attract pollinators all summer are zinnias (both *Zinnia* x hybrida and *Zinnia elegans*), *Gomphrena globosa*, *Pentas lanceolata*, *Lantana camara*, parsley (*Petroselinum crispum*), marigolds (*Tagetes erecta*), and scarlet sage (*Salvia coccinea*) to name a few. Be sure to add a few to your garden this spring to enliven your garden with both blooms and pollinators.

Marcia

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Digging into a "Miner" Problem: Leaf Miners

By Karen Garland, Cherokee County Master Gardener

As nature enthusiasts, most gardeners take pleasure in observing the varied colors, patterns, shapes, and textures of the flora and fauna that inhabit their yards. One such discovery may not be the work of art you would expect from Mother Nature, as you notice the light green serpentine designs on some of your garden leaves. Like a mountain path, the narrow squiggles are characteristic trails left by a group of insects known as leaf miners, which includes species of moths (order Lepidoptera), sawflies (order Hymenoptera), flies (order Diptera), and beetles (order Coleoptera). With many different types of leaf miners, the diversity, appearance, and habits are extremely variable, yet the plant damage they cause is noticeably similar.



<u>columbine leafminer (*Phytomyza aquileqivora*)</u> photo by <u>Lisa</u> Ames, University of Georgia, Bugwood.org

Caused by their larva feeding within the layers of the leaf tissue, the damage may look serious, but is rarely severe enough to kill the plant, unless there is repeated infestation that might stress and weaken it. However, significant "mining tracks" can reduce the plant's ability to photosynthesize, degrade its edible parts, and increase its susceptibility to diseases. In addition, not all leaf miners squiggle their way through leaves. Similarly colored light green transparent blotches may also be signs of other species of leaf miners munching their way to maturity.

Adults target a variety of vegetable and flower host plants to lay their eggs. Spinach (*Spinacia oleracea*), lettuces (*Lactuca* spp.), beets (*Beta* spp.), cucumbers (*Cucumis* spp.), squashes (*Cucurbita* spp.), tomatoes (*Solanum* spp.), beans (*Phaseolus* spp.), asters (*Aster* spp.), begonias (*Begonia* spp.), impatiens (*Impatiens* spp.), and marigolds (*Tagetes* spp.), provide prime

feeding surfaces, as larvae burrow and tunnel into the foliage, leaving a transparent track as they forage. They will also chew their way through tougher shrubs and trees, like boxwood (*Buxus* spp.), alder (*Alnus* spp.), and citrus (*Citrus* spp.). But, what is there to eat between the skins of a leaf? A juicy substance called mesophyll fills this inner space, which is full of chloroplasts, the green engines of photosynthesis.

If you look closely, you can often see the larvae, as a dark, 1/5-inch to 1/8-inch speck at the end of one of the trails. Additionally, these young insects are very flat, an adaptation that enables them to feed inside the leaf. To complete their metamorphosis, they leave the "mines," falling to the ground to pupate. With a two-week life cycle, there may be three to five generations per year, depending on the weather and climate. Many species will overwinter as pupae in the soil, emerging in late spring to resume the cycle.

The question . . . to control or not to control? Most leaf miner species have many predators and disease organisms that provide natural population controls. Therefore, applying insecticides is not always the best way to handle a leaf miner problem since conventional insecticides will not only kill the leaf miners, but also the beneficial predators. Thus, it is important to regularly check leaves for mining trails, so as to rid the damage manually by picking or cutting, especially if there is a history of attacks. Additional tips to prevent serious damage include:

Planting resistant species or varieties;

Providing proper care to keep plants vigorous and healthy;

Covering plants with floating row covers to prevent the adults from laying their eggs;

Removing infested leaves, especially edible ones, as it eliminates existing leaf miners before they become adults and can lay more eggs;

Tilling the garden after harvesting to destroy pupae who may be residing in the soil;

Practicing yearly crop rotation; and as a last resort

Spraying those plants that are susceptible in early spring with an insecticide, such as neem.

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Why Pollinators are Important and How We Can Help Them

By Karen Garland, Cherokee County Master Gardener



Honeybee (Apis mellifera) on Jerusalem Sage (Phlomis fruticose) - photo by Karen Garland

Do you enjoy a cup of coffee in the morning, a slice of watermelon on a hot summer day, or pumpkin pie at Thanksgiving? If you answered "yes," then you need to thank a pollinator! In fact, one out of every three foods you eat needs the assistance of pollinators. Indeed, only 10 percent of all flowering plants do not rely on pollinators for pollination, which means the rest require help from outside sources. Some examples of common food plants that need pollinators are tomatoes, eggplant, beans, peas, squash, peppers, cucumbers, melons, apples, peaches, and pears. Without the services of pollinators, our diets would be severely limited, making it more difficult to acquire the variety of foods needed to stay healthy.

As shared by the United States Fish and Wildlife Service, "Pollinators are nearly as important as sunlight, soil, and water to the reproductive success of over 75 percent of the world's flowering plants." However, when you think outside of the vegetable and fruit garden, you will realize that the purpose of any bloom is to produce viable seeds and a way for that plant to reproduce. Pollinators are there to help.

Many types of animals are part of this process. You may know that honeybees are pollinators, but you may not know that they aren't even native to North America. In fact, they were imported from Europe in the 1600s. Others pollinators include bats and birds, but the most common pollinators are insects. Insect pollination is crucial to most gardens and occurs when bees, butterflies, and beetles fly from flower to flower collecting nectar. However, in the process, pollen adheres to their bodies and is transferred to the other flowers they visit. Without these animals, many food plants that we grow in our

gardens would not be able to complete the pollination process and, therefore, would not produce fruits or vegetables. Thus, if you are having trouble with your plants failing to produce, chances are very good that they may be missing pollinating visitors.

Unfortunately, these beneficial insects face many threats, including pesticide use on plants that not only kills the damaging insects, but the beneficial pollinators as well. While pesticides are only part of the reason that pollinator populations are in decline, there are other detrimental factors, including habitat destruction and fragmentation, decreased plant diversity, and the spread of invasive species. Perfectly manicured, weedless lawns have taken the place of flowered meadows and woodland borders. Native vegetation is being replaced with non-native landscaping. When we remove food-sources and nesting sites for pollinators, we make it harder for them to flourish.



Monarch butterfly (Danaus plexippus) on pentas (Pentas spp.) - photo by Karen Garland

Fortunately, there are several things you can do to increase the number of pollinating guests that visit your yard.

Plant a diverse garden that will also attract pollinators to your fruit trees and vegetable garden. Choose flowers with a variety of colors and shapes, planted in clumps, rather than single plants, to attract a variety of visitors. Be sure to plant for each season from spring to fall.

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Partridge-berry

By Hope Sorrells, Cherokee County Master Gardner



Partridge-berry—photo by Marcia Winchester

Why should I consider partridge-berry in my landscape? Let's take a look. Partridge-berry, (Mitchella repens) is a trailing, creeping, evergreen perennial groundcover. The word "repens" is descriptive of its creeping growth habit, though it does not climb. It can even withstand some light foot traffic making it an ideal groundcover along walkways or between stepping stones. Partridge-berry grows as a native forest plant scattered throughout eastern North America in USDA Hardiness Zones 3 through 8.

Partridge-berry blooms May into summer depending on location. The diminutive ½-inch long, fragrant, trumpet-shaped flowers occur in pairs that share a single ovary and are waxy white or pink. Due to the united ovary, both flowers of the pair must be pollinated (thank an insect) for a single ¼-inch diameter red berry to be produced. Berries are not prolific but appeal to a variety of birds and other wildlife.

The glossy dark green leaves are oval to round with a distinctive white midvein and are about ¾-inch long. Partridge-berry plants spread by stolons that root to the ground at nodes, forming a mat of foliage about 1 to 2 inches in height. Native American women used the berries and leaves to brew a tea that was thought to ease childbirth.

Partridge-berry prefers growing in shady areas with consistently moist but well-drained, rich, acid, humus soil. The good news is that it can tolerate a range of conditions including dry shade once established. Though it grows in deep forest shade, it can take some sun, especially morning sunlight. As with most plants, attention to watering is important when first planted and through the first growing season.

Gardeners may want to consider partridge-berry particularly for the winter landscape palette. The shiny dark green leaves and bright red berries will surely brighten blank areas in the garden. It looks good growing under trees, in shady woodland borders, or in rock gardens.

Partridge-berry does not propagate well from seeds. The best way to start partridge- berry in your garden is by division. Once established, these divisions form thick groundcover mats that will naturalize. Don't expect wide-spread coverage, however, as it is not an aggressive spreader. It establishes slowly too.

Where can I find this versatile native groundcover? The Georgia Native Plant Society plant sale or our own Cherokee County Master Gardener's plant sale would be good places to look. The Georgia Native Plant Society also has plant rescues. Members can attend and dig plants for personal use. Recently as a member I went on a rescue and was able to bring home partridge-berry divisions.

Lady Slipper Nursery told me that they have had it at times but not routinely. They can order it if requested.

Where not to get plants? Do not even think of digging partridge-berry from public land or private land without obtaining permission! Over harvesting of this attractive plant has occurred in some areas.

If you want an adaptable native groundcover that will show off with outstanding foliage and berries, consider partridge-berry.

Local Gardens to Explore

By Patricia Bowen, Cherokee County Master Gardener

We live in an area rich in beauty, and in spring that beauty in our gardens is reborn. There are many gardens that are open to the public in and near Cherokee County. They have seasonal interest for most of the year: spring, summer and fall. Even if you've been to one or more of these gardens, consider going back again in a different season to enjoy the changes you may want to see and learn more about. It's a great way to spend a few hours outdoors, and you may pick up new ideas and techniques. (Be sure to take your camera, and pen and paper for notes.) Here's a sampling of gardens within a comfortable drive of home. It's a somewhat arbitrary list. There are more private gardens than I can list here, small local collectives, and others that occasionally open to the public. Visit the websites of those listed below for addresses, hours, fees, and more.

Atlanta Botanical Garden (<u>www.atlantabg.org</u>) has two locations: one in downtown Atlanta and a smaller one in Gainesville.

- The 30-acre Atlanta site has a variety of gardens with appeal for all ages. There is topiary, a children's garden, edibles, indoor collections of orchids and desert plants and tropicals, outdoor collections of conifers and hydrangeas and more. They house an onsite restaurant, permanent and seasonal art exhibits, and classes.
- The 5-acre Gainesville site has 1200 different types of plants, a model train garden, two half-mile walking trails, a visitor center and gift shop, and an amphitheater. It hosts seasonal exhibitions, social events and educational programs.

Atlanta History Center (www.atlantahistorycenter.com/explore/goizueta-gardens) has several gardens, each with their own history and special features, all under the "umbrella" name of Goizueta Gardens, dedicated to a past CEO of Coca-Cola. All connect on one 33-acre site; all are accessible for one single fee.

- Frank A. Smith Memorial Rhododendron Garden has an abundant variety of rhododendrons, other shade loving plants, small flowering trees and eclectic ground covers bordering a pond and a dry stream bed
- Mary Howard Gilbert Memorial Quarry Garden has 600 species of native plants, many rare or endangered. A pond and a bog garden provide habitat for native water plants, carnivorous plants and wild orchids.
- Smith Family Farm Gardens replicates an 1860s garden of food and flowers. It has a farmhouse, a fenced vegetable garden with heirloom produce, a quarter acre of corn and cotton, old fashioned flowers, and a personal vegetable garden behind a slave's cabin.
- Sims Asian Garden matches Asian plants with their American counterparts. Observe the differences and similarities in the collections of maples, hydrangeas, and many types of herbaceous plants.
- Swan House Garden complements an 18th century inspired setting surrounding the famous historic site. The pools, fountains, walls and terraced lawn are surrounded by varieties of tumbling roses and beautiful landscaping.
- Swan Woods and Wood Family Cabin have remnants of terraced cotton fields abandoned a century ago. Among large pine, beech and tulip trees are collections of native ferns and wildflowers. A recent addition on the Swan Woods Trail is the Garden for Peace, part of an international gardens network dedicated to peace.

Callaway Gardens (www.callawaygardens.com)

Callaway Gardens is approximately 120 miles from Canton, but well worth the ride. It covers 6,500 acres in Pine Mountain, Georgia, near Columbus. Founded by the Callaway family to promote and preserve native azaleas, there are now over 20,000 native and cultivated species on the grounds. The gardens are just one facet of a destination that includes hiking and biking trails, various sports venues, entertainment, unique holiday sights and activities, as well as onsite dining and overnight accommodations.

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LAWN TIPS

Cool Season Grasses

(Tall Fescue, Kentucky Bluegrass, Creeping Red/Chewing Fescue)

- ◆ Time to make sure the watering and mowing are being done. Water no more than one inch per week unless rainfall contributes the needed water. This will prevent shallow roots that can be easily damaged in the hotter and drier months of summer. Mowing should be kept at 2-3" for fescue without taking off more than 1/3 of the grass blade height at one time.
- If thatch is accumulated, rent a core aerator or make sure your lawn company has done this. If the thatch has accumulated to more than an inch or two, it is time to get this done. If you have a small amount of organic matter next to the ground, wait until next spring to check again.
- Sodding can be done at this time for a new lawn or filling in bare spots. Make sure you water regularly until the roots are established.

By Rachel Prakash , Cherokee County Master Gardener

 Keep weeds in check now before they produce seed.
 This can be done by hand-pulling or spot treating with a post-emergent weed killer

Warm Season Grasses

(Bermuda, Centipede, Zoysia, St. Augustine)

- ◆ Check the blade on your lawn mower to make sure it is sharp. A dull blade can cause ragged cuts which causes more water loss and stress on your lawn.
- Water the lawn if the weather does not supply the needed moisture, especially if new sod has been put down.
- When grass is 50% green begin fertilizing with a slow release form of nitrogen.
- Centipede lawns need a fertilizer specifically designed for Centipede.
- ♦ Aerate when soil temp. reaches 80, usually mid-May
- Plant warm season grasses when soil temp. are 75-80.
 May is the best time.

Local Gardens

Gibbs Gardens (www.gibbsgardens.com)

Right here in Cherokee County, Gibbs Gardens is a seasonal pleasure to walk through, especially from March to Mid-June when 20 MILLION daffodils bloom. The entire property is 292 acres, and the house and gardens include 220 acres, making it one of the nation's largest residential estate gardens. Visit again and again through autumn to see gardens dedicated to rhododendrons, hydrangeas, roses, water plantings, wildflowers, Japanese style plantings and more. There are a gift shop and onsite restaurants, a full schedule of educational and social events, an annual arts exhibit in May and an arts festival in September.

Oakland Cemetery (<u>www.oaklandcemetery.com</u>)

A historic site founded in 1850, Oakland is a showplace of sculpture and architecture, and a botanical preserve with ancient oaks and magnolias. The original six acres contains the oldest graves and plantings, and it's now grown to 48 acres right in the middle of Atlanta. Originally gardened by family members, today's plantings represent what was thought to be grown in the periods related to the gravesites. Heirloom daffodils, mums, tropicals, historic iris and flowering trees cover the grounds. There are over 1400 trees, some almost 200 years old. Guided and self-guided tours are available, and there's a gift shop on site.

Smith Gilbert Gardens (www.smithgilbertgardens.com)

This once-private home and garden in Kennesaw covers 16 acres, 13 of them open to the public. The home was built in 1880 by Hiram Butler, a Confederate railroad man, and the property now has over 3,000 species of plants, many of them rare. United by woodland paths, the Gardens consist of separate groupings including the Bonsai Exhibit, Palladino Camellia Garden, tea house and waterfall area, Rose Garden, and Conifer Display. They host a full calendar of events and classes for adults, families and children, and there is a gift shop in the main house.

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Newsletter for the Cherokee County Master Gardeners

Leaf-Miners

Despite being regarded as a pest by many gardeners and farmers, sometimes it takes changing your perspective to ease your gardening frustrations into an appreciation for the interesting aesthetics that may be residing in the smaller facets of your garden. Therefore, if you have not had the opportunity to observe the intricate "artwork" of a leaf miner, you may need to add it to your gardening bucket list. Once observed, remember to destroy the inhabited leaf.

Resources

U. (Ed.). (2016, September 20). How to Manage Pests. Retrieved February 23, 2017, from http://ipm.ucanr.edu/PMG/GARDEN/VEGES/PESTS/vegleafminers.html

Wold-Burkness, S., & Hahn, J. (2017). Leafminers in home vegetable gardens. Retrieved February 23, 2017, from http://www.extension.umn.edu/garden/insects/find/leafminers-in-home-vegetable-gardens/

Pollinators

Provide a water source by incorporating a shallow dish, bowl, or birdbath with half-submerged stones for perches.

Apply insecticides correctly, as many brands target all insects, both beneficial and harmful. Do not use insecticides on food plants that rely on pollinators. Instead, try using bug controls such as predatory insects or bacteria that are specific to the harmful insects that are causing the damage to your garden.

Do not use overhead watering in the morning or afternoon when most insect pollinators are active. Use drip irrigation if possible.

Reference

Harris, B., Bauman, K., Pennisi, B., & Putzke, M. (2016, May). The Eco-Friendly Garden: Attracting Pollinators, Beneficial Insects and Other Natural Predators. Retrieved March 12, 2017, from http://extension.uga.edu/publications/files/pdf/8%201456_2.PDF

Pollinators Home Page - U.S. Fish and Wildlife Service. (2016, April 8). Retrieved March 12, 2017, from https://www.fws.gov/pollinators/

Rhoades, H. (2016, June 25). Insect Pollination: Why Pollinators Are Important In Your Garden. Retrieved March 12, 2017, from https://www.gardeningknowhow.com/garden-how-to/beneficial/insect-pollination-process.htm

State Botanical Garden of Georgia (www.botgarden.uga.edu/)

The State Botanical Garden of Georgia is located at the University of Georgia (UGA) in Athens, covers 313 acres, and houses a conservatory operated by the University. In addition to the gardens, there are trails for hiking and biking, classes for individuals and school groups, speakers and social events, a gift shop, a café, something for all ages. UGA is also home to the State Extension Program which oversees the Master Gardener and 4H programs. Approximately 100 miles from Canton, it's short enough for a day trip, but you may want to stay over and enjoy all there is to see in Athens.

* * *

There is a much larger number of private gardens that open to the public on limited schedules or on request, far too many to list here. There are also teaching gardens, community gardens, and event gardens that open for weddings, meetings, conferences, fundraising and more. If your interests go beyond the sites listed above, Google, for instance "local gardens," "metro Atlanta gardens," and add any specifics you're looking for, such as "youth programs."

APRIL TIPS

ORNAMENTALS

- If your spring bulbs have been shaded by new growth of a tree or shrub plantings, consider moving them to a sunny location or pruning back the plantings. Mark over -crowded clumps; dig up and divide them after the tops have died back. Note where you want to add color for next spring. http://extension.uga.edu/publications/files/pdf/8%20918 3.PDF
- Upon emergence of foliage, fertilize bulbs with a 10-10-10 fertilizer, at a rate of 3 pounds per 100 square feet.
 Repeat the application after the bulbs have bloomed.
- If you plant an Easter Lily outside, don't plant it near other lilies as it may carry a virus that can infect them.
- Prune spring-blooming shrubs, such as forsythia, quince and early spirea after they have completed flowering.
- Do not fertilize azaleas and camellias until they have finished blooming. They should be pruned after blooming. http://extension.uga.edu/publications/files/pdf/B%20918 3.PDF
- Many gardeners plant annual and perennial flowers to attract hummingbirds; woody plants can also be added to the yard to provide nectar for our smallest native birds. Some trees to add are buckeye, horse chestnut, apple, crabapple, hawthorn, redbud and tulip poplar. Shrubs include red and bottlebrush buckeye, rhododendrons, Georgia basil, azaleas, New Jersey tea, Salvia greggii, and rosemary. http://extension.uga.edu/publications/files/pdf/C%20976 2.PDF
- Once new growth emerges on trees and shrubs, cut back to green wood any twigs affected by winterkill.

FRUITS AND VEGETABLES

- When planting orange, yellow or chocolate peppers, be sure to plant extra since they stay on the plant longer to mature and produce fewer peppers
- To hinder early blight on tomatoes, mulch to keep the soil borne diseases from being splashed on the plant during rains. Remove mulch and dispose of at end of season. http://extension.uga.edu/publications/files/pdf/B%201271_5.PDF
- To have fresh raspberries, raise them in your own backyard. Fifteen or twenty plants, spaced 3' apart, in rows 6' apart, will produce a good supply of fruit. http://pubsadmin.caes.uga.edu/files/pdf/C%20766 2.PDF
- If fruit trees are lacking pollinators nearby, pick bouquets of blossoms from good pollinators and place them in buckets under blossoming trees. Make plans to plant pollinating varieties this fall or plant perennials or shrubs that bloom at the same time as your fruit trees.

- Thin young fruits of apples, pears and peaches within 25 days of the peak bloom, leaving 4-7" between fruit to insure larger, healthier fruit.
- Grapevines with excessive vegetative growth generally have less high-quality fruit. In early spring, prune out the canes with the fewest buds to allow light, moisture, and air circulation within the plant to improve the quality and quantity of the fruit. http://extension.uga.edu/publications/files/pdf/B%20807 2.PDF
- Erect trellises now for beans and cucumbers. Don't plant tomatoes, peppers or other warm season plants until the soil temperature warms up. Usually in Cherokee county that will be April 15 or later. Plants if planted early will just sit there and not grow or be killed by a late frost.
- When weather is wet and cold, allow about twice the germination time listed on the seed packet. If there is no sign of growth after this time, dig around a little to check for sprouted seeds; if you find no signs of life the seed has probably rotted and you will need to replant.
- If your garden is small and you do not have adequate space for the long-vine varieties, plant a bush-type, squash and green beans.
- Root crops must be thinned, no matter how ruthless this practice seems. Thin carrots, beets, parsnips and onions so you can get three fingers between individual plants.
- When planning your vegetable garden, consider that leafy vegetables need at least six hours of sunlight to develop properly. Fruiting vegetables like squash, tomatoes, eggplant, beans and peppers need 10 hrs of full sun.
- When transplanting seedlings in peat pots to your garden, be careful not to allow the rim of the peat pot to protrude above the soil level. If the rim is above the soil, it will act as a wick and draw moisture away from the transplant. To prevent this from happening, break away the uppermost rim of the pot before planting and make sure the pot is completely covered with soil.
- When tomato seedlings have 5-7 leaves, they are ready to transplant into the garden. To increase root growth and produce a sturdier plant place tomatoes in soil up to the bottom leaves.
- Drive stakes for future supports at the same time you plant tomatoes. If you try to install stakes later, you may damage the plant roots.



MAY TIPS

ORNAMENTALS

- Keep and eye out for aphids and other insects on roses.
 Spray if necessary. Begin spraying for blackspot at least twice a month. Removing and replacing mulch under roses will cut down greatly on black spot. http://extension.uga.edu/publications/files/pdf/C%201001 2.PDF
- Red and silver maples, willows, poplars and elms can clog septic lines with their roots. Don't plant near water/ sewer lines.
- If you are building a home on a wooded lot, save young, vigorous trees. They will adapt to changes in their environment better than older trees. Trees that once grew in shade and are suddenly exposed to increased sunlight, wider temperature changes, and drying winds may not survive.
- Lightly sidedress perennials, including spring bulbs, with a 5-10-10 or 10-10-10 fertilizer, being careful to avoid the center or crown of the plant.
- Prune off sprouts from the base of crape myrtles. Check the leaves on Azaleas and Camellias for leaf galls. They are white to green growths and can be pruned out and disposed of. http://blog.extension.uga.edu/bulloch/2015/04/what-is-this-strange-growth-on-azalea-leaves/

FRUITS AND VEGETABLES

- Protect developing strawberries from birds with spun bonded row covers. Netting can trap and kill beneficial snakes and birds. http://extension.uga.edu/publications/files/pdf/C%20883 4.PDF
- Technically, berries are fruit that are soft throughout, such as blueberries. The raspberry is not a true berry, but a fruit that is made of many small sections each with a seed or pit. Fruits with fleshy material surrounding a hard seed are called drupes. Thus a raspberry is not a berry but is a cluster of small drupes or drupelets.
- Thin peaches 4-6" apart for large, high-quality fruit.
- If spraying fruit trees near a vegetable garden, cover vegetables with a sheet of plastic to protect them.
- Place a thick layer of newspaper under tomatoes to cut back on leaf diseases. Cover with mulch. This helps prevent fungus spores from splashing on leaves. Remove and dispose of at end of the season.
- To ensure pollination of sweet corn, plant several rows together in a block, rather than in one long row. Sidedress with 3 Tbsp of 10-10-10 per 10 feet of row when 12-18" high. http://extension.uga.edu/publications/files/pdf/C%20905 3.PDF
- When thinning beans, watch for "snake heads", seedlings
 that have lost one or both of their cotyledons and
 produce poor, weak sprouts. Also, watch for "bald
 heads", seedlings that have the growth point damaged so
 severely that they cannot develop. Both types will be
 weak and delayed in growth and should be removed.

APRIL/MAY MISCELLANEOUS

- Mark the handle of your spade/hoe in inches for a handy measuring device for row width and planting distances. Paint or tape the measurements on the handle. A coat of varnish can make the marks last longer.
- Try trapping earwigs and sowbugs with rolled-up newspapers moistened with water. Insects will hide in the paper by day. Frequently gather and dispose of traps.
- When you see ants crawling on garden plants, look for aphids. Some ant species protect aphids, moving them from plant to plant and even taking them into the anthill for overnight safety. The ants do this to ensure a supply of honeydew, a sugary water substance secreted by aphids, on which ants feed. http://extension.uga.edu/publications/files/pdf/B%201074 6.PDF
- A garden use for plastic milk jugs: Seep Irrigation. Punch holes in the sides of a jug about 2" apart. Bury the jug leaving the neck protruding from the soil. Fill jug with water (solutions or liquid fertilizer may be used to water and feed at the same time) and screw on the cap. The water will seep out, providing a slow, deep irrigation for plants.
- Trellis and stake downwind from the prevailing winds so plants lean against the supports when the wind blows.
- Don't be too anxious to move your houseplants outdoors. A slight chill can knock the leaves off tender plants.
- Replace bulbs on plant lights yearly. They gradually lose their strength causing plants to stretch and stop blooming.
- Moles are tunneling insect eaters and particularly attracted to grubs. When bulbs are missing or shrubs have root damage, look for voles or field mice to be the culprits. These rodents often use mole tunnels as their runs.

RAINFALL COMPARISONS								
	Cherokee County			Sta	State Wide			
	Jan 17	Feb 17	YTD	Jan 17	Feb 17	YTD		
Actual	5.2	2.0	7.2	9.4	2.0	11.4		
Normal	6.0	5.0	11.0	4.1	4.5	8.6		
Excess	08	-3.0	-3.8	5.3	-2.5	2.8		

Recipes

Marcia's Bread Salad

(serves 2)

1/4 loaf French bread (torn into bite-size piec-

1 large tomato (cut into chunks)

1 cucumber (peeled &

cut into chunks)

Asparagus (grilled & cut

into bits)

Feta cheese (crumbled) Chopped red onion

Italian dressing

Broil bread until toasted. Toss all ingredients. Top with fresh basil & parsley

> Send recipes to Pat Bowen at woodsgal1007@gmail.com

To receive printed copies of the 2017 newsletters, please send a check for \$10 to:

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Stir-Fried Beef & Peppers

(4 servings)

1 lb. beef round steak 2 medium onions 3 T soy sauce

2 T dry cooking wine 4 t cornstarch

1/4 t sugar

Searson to taste 1/8 t ginger

1/2 cup canola oil 1/2 lb. mushrooms (thickly sliced)

(quartered)

2 small gree or red peppers (cut into

chunks

* cooked rice, according to pkg. directions

Prepare rice as label directs. Meanwhile, cut round steak lengthwise in half; then cut "diagonally" against the grain into "paper-thin" slices.

In a medium bowl mix: soy sauce, sugar, dry wine, cornstarch & ginger. Add beef slices; toss & set aside.

Pour cooking oil into dutch oven. Over high heat cook: mushrooms, onions & peppers with salt & pepper—stirring quickly & frequently (Stirfrying) until vegetables are tender-crisp (about 5 mins). Spoon vegetables into clean bowl, leaving oil.

Add meat to oil; stir-fry until meat loses its pink color (about 2 mins). Add vegetables & stirfry until hot. Serve over cooked rice.



Mission Statement of the Georgia Master **Gardener Association:**

To stimulate the love for and increase the knowledge of gardening and to voluntarily and enthusiastically share this knowledge with others