



THYMES  
CUMBERLAND  
COUNTY MASTER  
GARDENERS  
OCTOBER, 2023

President: Mike Barron

Well folks, it appears that fall has arrived--at least all of the oak trees around my house think so. I have picked up leaves several times already, but looking at my yard it is hard to tell. One silver lining is the mulch it creates. I have a leaf collector attached to my lawnmower that gives me close to a 50-50 mix of green grass and brown leaves chopped into a fine mix. I pile them up, mix them a few times and let them compost. I then use the mix the next year for mulching.

There are lots of things going on this fall. Tree planting and bird wreath creation at the PDG; ramp up for the 2024 Flower, Lawn & Garden Show; working on a plan to eliminate our use of a storage unit, which carries a monthly \$173 charge; planning for our Christmas luncheon; election of board members for 2024 and many other activities. Please look for opportunities to volunteer your services.

Our November meeting will again be at **1 pm in the Country Store**. There will not be a speaker for our November meeting, but we have a full agenda. We will be electing the officers for the Board next year, talking about the 2024 Flower, Lawn & Garden Show, and anything else that comes to mind. There will **not** be a meal at this meeting, but snacks are always appreciated, if you feel so inclined.

## MASTER GARDENER OBSERVATIONS AND IDEAS

Sue Partch: Carotenoids and Anthocyanins

Long gone are the pastels of spring and gone too, are the clear, bright colors of summer. Now, we have the warm, deep colors of fall. They tell us to dig out the blankets, build up the woodpile, get out the recipes for hearty soups, and put the gardens to bed.

So where did these tree colors come from? A high school science review: colder temps and shorter days trigger trees to stop making the green producing chlorophyll. This process either reveals the hidden carotenoids that show as yellows, oranges or browns, or it activates the production of anthocyanin which creates the reds and purples...depending on the tree type. Oaks change to dark reds or browns, hickories to bronze, aspen and poplar to golden yellows, and dogwoods to purple; but maples vary from

scarlet to orange to yellow, depending on the species. Elms don't bother with any of it; they just shrivel up into a drab brown.

All that aside, the roadside views are full of color...if you look up. The trees are lovely, but the ground view is less so. There're lots of dried, dead brown plants now and many fallen leaves. Unharvested cornfields have rows of rustling faded yellow stalks. The green in the fields and mowed roadsides is dull. Still, looking beyond that, you can find flaming red bushes, lingering tickseed yellow, several anonymous (to me) plants with little white flowers, a patch or two of the fuzzy blue mist flower and the delicate, daisy-like small fall asters in white, lavender, pink and blue.

Porches and gardens sport chrysanthemums in all their warm colors. Also, of course, there are bright orange pumpkins. Speaking of pumpkins, this is a bit of a tangent but still related to fall colors. When did Halloween get to be almost as big an outdoor decorating holiday as Christmas? People used to display just a jack-o-lantern or a few pumpkins with maybe cornstalks. But now I see yards full of skeletons, witches and ghosts hanging from trees, pumpkin lights, elaborate pumpkin/cornstalk/scarecrow arrangements and way too many of the plastic blow-ups. A bit much, I think, but definitely colorful and eye-catching.

Does this make it difficult to concentrate on Mother Nature's outstanding display? **No Way!**

Kristi DuBois: Carnivorous Plants

Photo Credit: David Clark



Halloween is the perfect time for the Cumberland Playhouse's production of *The Little Shop of Horrors*, a fantastical musical about a giant plant that feeds on human flesh and blood. Thankfully, there is no such thing as a man-eating plant, but there are plants that eat meat, even here in Tennessee!

In fact, Southeastern United States is a world hotspot for carnivorous plants. Carnivorous plants trap and consume animals, mostly insects. They still need roots for stability and leaves for photosynthesis, but because they live in poor soil, they get most of their nutrients from digesting prey with enzymes. According to Danny Freedman in *What's the Biggest Thing a Carnivorous Plant Will Eat?*, tropical pitcher plants can eat frogs, geckos, and small rodents, but they tend not to because large prey can rot before they are fully digested, effectively killing the meat-eating plant. Therefore, most carnivorous plants stick to insects.

But how do carnivorous plants avoid eating the insect pollinators they rely on? Gary Krupnick of the Smithsonian Museum of Natural History answers that interesting question. They can use spatial separation with the flowers for flying pollinators higher in the air than the traps for crawling prey which are closer to the ground. Or, they can develop flowers early in the season for the pollinators and traps later for prey. They can also use different attractants (smells or colors) for the pollinators and the prey.

Meat-eating plants live in sunny wetlands—bogs, swamps, and marshes—in low nutrient, acidic soil. They are on every continent, except Antarctica. A number of native carnivorous plants in the U.S. are found in the Southeast—Mississippi, Alabama, the Carolinas, Georgia and the Florida Panhandle, according to Krupnick. Unfortunately, because so many wetlands have been drained for agriculture and development, many species of carnivorous plants are threatened, endangered, or extinct.

Fortunately, these plants are surprisingly easy to grow if provided with the right conditions, says Siru Curzon of Tennessee Naturescapes, a native plant nursery in Clinton, Tennessee. She says carnivorous plants need acidic soil with few nutrients, such as 50/50 peat moss/silica sand or perlite. They should NOT be planted in potting soil or given fertilizer. Additionally, they must never be allowed to dry out. The most common way to keep carnivorous plants wet is to use the tray method, which is to put the potted plants in a tray, continuously filled with about 2 inches of water. At our house, we use an automated drip system so that we don't forget to water and inadvertently kill the plants. Carnivorous plants need soft or low mineral water with 50 ppm of dissolved minerals, according to an excellent resource, *Sarracenia Northwest*. This water can be rain, distilled water or reverse osmosis. If you are lucky, as we are in Lake Tansi, you will have low mineral water straight from the tap. You can contact your water supplier or test your water with a home kit to find out if your water is appropriate for carnivorous plants.

Finally, carnivorous plants need to be outside in our area, says Curzon (Naturescapes). This is because they need at least 6 hours of full sunlight a day with at least 3 months of winter dormancy. If it goes below 25 degrees F, they need to be covered, or they will freeze. With a bit of planning, the home gardener can have great success growing carnivorous plants. Popular types of carnivorous plants available from specialty nurseries include American pitchers (*Sarracenia*), Venus flytraps (*Dionaea muscipula*) and hardy sundews (*Drosera*). American pitchers (*Sarracenia*) are tall, showy, upright tubes with open *lids* and enticing scents that attract prey insects. When the insect accidentally slips down the inside of the pitcher, it is unable to climb up the slippery, steep slope. Eventually, it dies and is digested by the enzymes of the plant. Pitchers often have colorful lids in many shades of maroon to attract prey like flies, bees, wasps, moths, and even pesky Japanese beetles. Before they grow pitchers, they have yellow, white, red or pink flowers that are pollinated by some of the very insects that they later eat. Pitchers grow like irises from rhizomes, says Curzon, with very slowly-forming clumps. There are 11 species of American pitchers with 3 endangered, according to Curzon. Unfortunately, less than 2% of their habitat is left in the Southeast because of logging and the draining of wetlands. The green pitcher plant (*Sarracenia Oreophila*) used to be in 34 small sites in Tennessee but may now be extinct (*Carnivorous Plant Resource*).



Venus flytraps (*Dionaea muscipula*) originate, not from a tropical jungle, but from a large contiguous area in North and South Carolina, says Curzon. They have leaves that look uncannily like bear traps with tiny trigger hairs inside. When an insect touches two different trigger hairs within 30 seconds, the traps close and digestion can begin. Venus flytraps have white blooms in early summer. While they are easy to grow, it is illegal to collect them in the wild, adds Curzon.

Sundews are tiny carnivorous plants that the home gardener can grow. There are 8 species in the U.S. with 3 native to Tennessee (Curzon; *Carnivorous Plant Resource*). Sundews have glistening dew, or mucilage, at the tip of tentacles that trap insects who think the dew is nectar or water. Horrifyingly, the tentacles of the plant will close up on and devour the unlucky gnats, small flies and mosquitos that get stuck in the dew.

Nurseries in our area that sell these are Tennessee Naturescapes in Clinton and Overhill Gardens in Vonore, Tennessee.

After learning about the fascinating eating habits of carnivorous plants, it might be tempting to experiment and throw hamburger in a pitcher plant or stick your finger in a harmless-to-us Venus flytrap. DON'T! First of all, it will be a slow and boring process. Second, it will waste the energy of your plant and could potentially kill it. Better to assuage your morbid curiosity by watching your carnivorous plant slowly and effectively--day by day--digesting a hapless and pesky fly.

## Carol Lorenc: Sweet Persimmons

What's new in my yard? PERSIMMONS!! A few years ago, I attended the MG Conference in Franklin which included a grafting workshop--success, to me, was not cutting off a finger... Carol Reese directed grafting an Asiatic persimmon variety onto a native persimmon base. This particular variety makes excellent cheesecake so I did two grafts. Well, my grafting didn't take, but I planted the native bases anyway.

A year later, I found an Asiatic persimmon tree on deep discount at Walmart (?!) and planted it. This year, I've been rewarded with about a dozen persimmons on one of the young trees. So, now I know that I have two male and one female persimmon, but I didn't record which tree is the Asiatic.

I guess I'll try the cheesecake anyway and try to be better about plant record keeping. Oh, I did remember to wait until after the first frost to taste the persimmons and was rewarded with a soft, sweet fruit.

## Carol Burdett: Overwintering Plants

At this time of the year, it's generally too late to share this thought; but since this year has brought us surprisingly warm days, most of us still have annual flowers bravely hanging on to their beauty through the leaves of fall. Want to keep them blooming all winter inside, then again next summer outside? Read on.

What I've been doing for years is pulling my impatiens gently up and putting them in shallow water in a non-draining home for the winter. Of course some of the soil clings to the roots, which is fine, but I don't add any soil, simply water. They perk up almost immediately and bloom all winter and then are happy to make the big transition to soil and moving outside come the next spring.

Last year, I had giant begonia plants (which are very hard to find) from our friend at the Jackson TN research center. I did the same with them, and for two years now they've happily moved indoors into water pots. These all reside in my windowsills. I pruned down the begonias drastically, as they're vigorous growers, and last spring I was also able to break each plant into two.

Most of the impatiens were very young, actually growing in my stone pathways and easy to pull up. This year, I added a couple of seasoned plants and now that they've happily made the move, they'll get a *haircut* too.

## Jewell Wilhoite: Fall Feathered Friends

The robins have flown in en masse. They're gobbling up holly berries and whatever lives among the vast carpet of leaves in our yard. Apparently, robins aren't moderate or forward-thinking birds. Perhaps they might relish a few berries when the snow hangs on those holly boughs. None of this scene is unusual. What is a bit different is that juncos have also shown up.

You know juncos--those rather small, grey colored birds seen hopping around, eating microscopic seeds. We always called them Snow Birds. Living in the South, we hoped they would, indeed, bring us a much-treasured day or more of snow. We would try to count their numbers, since they came in flocks and moved right in with the other local bird families. Maybe they have superior eyesight and were actually eating tiny insects; thus, no competition.

I think it's early for juncos and wonder if this means the wooly worms had better get on the ball with their weather predictions.

