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Extension Update by Larry Figart

"Volunteers do not necessarily have the time; they have the heart." – Elizabeth Andrew



We will soon be accepting applications for the 2023 Master Gardener Class. If you have an interest in gardening and serving your community, please read on.

Master Gardeners receive training in horticulture and in exchange agree to give volunteer service by helping their local county extension office. The training will consist of both in-person and online training beginning in August 2023. You need to be a Duval County resident. If you live outside of Duval County, contact your local county extension office. The cost to participate is \$150. If you are interested, we've scheduled an informational meeting on May 25th via zoom. To register click here: <https://www.eventbrite.com/e/master-gardener-volunteer-interest-meeting-tickets-631740562027>

What's That?

Trail through the turf



Image Credit: Larry Figart UF/IFAS

Circular turf trails



Image Credit: (Name withheld by request)

(answers on page 6)

Footprints



Image Credit: Thomas deHaas, Ohio State University



Around the Yard by Tonya Ashworth

Advice for New Florida Transplants

If you are one of the many people who have recently started calling Jacksonville home, let me extend a welcome. I too, am a recent transplant, having moved here not quite two years ago from Memphis. Moving to Florida is a major adjustment for most gardeners, myself included. After I finished mourning the peony collection I left in Tennessee, I started to dig in and learn the ways of a sub-tropical landscape. Allow me to share some advice that I hope will be helpful to you as you begin your new Florida garden.

First off, know your zone. The [USDA Hardiness zone map](#) shows that Duval County is in hardiness zone 9a. Florida is a big state, and portions of it are in Zones 8,9, 10 and 11. So, you need to be careful what you plant because we do get freezes here. Some things that live in Orlando, just a couple hours away, will die in north Florida winters. Before you spend a lot of money on a statement plant or palm, check the zone the plant can live in. There are microclimates and people often try to cheat a bit if they live near a body of water, but know you are taking a chance if you push your zone.

Soils are the next adjustment for most new Florida gardeners. I was shocked to find out how sandy my new back yard was. Sandy soils mean good drainage. On the other hand, sandy soils also have less ability to hold onto essential nutrients. Most of the commonly found plants at the garden center need soil that holds onto nutrients. Unless you plan on growing all Florida native plants, you should add compost into your beds. Compost increases the soil's ability to hold moisture and nutrients better. In Duval County, the pH can vary a lot, depending on how close you are to the beach, among other things. You can easily find out what your soil pH is by bringing a sample to the Duval extension office for a free pH test.



Adding compost can be very beneficial for our sandy soil
UF/IFAS Photo by Tyler Jones

When you think about fertilizers, you need to know that our soil is naturally high in phosphorus, which is the middle number on the bag of fertilizer. So, unless a soil test tells you differently, you should look for a fertilizer that has a 0 in the middle, for example, 15-0-15. Speaking of fertilizers, Florida residents need to be very cautious about how, when and how much nitrogen they apply to their landscape. We are surrounded by water and have a responsibility to protect our rivers and ocean. Too much nitrogen running off your landscape contributes to harmful algal blooms. If you are in doubt about how to appropriately fertilize, please look online at the [Ask IFAS website](#) or call the extension office for help.

Asking questions of other gardeners is a great way to learn. This is the best way. We have our next Master Gardener Volunteer training coming up in August. If you are interested in the program, there will be an informational presentation on May 25th. All we ask is that you register at: <https://www.eventbrite.com/e/master-gardener-volunteer-interest-meeting-tickets-631740562027>. There is no cost for the volunteer interest meeting.

If you can't commit to the volunteer time requirement, come to Extension classes at our office or at local libraries. There are other great gardening groups in Jacksonville as well. Asking questions of other gardeners is a great way to learn. Your local garden club, arboretum or specialty plant group comes to mind. For instance, when I was in Memphis there was the Tennessee Native Plant Society and even a Memphis Camellia Society that were a great resource. Find your people. Put down your roots.

Out on a Limb by Larry Figart

Questions about Trees and Storms

As afternoon storms will soon be a regular occurrence, many thoughts turn to the trees around our home. You may be wondering if they are safe, or if they can hold up against the wind of a thunderstorm, tropical storm, or even a hurricane. Hopefully these questions and answers will help you figure out the best course of action in preparing your trees for storms.

I am worried about my tree falling in on my house, who should I call to determine if my tree is a risk?

Usually, I leave this question to answer last as a summary but let's be honest, it is what most folks concerned about their tree want to know. Most property damage from trees during storms occurs because of some sort of failure in the structure of the tree. A periodic tree inspection by an ISA Certified Arborist with the Tree Risk Assessment Qualification (TRAQ) is recommended. The TRAQ designation means the arborist has completed training and passed both a comprehensive written exam and a performance-based assessment. To maintain the qualification, the arborist must retrain and retest every five years. To search for an arborist with the Tree Risk Assessment Qualification go to: <https://www.treesaregood.org/findanarborist/arboristsearch> and look for the arborists with the Tree Risk Assessment Qualification credential.

What things should I look for when scouting my tree? When you are out in your yard, look up. Take note of any large dead branches. Major deadwood over any structure is an immediate concern. The type of branch attachment is also important. Take a look at how the branches are attached to the trunk. If the attachment of the branch looks like a "V" rather than a "U", it is a weaker branch attachment. Double trunked trees are especially prone to failure. The reason "V" shaped branch attachments are a problem is because bark gets imbedded or included in the joint and weakens the attachment.

Trunk defects are a little harder to detect than branch defects. The most obvious type of trunk defect is a cavity. Large cavities with decay should be inspected. Any vertical crack in the trunk of the tree that goes deep into the wood of the tree is a warning sign of structural problems and any horizontal crack is a sign of imminent trunk failure. Any mushroom or mushroom like fruiting structure coming out of the trunk of the tree is a sign that the tree has internal decay. If you have cavities, mushrooms, or cracks in the trunk of your tree, the tree should be inspected by a tree professional.

I am concerned it will blow over, what should I be looking for? The first thing to consider is whether your tree has enough root space to anchor itself in the ground. Assuming a soil depth of at least 3 feet, a small maturing tree will need at least 100 (10' x 10') square feet of rooting space, a medium size maturing tree will require 400 (20' x 20') square feet or more of rooting space and a large maturing tree will need at least 900 (30' x 30') square feet or more of rooting space.

(continued on page 5)



Trees with double trunks are weaker
Image by L. Figart

Growing in the Garden

written by Beth Marlowe

What's Wrong with My Tomatoes? The Ends Are Turning Black!

If the bottom end of the tomato (the one that's not attached to the plant) is turning black but the rest of the tomato looks fine, you may have blossom end rot (BER). This is not a disease, and it is not caused by an insect pest. It happens when not enough calcium has been making its way with water up from the roots to the developing fruit. Lack of calcium causes cell walls in the fruit to break down, leading to invasion by a secondary pathogen. BER can also affect peppers and cucurbit crops. Once you have BER on a fruit, that one can't be fixed. You can, however, prevent most cases of BER.

You may think this means you simply need to add more calcium to the soil to solve the problem. Although this may be a solution to the problem, especially in a raised bed or container, our native soils often have plenty of calcium. And our irrigation water often has more. So how can there be a deficiency in the fruit? There are three main causes:

1. **Inconsistent watering.** Calcium is transported up through the plant in water. If watering is erratic, then supplies of calcium to the developing fruit are also erratic and may be missing when needed.
2. **Over-application of nitrogen.** Excessive nitrogen can cause excessive leaf growth, redirecting water (and calcium) from the developing fruit to the leaves. The ammonium form of nitrogen can also inhibit calcium uptake.
3. **Unavailability of soil calcium.** This can be due to an excess of soil magnesium or potassium, lack of adequate soil moisture to move the calcium, or even damage to the root tips that take it up.

Once BER is apparent, solutions are limited. You can try adding calcium to the soil, but if lack of soil calcium was not the problem, adding more will not fix it. Applying calcium solutions to the leaves is generally ineffective because the plant can't move calcium from the leaves to the fruit. Harvest the damaged fruit and change cultural practices going forward. Water consistently. Add mulch to help soil retain moisture. Get soil nutrients tested and amend or reduce fertilizer applications. Avoid damaging plant roots. Blossom end rot is definitely a case where an ounce of prevention is better than a pound of cure!



Blossom End Rot in Tomato
Image Credit: M.E. Bartolo, Bugwood.org

For more information on blossom end rot:

- [Blossom End Rot in Bell Pepper: Causes and Prevention](#)
- [Blossom End Rot on Tomatoes](#)

For more information on soil testing:

- [Landscape and Vegetable Garden Test Form](#)

Out on a Limb by Larry Figart (*continued from page 3*)

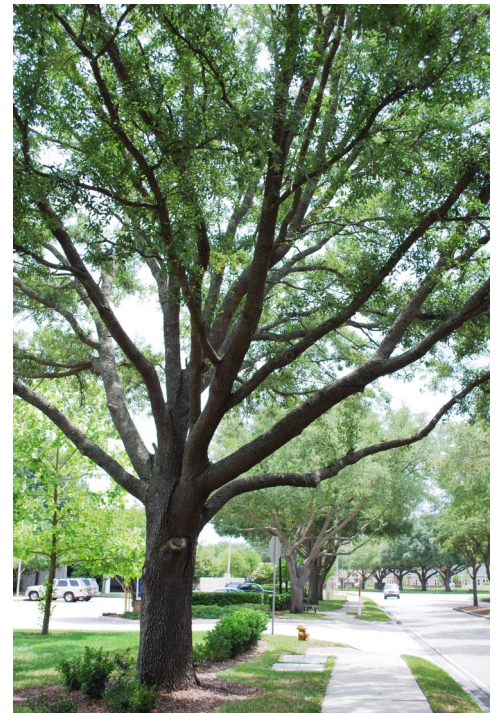
Most root defects can be detected with a little inspection. The part of the root system that bears most of the load in holding the tree up is the root flare. If you picture the tree as a wine glass, the root flare is like the base of the wine glass. The root flare should be readily visible. Many trees have had their root flares covered by soil during construction activities. Mulch volcanoes are formed when mulch is piled over the root flare and against the trunk of the tree. Both situations are bad for the tree because it buries the roots and promotes disease. It also makes inspection of the root flare difficult. If the root flare of your tree has been covered by soil, or mulch, it is important to uncover it for a proper inspection. As with trunk defects, look for any cavities at the base of the tree, or mushrooms originating from the base or roots of the tree as a sign of possible root decay. Any damage to the root flare by construction, or other means, is a cause for alarm. Recall the wine glass analogy and imagine how unstable the wine glass would be if part of the base were gone. An ISA Certified Arborist should be called in to inspect the tree if any problems with the root system are suspected.

Are there wind tolerant trees? Between 1992 (Hurricane Andrew) through 2007, the University of Florida studied the damage to trees in urban areas by hurricanes. According to the study, the trees demonstrating the highest survival were American Holly, live oak, southern magnolia, sweetgum, crape myrtle and sabal palm. The trees that had the least survival rates include tulip poplar, spruce pine, sand pine, and southern red cedar. Making a decision for a tree to remain or be removed based solely on its species should be used with caution. There is no such thing as a risk-free tree. In addition, local considerations such as soil, cultural practices, tree age and health, and other urban forest health conditions need to be considered. This publication may be helpful: <https://edis.ifas.ufl.edu/publication/FR174>.

How should I have my tree pruned to make it more wind tolerant?

How your trees are pruned is just as important as if they are pruned. A recent study by the University of Florida looked at how trees handled hurricane force winds. The study showed that properly pruned trees had considerably less damage than unpruned and improperly pruned trees. It used to be said that you should thin the canopy so that the wind blows through the canopy. However, this type of pruning is no longer recommended. The latest research has shown that improper pruning (over lifting and over thinning the crown through the removal of large lower limbs and interior branches) resulted in more damage to the tree during windstorms. Properly pruning trees by using reduction cuts and structural pruning resulted in trees that resisted wind and therefore received less damage.

There is no way to completely eliminate the risk of a tree falling and causing damage in a storm. With regular inspection of your landscape, homeowners can significantly reduce the risk by identifying defects in their trees and taking care of them before they become a problem. More information of trees and storms can be found on the University of Florida “Ask IFAS” website at https://edis.ifas.ufl.edu/entity/topic/trees_and_hurricanes.



This overthinned tree is more susceptible to wind damage
Image: L. Figart UF/IFAS

What to Plant in May and June

Annuals: Plants that can take summer heat include salvia, angelonia, wax begonia, and ornamental pepper

Bulbs: Planting (early, mid and late-blooming) varieties of daylily ensures months of color from these low-maintenance plants.

Vegetables: Swiss chard will take the heat as well as okra, southern pea, and sweet potato

Herbs: Continue to plant heat-loving herbs, including basil, oregano, Mexican tarragon, and rosemary

To add easy color: Don't forget salvias, coneflowers, bulbine, stokesia, gaura, porterweed, plumbago, fire-cracker plant, firebush, firespike, verbena, and many others that are great at providing color that require less maintenance than most

Upcoming Classes

Scan Code
for current list of
ALL Duval Extension Classes



Date, Time, Cost	Event & Registration	Location
May 23rd 12:30-2 pm \$10.00	<u>Rain Barrel Class</u> Participants will learn everything they need to know about storm water and how to collect rain for re-use. You will leave with your very own rain barrel ready to set up. Non-members call: 904-730-2100 to register	Jewish Community Alliance 8505 San Jose Blvd. Jacksonville, FL 32217
May 24th 2-3:30 pm \$10.00	<u>May Backyard Hen Training</u> This informational course is on caring for backyard hens and is a prerequisite to receive a Backyard Hen Permit from Duval County.	Extension Office 1010 N McDuff Ave.
May 25th 9-10 am Free	<u>Master Gardener Interest Meeting</u> This meeting is for Duval County residents interested in applying to be a Master Gardener Volunteer in 2023.	Via Zoom
May Various times & locations Free	<u>Jacksonville public libraries "Life Lit"</u> Life Lit Programs Life are free workshops offered by trained professionals and volunteers that focus on improving your day to day life. These programs cover a wide range of workshops from gardening to small business needs. Go support our UF/IFAS Extension staff and volunteers!	May 15th –Gardening in a Jar (Wesconnett Regional Branch) May 23rd- Create a Foodscape with Edible Landscaping (Univ. Park Branch) June 12th– Weeds in the Lawn and Landscape (Regency Branch)

What's That? Answer!

We know the cause of the damage in at least two of the images. In the image titled "trail through the turf", the homeowner (me) was applying a non-selective herbicide and did not realize that the nozzle on the sprayer was leaking. In the image labeled "footprints", the homeowner had applied an herbicide to kill vegetation before installing raised beds. Unfortunately, he walked through it while it was still wet and it damaged the turf wherever he stepped. In the image entitled "circular turf trails", we are not sure what actually happened but it is possible that it may be herbicide related as well. For more examples of incorrect herbicide use, check out:

<https://blogs.ifas.ufl.edu/osceolaco/2018/02/08/herbicide-applications-gone-wrong/>



Evidence of a leaky sprayer
Photo Credit: L. Figart, UF/IFAS