

THE MANATEE COUNTY MASTER GARDENER E-NEWSLETTER

JUNE 2022 - VOLUME 21 - ISSUE 6



Plants That Miss Home

By Maureen Hirthler, Master Gardener Volunteer

Palm trees swaying in the breeze and bright, colorful flowers – aren't they some of the things that brought us to Manatee County? We love that "tropical look," and we think it's hot and humid enough here in climate zones 9a, 9b, (possibly 10a near the coast) to grow them. But not all palms and ornamentals enjoy our weather, especially the humidity. Some popular palms and ornamentals would prefer to be planted elsewhere in a place similar to their native area. The genus *Phoenix*, which includes date palms, struggles from the humidity and rains in our summers.

The Date Palm, *Phoenix dactylifera*, is native to the Middle East and is the source of the delicious Medjool dates. It grows best in a dry climate with low humidity and acidic soils. That description doesn't fit Manatee County very well. Although you may see them here, their growth may be inhibited, nutritional deficiencies are common, and you rarely get edible dates.



Photo: UF/IFAS

Pygmy Date Palm with Magnesium Deficiency

Phoenix robelinii, the Pygmy Date Palm, is also a popular landscape palm that would prefer to be elsewhere. It originated in southwestern China, grows best in acid soil, and does not tolerate salt. Pygmy date palms are subject to various nutritional deficiencies because of our alkaline soil, and it is rare to see one thriving in our area.



Photo: UF/IFAS

Canary Island Date Palm with Potassium Magnesium Deficiencies

Phoenix canariensis, the Canary Island Date Palm, can be grown on a wide range of soil types, with their primary requirement being good drainage. They are drought tolerant and moderately tolerant of salt spray. Although they are prevalent here for those reasons, they come from the islands off the coast of North Africa, where the climate has extremely dry summers and wet winters. They fade in the summer humidity and also manifest nutritional deficiencies.

Although you may find date palms in our publications, this article describes issues we often see in our Plant Diagnostic Clinic. A palm in a poor location is labor-intensive. Even with appropriate fertilization, these palms may never look healthy. We encourage the use of native palms adapted to this area, and here at the Extension, we can help you choose beautiful palms that require a minimum of care. The Cabbage Palm (*Sabal palmetto*) and Saw Palmetto (*Serenoa repens*) are a vital part of our native landscape. The Paurotis Palm (*Acoelorrhapha wrightii*) is multistemmed and tall enough to contrast with the lower growing Needle Palm (*Rhapidophyllum hystrix*). With its glorious blue-grey fronds, the Bismarck Palm (*Bismarckia Nobilis*) makes a dramatic focal point in all landscapes.

Who doesn't love the regal Bird of Paradise (*Strelitzia reginae*)? These perennials are native to South America but can be grown in USDA Grow Zones 10-12. It's difficult to believe, but we don't have enough consistent humidity for this plant to thrive. Not only do the edges of the leaves turn brown, but our high winds can split and tear the leaves, creating an unsightly plant. You will see successful Birds of Paradise throughout the county due to various microclimates. Still, easier-to-grow Florida Friendly Plants are better suited to our conditions and give color to the landscape. Our Florida Friendly Landscaping app gives suggestions for exactly what you need.

These are just a few examples of plants we call tropical that are not suitable for our actual climate. We have many resources here at the Extension to help you have a lovely and exciting landscape with healthy plants.

Some resources:

FFL Plant Guide: <https://ffl.ifas.edu/resources/aps/plant-guide/>

Bird of Paradise: <https://edis.ifas.edu/publication/MG106>

Date Palms: <https://edis.ifas.edu/publication/MG10>

<https://edis.ifas.edu/publication/MG106>

<https://edis.ifas.edu/publication/ST441>

Best Palms for Florida: <https://edis.ifas.ufl.edu/publication/EP020>



The Great Garden Gym

By Jennifer Tonge-Martin, Master Gardener Volunteer

I've been a member of several gyms in my life, usually in January when I discover my clothes have shrunk unaccountably over the holidays. Those membership cards never seem to get me any fitter—especially since they sit unused at the bottom of my junk drawer! They say the best exercise is the one you'll do, and I love to garden!

Studies show that garden activities can burn a lot of calories (150-200 in 30 minutes of weeding), improve bone density and cardiovascular health. Gardening can improve mental and emotional health as well. How do I take advantage of that free gym in my yard, especially during the hot months of summer?

In-depth research (I googled it) revealed information on exercises to prevent injuries when gardening, and the Extension website has a lot of information about exercise (sfyl.ifas.ufl.edu/exercise). Our own Master Gardener Mary Lange wrote a wonderful article: "Yoga Stretches for Gardeners" in the September 2018 Garden Bench. But you can skip the stuff on "Nature Bathing" (World Naked Gardening Day is supposedly held the first Saturday of every May).

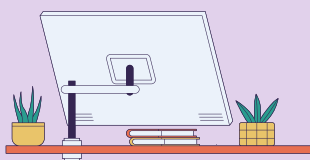
The hardest work in the garden is during February-May, when pruning, dormant and pre-emergent pesticide application, transplanting, fertilizing, and refreshing mulch must be done. This is a good time to have help to get the "big chores" accomplished. During that time, I started a routine I call my "circuit training." Morning or evening, 5-6 times a week, I spend 20-30 minutes walking around my yard, bending and stretching as I "scout" for insects, disease, and weeds. I note if anything needs watering, pruning, etc. and schedule those chores for another "circuit." This gentle routine adds up to over 150 minutes of exercise a week, more than the CDC recommendation of 150 minutes a week.

My exercise equipment consists of pruners, a little weeding hoe, and a watering can, much cheaper than a treadmill! I practice good body mechanics and consciously squat and stretch (I love "Downward Dog" as a weeding position). When I do "hose hauling" or use the rake or shovel, it is my "weight training" 2-3 times a week. I use a timer to keep my circuits at 30 minutes, thus avoiding becoming a "weekend warrior." I conscientiously avoid gardening between 10 AM and 4PM and drink lots of water, as it is easy to become dehydrated, sun-burned or suffer heat injuries, especially in the Florida summer.

Even with the time and safety precautions, I've managed to lose weight, keep up with my garden chores, and avoid injuries. My yard seems to be in as good a condition as ever (maybe even better). All this plus no wasted expense on a gym membership!

Ask a Master Gardener

By Karen Holleran, Master Gardener Volunteer



Dear MG,

I'm looking for help identifying this growth on my Foxtail palm and how to treat it if possible.

Dear S.B.,

I'm sorry, I don't have good news for you. These bumps of sawdust mixed with palm sap are from ambrosia beetles. These beetles bore into the palm trunk, creating galleries where they grow a fungus they feed their brood. Generally, these beetles attach an already unhealthy palm. Beetle infestation is secondary to the cause of palm decline and death.



Foxtail Palm

Your picture looks like this Foxtail palm is part of a multiple. Often these palms are planted as three trees in one group, which unfortunately, isn't natural since the Foxtail is a solitary palm. Growers group these palms together when they're very young. As they grow, it's not uncommon for one or two of the group to die from overcrowding or other issues associated with the unnatural grouping. Is this the only trunk affected? You may be able to save the unaffected one by removing the infested one, which is already unhealthy.

You might want to call an arborist for a second opinion. You can find an arborist on the ISA, International Society of Arboriculture website. That site is treesaregood.org.

I'm including two links to information about ambrosia beetles in palms for your reference.

<https://idtools.org/id/palms/symptoms/factsheet.php?name=Ambrosia+Beetle+Damage>

<http://idtools.org/id/palms/sap/factsheet.php?name=7455>

I hope the information provided is a help to you. Please feel free to visit our Plant Clinic and Demonstration Garden at the Manatee County Extension Office, Mon & Tue (closed Wed) Thur & Fri 9 am to 4 pm at the NW corner of the Manatee County Fair Grounds, 1303 17th St W, Palmetto, or call our Plant Clinic with questions @ 941-722-4524, ext.1819 or ext.1820 to speak with a Master Gardener. You may also submit pictures and questions to this email for identification and diagnosis ManateeMG@gmail.com.

What's This?: Spanish Moss & Ball Moss

Photos & Text by Norma Kisida, Master Gardener Volunteer

Nothing says old Florida like Spanish moss hanging from ancient oaks. As Master Gardeners leading walks in our Manatee County preserves, we often get the question of whether the Spanish moss (*Tillandsia usneoides*) and ball moss (*Tillandsia recurvata*) are harmful to the trees. Both are epiphytes, also known as air plants, and are members of the Bromeliad family. Unlike mistletoe, these air plants are not parasites and take nothing but support from the trees, surviving on moisture and nutrition they take from the environment. This is evidenced by their ability to live on non-plant material such as fences and wires.

Spanish moss and ball moss are both more common in trees that are in decline because there is more opportunity for them in trees that are more sparse due to poor health. It is possible that a tree that has an abundance of Spanish moss on it could block the light from the lower branches, contributing to further decline.

Another concern is that the moss contains chiggers, also known as red bugs. However, these insects prefer to live in low damp areas close to the ground and are not likely to be found on the moss in the trees.



Ball Moss



Spanish Moss

In the past Spanish moss was used in car cushions and upholstery and was a thriving Florida industry. Today it is used in crafts and by florists and many animals use it for shelter and breeding.

Although removal of Spanish moss is not usually necessary there are University of Florida recommendations for the process of removal.

That and more detailed information may be found in this document - Spanish Moss, Ball Moss, and Lichens - Harmless Epiphytes - <https://edis.ifas.ufl.edu/publication/EP485>



Compost Happens (Don't Overthink It!)

By Susan Griffith, Florida-Friendly Landscaping™ Coordinator

There are a lot of benefits to composting. At the present time, over 60 billion pounds of vegetable food scraps go to the landfill each year in the US alone. Only 5% of it is currently being diverted into compost. This means that the other 95% is creating methane gas as it decomposes in the landfill, a greenhouse gas 25 times more powerful than carbon dioxide.

Composting mimics a natural upcycling process in nature, the transformation of raw, organic materials into nutrient-available, fertile soil additives. Compost is beyond fertilizer. It is a complex, living, probiotic soil regenerator. It is capable of strengthening plants' immune systems, making them less prone to diseases and insect pests, enhancing food nutrition levels, and increasing crop yields while also increasing the water-holding capacity of soil. It is the very foundation of the soil food web.

Composting doesn't have to be complicated. It is actually very simple. First you need to know what you should not put in your compost. No meat, bones, or milk products. No cooking oils, grease, or mayo. No diseased plants (including those affected by root knot nematodes). No human or animal waste, weed seeds, colored or glossy paper, plastics, or treated wood products (e.g., pressure treated, stained, varnished or painted wood byproducts). And of course, no insecticides or herbicides.

What you **do** want is a good balance of nitrogen-rich materials like grass clippings, green leaves, and veggie scraps mixed with a greater amount of carbon-rich items such as untreated wood chips, brown leaves, hay/straw, and appropriate discarded paper products. An easy way to gauge the ratios is to plan for 3 times as much carbon as nitrogen. The size of the pile (whether enclosed in a bin or not) should be a minimum of 3' X 3'. The compost materials should be barely damp but never wet, well aerated, and turned at least once per week, more often if you can. If your balance of C to N is correct and your moisture level is ideal, you will experience no foul odors. If you do have foul odors, quickly correct by adding more carbon items. In several months with proper care, you can begin to harvest your "Black Gold" to use in your gardens. Once you make it a habit and get the hang of it by making minor adjustments, you will find it to be an easy and very rewarding way to do your part to help the environment and enrich your soil as well as your life!

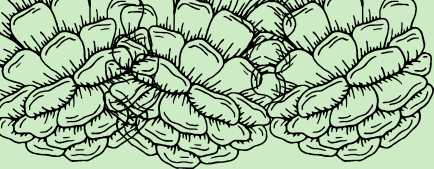
Everything you ever wanted to know about composting can be found at this web address :
<https://sfyl.ifas.ufl.edu/sarasota/natural-resources/waste-reduction/composting/>

Help for Plants During County Fertilizer Ban

Application of synthetic nitrogen fertilizer to your lawn and landscape is prohibited by ordinance in Manatee County from June 1st to September 30th. Certain situations are exempt from the "blackout period," including containerized plants, vegetable gardens and newly installed plants or lawns. You CAN apply other nutrients, such as potassium (K), magnesium (Mg), manganese (Mn) and iron (Fe.) A list of fertilizers that are considered "summer safe" and comply with the ordinance can be found at www.mymanatee.org.

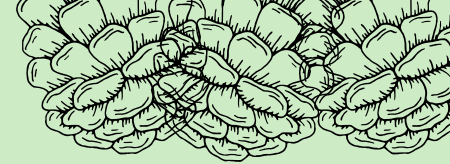


Gardener Fertilizing Yard



PINE TREES AND PINECONES

By Maureen Hirthler, Master Gardener Volunteer



We are all familiar with pinecones, either as holiday decorations or as a problem in the landscape. When you think about a pine cone, you are probably imagining a female pinecone with woody, spiraling scales. Male pinecones are small and soft; you may never see them during their brief life in the spring.

True pines are prehistoric and called gymnosperms (naked seeds) because they haven't developed an ovary that produces and protects seeds. Instead, two seeds per scale are kept safe from weather and predators by closing the scales over the seeds. Both male and female pinecones are found on the same trees, with the pollen-producing male cones on the lower branches to prevent self-pollination. Pinecones can stay on a tree for many years waiting to be pollinated. After 2 or 3 years, pollinated seeds peel loose and fall to the ground. Some cones like those of the Jack pine (*Pinus banksiana*) need a fast, hot fire to open and release their seeds.

Pinus edulis, which only grows between 6,000 and 9,000 feet of altitude, offer the most nutritious pine nuts in North America. A staple of Indigenous peoples' diet, pine nuts are rich in thiamine (B1), Vitamin K, magnesium, and protein. They are also one of the best natural sources of manganese, phosphorus, and zinc.

We often see Norfolk Island pines (*Araucaria heterophylla*) and Cook pines (*Araucaria columnaris*) here in Florida. Cook pines are more pointed and have larger spaces between branches. Interestingly, they always lean towards the equator. The Norfolk Island pines are tall and straight. These evergreens are not pine trees. Instead, they belong to another ancient plant family named *Araucariaceae*. These tropical trees were discovered in the late 1700s by James Cook who imported them to North America to use for shipbuilding.

There are several native pines of the genus *Pinus* found in Florida:

Slash pine (*Pinus elliottii*), Sand pine (*Pinus clausa*), Longleaf Pine (*Pinus palustris*), Loblolly Pine (*Pinus taeda*), Pond Pine (*Pinus serotina*), Spruce pine (*Pinus glabra*), and Short Leaf/ Yellow pine (*Pinus echinata*)

Fifty percent of Florida's original landscape was composed of either slash or longleaf pines, a wiregrass understory, and a high level of biodiversity. This provided a habitat for many species of birds and animals. With the arrival of Europeans, heavy logging began for use in naval stores. More recently, pine flatwoods have become a popular site for housing developments. 85-90% of pine flatlands have been destroyed in some places.

There is much controversy over Australian pine removal. Despite its name, the Australian pine has no relation to pine trees; it belongs to the *Casuarina* genus instead of the *Pinus* genus. It was initially planted as a drought, sun, and heat resistant tree that would provide shade in coastal areas. Since then, it has become a major problem. It is an aggressive grower that spreads into natural areas and smothers native plants under a heavy blanket of needle-like litter. Its shallow roots can't hold sand to stop beach erosion and make it unstable in our heavy storms. Australian pines can interfere with sea turtle activity, and birds are less likely to nest there. The State of Florida has classified Australian pine as a noxious weed and prohibits people from cultivating or planting it.

We need our native pines and pinecones to restore and conserve Florida's unique biodiversity. Plant them in your landscape and support the removal of Australian pines. Fight for the creation of protected habitats. Finally, get involved in your local community to advocate for sustainable land stewardship. And enjoy decorating for the holidays with dropped pinecones.

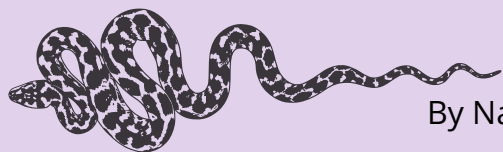
You can find more information at <https://gardeningsolutions.ifas.ufl.edu/plants/trees-and-shrubs/trees/florida-pines.html> and <https://edis.ifas.ufl.edu/publication/FR003>

Pictures and information about native pines: <https://edis.ifas.ufl.edu/publication/FR003>

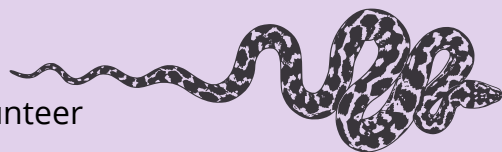
Fill out this survey for a chance to win prizes
including a compost bin, plants, books, and more!

<https://bit.ly/3vTxQM3>





sssssnakes!



By Nancy O. Porter, Master Gardener Volunteer

Did you know? Florida has 46 native snake species, many of which are quite common. Lucky for us, there are only six venomous species. Most importantly, all are harmless if left undisturbed!

If one could stop and just breathe, the following knowledge might kick in and save lives. Yours or the snakes, either way it's a win-win situation.

Fortunately, there are several resources for us to gain important knowledge about snakes. One is the Large Snake Lineup for South Florida: A guide to differentiating between non-native and native snakes in partnership with the South Florida Water Management District (SFWMD). <https://edis.ifas.ufl.edu/publication/UW484> This publication has fabulous photos and provides descriptions of snakes, native and non-native, one might encounter while in Florida.

If you have moved to Florida, you need to know that Florida has snakes and that they are a crucial part of our ecosystem. Snakes help control the population of rodents, which helps to promote healthy and less diseased food crops. Another important fact to keep in mind is that snakes are key to keeping the food web in balance, as they are predators and prey objects for Florida's native wildlife.

Most of Florida's snakes are as frightened of you as you are of them. If you come upon a snake, try to refrain from shooting first and asking questions later. Nonvenomous snakes are our allies, as some eat the poisonous ones. They are much more efficient at repelling the bad snakes than over the counter "snake repellants."

Take a few minutes and look over the Dealing with Snakes in Florida's Residential Areas-Identifying Commonly Encountered Snakes: <https://edis.ifas.ufl.edu/UW258>. You will be much more prepared to determine the good from the bad snakes, in case you meet up with one in your yard.

If you live in an HOA your worries might not be as urgent, as your lawns are always manicured and kept low. If you live in a neighborhood where the rules are not as strictly enforced, remember the following:

Tall grass, overgrown shrubs, brush piles, piled debris or wood piles provide great hiding spots. If you happen to have a wood pile, keep it a bit off the ground and a safe distance away from the house.

Do not disturb pond or lake edges which would destroy the natural habitat for the snakes' food source. Warn your children and keep your pets away from these types of areas. (Remember that alligators also use these areas, and they may not run from you!) Fence your yard, if necessary.

Remember, snakes are most active in the spring and summer.

The following are suggested ways to "snake proof" your home (keep in mind, snakes also like to stay cool during our summer heat):

Close any gaps under doors, holes in walls, or openings on your roof such as plumbing vents or roof vents. Check for any openings in screens (windows, doors, pool enclosures) as they are an open invitation. Cover your patio pool drain.

Avail yourself of the publications previously suggested. Understand that snakes are not aggressive. They will not hunt you or chase you. If you are lucky enough to see a snake, remain calm. Snakes would much rather **NOT** see you or be seen by you. Allow them to go on their way. Lastly, most snake encounters are with non-venomous, harmless snakes.

UF/IFAS, SFWMD ask residents to identify, report invasive snakes Lourdes Mederos, rodriguezl@ufl.edu
WEC220/UW258: Dealing with Snakes in Florida's Residential Areas—Identifying Commonly Encountered Snakes ([ufl.edu](https://edis.ifas.ufl.edu/publication/UW258))
Department of Wildlife Ecology & Conservation Dr. Steve A. Johnson Research Students
Florida Snakes: Identification Guide (reptile.guide)

Territorial Aggression Among Birds

By Jim Haupt, Master Gardener Volunteer

Many birds, like the black-capped chickadee, red-tail hawk, Carolina wren, tufted titmouse, sandhill crane, northern mockingbird, and red-winged blackbird are territorial for all or part of the year. They seek territories for cover, food, water, and nesting material. Once claimed, they fiercely drive off rivals and intruders.

The size of a bird's territory depends on the species. A small black-capped chickadee (*Poecile atricapillus*) will chase off other birds in a space between 8 to 17 acres. A red-tail hawk (*Buteo jamaicensis*) may require an entire neighborhood. A Carolina wren (*Thryothorus ludovicianus*) is satisfied with one or two backyards. The territory of a tufted titmouse (*Baeolophus bicolor*) extends anywhere from 15 feet off the ground to the tops of trees.



Photo: blogs.ifas.ufl.edu

Carolina Chickadee



Photo: blogs.ifas.ufl.edu

Tufted Titmouse

Scarcity of food and other resources can cause competition and conflicts. Sandhill cranes (*Grus canadensis*) in the Okefenokee Swamp, depend on wetlands to feed, roost, and reproduce. Each adult pair selects a slice of wetlands and remains in that location throughout their life cycle. Sandhill cranes feed mainly on tubers of redroots (*Lachnanthes carolinian*), but in winter, when water levels rise and cover the tubers, competition between sandhills increases and confrontations intensify. (*Territorial Behavior of Sandhill Cranes in the Okefenokee Swamp, 1992, University of Nebraska - Lincoln, Bennett & Bennett*)

When a bird sings or calls, it's usually done in response to an intruder, predator, or to protect a limited food supply. Before nesting season, territorial disputes between male tufted titmice are limited to singing duels, but during nesting season, duels become more intense, rapid, and erratic as they make aerobatic arcs within 2 to 3 feet of each other. The northern mockingbird (*Mimus polyglottos*), the state bird of Florida since 1927, can mimic songs of at least "fifty to sixty" other birds, even auto horns, barking dogs, and machinery. They are capable of singing complex songs for hours each day to protect their nests. ([Imagineourflorida.org/northern-mockingbirds/](https://imagineourflorida.org/northern-mockingbirds/) & ifas.ufl.com/2017/03/17/local-bluebirds-have-started-nesting)



Photo: blogs.ifas.ufl.edu

Red-Winged Blackbird

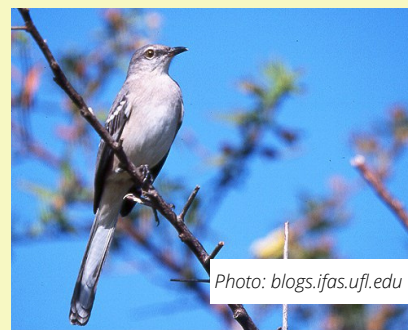


Photo: blogs.ifas.ufl.edu

Northern Mockingbird

A male red-winged blackbird (*Agelaius phoeniceus*) establishes their territory by puffing up their striking red wings. As males get older, their color becomes brighter and more difficult for an intruder to ignore. These birds will actually do flight displays over their territories by adjusting height and speed for dramatic effects to pursue any of its own species, a hawk, or a human that attempts to get too close. (blogs.nature.org/science/2019/07/22/why-do-little-birds-mob-big-birds)

According to Kate Sieving, a University of Florida Professor, "it's pretty common to see aggressive interactions between individuals of the same species." She added that when a physical confrontation occurs between individual birds, such as two tufted titmice (*Baeolophus bicolor*), an audience of other birds is drawn to observe the combatants to see how hard they are willing to fight for their territory and if their territory is worth fighting for. "The audience effect," she continued, "encourages combatants to fight harder especially if a female titmouse is watching." According to Sieving, "Birds living in the same territory frequently listen to one another to express concerns about habitat quality and vocalize alerts when a predator is near." (blogs.ifas.ufl.edu/2021/04/19/thems-fighting-birds-study-identifies-other-species-influence-on-territorial-aggression/)

If you have a passion for birds and wish to design your own landscape to attract them and other wildlife, go to "Landscaping for Wildlife," from UF/IFAS Extension. (edis.ifas.ufl.edu/entity/topic/landscaping_for_wildlife)

JUNE CALENDAR OF EVENTS

Date	Time	Event
Wednesday 6/1/22	9:00AM	Be Prepared: Trees and Tropical Weather As we start off this year's hurricane season, join UF/IFAS Extension to learn about how best to plan, maintain and prepare your trees for the tropical weather. https://www.eventbrite.com/e/be-prepared-trees-and-tropical-weather-tickets-325152920137
Saturday 6/11/22	10:00AM	Amazing Air Plants: Tillandsia Workshop Learn about these amazing epiphytes that only require air and water to live. This is a "make and take" workshop where you will create a palm boot planter using Tillandsia air plants. Bring wire cutters and pliers. \$35 advance payment for materials due by Thursday, June 9. https://www.eventbrite.com/e/amazing-air-plants-tillandsia-workshop-tickets-338977630217
Thursday 6/16/22	10:30AM	Rain Barrels for the Rainy Days of Summer Learn the safe and proper ways to use rain barrels to collect water from your roof gutters to help mitigate storm water runoff and reduce potable water usage in your landscape by watering your plants with it! After the Zoom webinar you will have an opportunity to make an appointment to purchase your own rain barrel and bag of some of the parts you'll need to install it for \$30 plus tax. https://www.eventbrite.com/e/rain-barrels-for-the-rainy-days-of-summer-tickets-297276480957

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1303 17th St. W., Palmetto, FL 34221

Telephone: (941) 722-4524

Website: <http://sfyl.ifas.ufl.edu/manatee/> **Email:** ManateeMG@gmail.com

Manatee County Master Gardener Volunteer Plant Clinics

Location	Address	Day(s)	Time
Crowder Bros. Ace Hardware	5409 Manatee Ave W., Bradenton	Third Saturdays	9:00 A.M. – 12:00 P.M.
Central Library	1301 1st St. W., Bradenton	Third Saturdays	11:30 A.M. – 2:30 P.M.
Lakewood Ranch Farmers Market	Waterside Place, 7500 Island Cove Terrace, Sarasota	First Sundays	10:00 A.M. – 2:00 P.M.
Robinson Preserve	840 99th St. N.W., Bradenton (South entrance, near pavilions)	Fourth Sundays	9:00 A.M. – 12:00 P.M.
Rocky Bluff Library	6750 US Hwy 301 N., Ellenton	Second and Fourth Saturdays	10:00 A.M. – 1:00 P.M.
St. George's Episcopal Church	912 63rd Ave. W., Bradenton	First and Third Thursdays	9:00 A.M. – 12:00 P.M.
UF/IFAS Extension Manatee County Tel. 941-722-4524 manateemg@gmail.com	1303 17th St. W., Palmetto	Every weekday except Wednesdays	9:00 A.M. – 4:00 P.M.