

The Master Gardening Bench



The Manatee County Master Gardener Newsletter

March 2019 - Volume 18 – Issue 3

All articles are researched utilizing UF/IFAS Extension and/or other educational sources unless otherwise noted.



Photographs by Peggy Connolly

Neighborhood Oak Trees in Manatee County

By Peggy Connolly, Master Gardener Intern 2018

On your next walk, pause and take note of the trees that surround you. If you live in an older or perhaps even a newer neighborhood in the county, chances are one of the trees is an oak (*Quercus* spp.). There are several hundred oak species in the United States; twenty-four are found in Florida, but only a few are common to Manatee County.

The most dominant in the county is the live oak (*Q. virginiana*). This tree got its name for retaining its green leaves until after the following year's new leaves appear.

This tree has one of the broadest spreads of all oaks, making it majestic in our landscapes. It can reach 40 to 60 feet in height, but its spread can stretch out 60 to 100 feet. The trunk is very short and has deep rough ridges and grooves. Leaves are leathery green and tend to have a rolled look.

This tree is prized for its disease and pest-free hardiness, long life, shade cover, hurricane and salt resistance, and ability to thrive in urban settings, including areas with compact soil and drought conditions. If that weren't enough, consider that it is a great home to many epiphytic plants and wildlife.

Some maintenance issues with live oaks include pruning, which must be done every year in the first three years to properly develop trunk and branch structure. Then, the pruning can taper to every five years to age thirty and then as needed. Roots are known to lift sidewalks and driveways.

In the past, the live oak was designated as the canopy street tree in the land development code of Manatee County. Due to the potential size, it is now only recommended for lots greater than sixty feet wide. Smaller street trees or shrubs are now suggested.

The laurel oak (*Q. laurifolia*) is another oak with a strong presence in Manatee County. This tree is considered medium-sized: it often grows as tall as the live oak but does not have the broad spread. It has a rounded symmetrical top and its leaves tend to be narrower and longer than the live oak. Leaves are lustrous green in color with a yellow mid-rib. Unlike the live oak, this tree loses its leaves in early spring and can remain bare for several weeks until new leaf buds break.

Gardeners and landscapers recommend the laurel oak for its fast growth and shady dense canopy. This oak can tolerate wet conditions but only with good drainage. Drawbacks include a shortened life due to rot, starting from the inside, at about 50 years of age. Symptoms are not seen until it is too late to save the tree. The laurel oak does not grow well in alkaline soil, and its roots also tend to lift sidewalks and driveways.

There are other oak species with a limited presence in Manatee County. These include the sand live oak (*Q. germinata*), myrtle oak (*Q. myrtifolia*), Chapman oak (*Q. chapmanii*) and the sand laurel oak (*Q. hemisphaerica*). These oaks vary in the environmental sites they enjoy. For example, the sand laurel oak prefers a dry upland site, while its sister the laurel oak can thrive in wet conditions.

Look for young seedlings at local native landscape nurseries, and consider planting an oak on April 26 for Arbor Day. Call the Manatee County Extension Office and ask for assistance regarding which oak tree would be best for your landscape. Don't forget to have your soil tested for best results.

For more information: [UF Publication: Common Oaks of Florida](#), [UF Publication: Topic Oak](#), and [UF Publication: The Value of Oaks to Wildlife](#).



Leaves are about 2.5 - 3 inches long, light green and not curvy like most oaks. The other day I noticed this weeping on the lower three feet of the trunk. No smell, no soft spots on trunk, although the weeping does wipe off onto my glove. Any help is most appreciated.

L.G., Palmetto

A. Dear L. G.:

Thank you for contacting the Manatee County Extension Master Gardeners.

Regarding the type of oak you have; the leaf form as well as the lighter mid-vein leads me to believe the oak in question is in fact *Quercus laurifolia*, Laurel Oak. Keep in mind that the same species of tree can look quite different in various environments. If there were acorns to see, we could validate the identification with certainty.

The weeping on the trunk is very concerning. This kind of staining is the result of something happening on the inside of the tree and usually it's not good. There is a disease, Phytophthora Basal Canker of Laurel Oaks, caused by a fungal-like pathogen, Phytophthora. This disease causes weeping lesions in the first 5 - 6 feet of tree trunk. As the disease progresses internally, it damages the tree's vascular system, prohibiting the uptake of water and causing the death of the tree.

I can't make a positive identification of disease by a photograph. It would benefit you to call an arborist who can evaluate the tree and even take a heartwood sample to send to the University of Florida Plant Diagnostic Center in Gainesville. Positive identification of the pathogen will determine if the disease can be treated or whether it's best to remove the tree.

I'm including links to information about the Plant Diagnostic Center and a site where you can find a certified arborist for your area. <https://plantpath.ifas.ufl.edu/extension/plant-diagnostic-center/>, www.treesaregood.org/

On slide 17 & 18 of this Power Point presentation are pictures of the cankers and heartwood of Laurel oaks affected by Phytophthora for you to compare to your tree.

<https://wchance3.files.wordpress.com/2017/11/common-landscape-tree-pests-larry-figart-uf-ifas-11-3-17.pdf>

Master Gardener Karen Holleran answers your email questions and looks at photos for identification of problems at ManateeMG@gmail.com.



Q: Dear Master Gardener,

Can you identify this oak tree? It was in my landscape when I moved in; I estimate it is 25 feet tall. It is the tree between the cabbage palm (L) and So. red cedar (R). Some people say laurel oak because of its upright growth, but I am not convinced.

IS IT A LADYBUG?

Text and photographs by Norma Kisida, Master Gardener, 2012

Ladybug cluster



Ladybug larva and aphids



Ladybug larva devouring an aphid



Ladybug pupa



Adult ladybug



Most everyone, including children, recognize adult ladybugs, or lady beetles, and know that they are beneficial garden bugs. However, it is important for gardeners recognize ladybugs in all stages of the life cycle so as not to inadvertently harm them. Ladybugs, like butterflies, go through a complete metamorphosis, from egg to larva, pupa, and adult. This cycle takes four to eight weeks, and the ladybug looks very different in each stage.

The female ladybug, once mated, lays 10 to 50 eggs in a cluster on or near a plant with insects such as aphids, scale, or mealybugs that the larvae can devour when they emerge. The eggs are usually pale yellow to orange in color. When the larvae hatch, they bear no resemblance to the adult with their strange alligator shape, and are often mistaken for pests.

In the larval stage, they are mobile voracious feeders of various garden pests, even eating each other or the eggs. As they grow, they molt (shed their skin) through four different larval stages called instars. As they become pupae, a hard shell forms, and they are immobile. When the adults emerge, the shell is soft and may appear lighter in color and take several hours to darken and spots to appear. There are usually several generations each year with a decline in the colder months as the adults hibernate.

There are about ninety eight species of ladybugs in Florida, many considered beneficial because they eat plant pests. They are not true bugs but are members of the beetle family *Coccinellidae*. Although we think of ladybugs as being red with black spots, the color can vary depending on the species as can the number of spots, and some have no spots. In Florida, most ladybug species feed on insects such as scale insects, aphids, and whiteflies. There are a few that feed on plants such as squash or beans, but these are limited to north Florida. Both adults and larvae may supplement their diet with nectar, water, and honeydew as well as secretions from some plants.

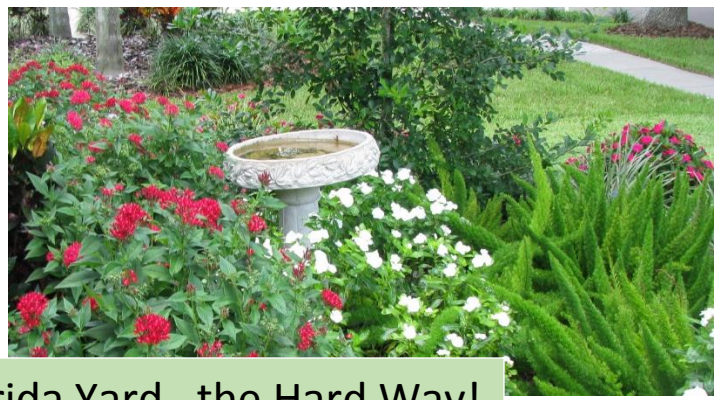
Asian ladybugs (*Harmonia axyridis*) may come in large numbers into homes and be a nuisance because of the sticky substance they secrete which can stain. This beetle can be distinguished by a whitish area with M shaped markings behind the head.

Recognizing the stages of ladybugs, using insecticides very selectively, and providing plants that provide both pollen and nectar will help increase the ladybug population in your garden.

For more information:

Ladybirds, ladybird beetles, ladybeetles, ladybugs of Florida

www.researchgate.net/publication/305434241_Ladybirds_ladybird_beetles_ladybeetles_ladybugs_of_Florida



Creating a Beautiful Florida Yard...the Hard Way!

By Mary Lange, Master Gardener 2017

I moved to Florida from Washington, D.C. in 2016 and proceeded to make every mistake in the book with my new yard. While I knew something about vegetable gardening, landscaping was completely new to me. I quickly learned how ill-prepared I was.

TURF: Turf was my first project. I had never had a yard of my own and couldn't wait to feel lush green grass under my bare feet! I painstakingly pulled up weeds in what had at one time been a lawn. I spread topsoil and installed over seven pallets of St. Augustine sod. It was not long before I realized my mistakes. My first water bill was over \$600 and, while watering requirements were reduced as the grass took hold, I soon realized I had saddled myself with at least a \$200 monthly water bill to keep the grass green and healthy. Added to this was the cost of fertilizing and spraying for pests. And even with all this cash outlay, large swaths of my yard died for lack of sunlight and a spotty irrigation system. Here's what I would do differently:

- **Develop a landscape plan:** Before beginning any yard projects, I should have evaluated my property, considering sunny and shady areas. I could then have developed a cohesive plan with the help of Manatee County's Landscape Assistance Program (see below) that would have included some turf but far more ornamental or mulched areas.
- **Check the irrigation system:** Much of my grass might still be alive if I had only checked my irrigation system before leaving town during a drought in south-central Florida. The county's Mobile Irrigation Lab (see below) offers a free irrigation system evaluation that would have given my turf a fighting chance.
- **Think Florida-Friendly:** My lovely grass is not as Florida-Friendly as I would like. It requires too much water, too much fertilizer, and too many pesticides. As a Master Gardener, I am heartily ashamed of my green grass folly.

SHRUBS: Shrubs were my second project. I inherited a yard that already had several flowering shrubs including ixora (*Ixora* spp.), oleander (*Nerium oleander*), hibiscus (*Hibiscus rosa-sinensis*), bougainvillea (*Bougainvillea* spp.), and gardenia (*Gardenia jasminoides*). I kept these as well as a

patch of Mexican petunias (*Ruellia simplex*) that looked to be on their last legs but that I continued to water and fertilize for more than a year, giving them plenty of time to invade other shrubs. I also added several azaleas (*Rhododendron* spp.), foolishly trying to recreate my beautiful spring walks up north when eye-popping azaleas were in bloom. My azaleas died before spring. Here's what I should have done:

- **Pull out invasive plants:** I should have immediately pulled out the invasive Mexican petunias, replacing them with Florida-Friendly shrubs such as Simpson stopper (*Myrcianthes fragrans*), Walter's viburnum (*Viburnum obovatum*), or yaupon holly (*Ilex vomitoria*). These native shrubs would have been better suited to my yard and would have had the added bonus of supporting pollinators.
- **Analyze the soil:** Had I done more research, including taking a soil sample to the Master Gardener Plant Clinic for testing, I would have learned that my soil (only four blocks from the beach) was extremely alkaline. Azaleas flourish in highly acidic soil! Mine never stood a chance.

TREES: By the time I turned my attention to the trees in my yard, I had started my training as a Master Gardener volunteer. I had multiple palms that were already well established. So, I added a layer of mulch around them (keeping the mulch well away from their trunk bases) and spread palm fertilizer every three months, per instructions on the bag. When it came to pruning, I hired an arborist to tackle my overgrown royal poinciana (*Delonix regia*). And before letting a local landscaper prune my cabbage palms, I repeatedly said, "Nine o'clock to three o'clock" no more removing fronds about that line!"

For more information on landscape design and Florida-Friendly landscaping, visit:

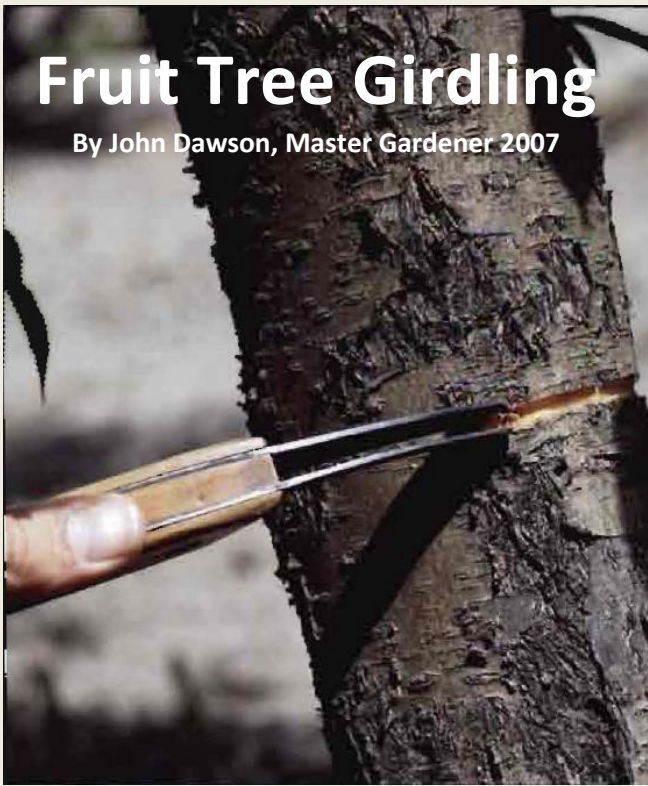
<https://edis.ifas.ufl.edu/ep375>, <http://edis.ifas.ufl.edu/ep396>,
<http://edis.ifas.ufl.edu/ep424>, <https://edis.ifas.ufl.edu/ep439>.

Call (941) 722-4524 to schedule a free assessment with the Landscape Assistance Program and the Mobile Irrigation Lab.

For information on becoming a Master Gardener Volunteer, visit: <http://sfyl.ifas.ufl.edu/manatee/lawn-garden/master-gardener-volunteer-program/>.

Fruit Tree Girdling

By John Dawson, Master Gardener 2007



Photos from University of California Fruit Report

Girdling - also known as cincturing – is an age-old method whereby trees are intentionally damaged to influence fruit development, to reduce tree height or to kill the tree. Most folks are aware that if you remove a section of the outer bark all the way around a tree, you will kill it. This often happens unintentionally via line trimmer or mower damage to young trees.

A technique of removing a small strip of bark, which will eventually heal over, has been used for centuries by orchardists on a wide variety of fruit species to increase yields, improve fruit set, enlarge fruit size, and advance maturity. The cut temporarily disrupts the downward flow of carbohydrates in the phloem towards the roots and allows more carbohydrates developed by leaves on the limbs to be available for fruit growth and development. This technique temporarily restricts tree growth, changes the hormone balance, and makes the tree more likely to flower and set fruit.

This method does not work on all types of fruit. Fruit that have been successfully cinctured include: grape, peach, apple, citrus, avocado, olive, jujube, lychee, pear, mango, and loquat.

Any damage to a tree will cause stress, so it is imperative that girdling only be done on healthy mature trees. Girdling is a technique used mostly by

commercial growers but can be performed by homeowners to enhance production from a tree that is not performing to expectations. Girdling is performed about four to eight weeks prior to expected harvest (usually about four weeks after bloom), depending on the species.

A special tree girdling knife, with a double trough blade is used to remove a very thin strip of bark about 3/16-inch-wide and only as deep as the cambium layer (the area between the bark and wood). Girdle tree branches that are at least two inches in diameter where they attach to the tree trunk on trees that are at least four years old. The girdle is cut around the limb in an “S” shape where the beginning and ending cuts finish about an inch or two apart, but never meet. Although some growers use a single circle cut, the “S” cut is safer for the beginner homeowner. Do not girdle all the limbs of the tree, unless you want to restrict its growth substantially.

Girdling wounds should heal over in six to eight weeks, even though some gumming may occur and leaf nutrients may be decreased for a period of time afterwards. Never girdle over a previous cut. A pesticide should be sprayed over any cut to prevent tree borers from entering the wound. The tree should be fertilized and watered to reduce stress so that the tree recovers well and will produce fruit again for the next season.



Notorious Red Heads: Redheaded Pine Sawflies

By Jim Haupt, Master Gardener 2016

There are approximately 35 pine sawfly species in the genus *Neodiprion spp.*, native to the United States and Canada. Sawflies resemble a common housefly but in fact are broad-waisted wasps. There are eight pine sawfly species indigenous to Florida. The **redheaded pine sawfly**, *Neodiprion lecontei*, found predominately in Canada, and the eastern regions of the United States, is considered to be the major defoliator of pines. The adult, or wasp stage, is rarely seen; it is the emergence of larvae, larger and more destructive, that signals the first sign of trouble.

As the name implies, the redheaded pine sawfly is recognized by its capsulated red head and saw-like appendage. Shaped like the blade of a saw, the female uses the appendage to cut slits in pine needles to lay her eggs. Once hatched, usually in about four weeks, the larvae gregariously begin to feed on the outer edges of needles. Lone unhealthy pines, or small stands of young pines between five to ten years of age, are generally targeted.

To compound the problem, secondary attacks by bark and wood-boring beetles will intensify the damage. Under ideal conditions, their numbers can increase, resulting in outbreaks that negatively impact the growth and mortality of "thousands of acres of pines" (4-H Forest Resources). Hard pines like Scotch pines, shortleaf pines, mugo pines, slash pines, longleaf pines, and loblolly pines, are targeted hosts for these notorious red heads. Once their favorite trees are exhausted, they will move on to less appealing cedar and fir species.

As the young larvae feed, the needles eventually take on the appearance of dry straw. Older larvae feed on the entire needle, leaving only short stubs. After the damage is done, larvae will move to the next available pine. If none are available, larvae will feed on the bark of the tree. In Florida, two or three generations of red-headed pine sawflies emerge each year, finally dropping to the ground to form papery cocoons in leaf litter or the top layer of the soil.

Larvae consist of two pouches attached to the esophagus that store the aromatic resins of the pine needle. When threatened by ants, spiders, rodents, or birds, the larvae will raise its capsulated head and regurgitate a droplet of the nasty fluid, paralyzing or repelling its victim.

Regular scouting is the first line of defense, checking needles for signs of damage before a serious infestation occurs. Horticultural oil and insecticidal soap are effective when directed at young larvae. Insecticides can be effective control alternatives, but can suppress the fifty eight documented natural enemies that prey on them. Extreme high and low temperatures help to control infestations.

When damage is seen on a small scale, these invaders may be hand-picked and crushed. Infested branches can be removed. Another technique is to place a bucket of soapy water below an infested branch, and by striking the branch sharply causes these unwelcome visitors to fall off their perch and into a soapy demise.



An adult redheaded pine sawfly



Redheaded pine sawfly larvae



Pine needles take on an appearance of dead straw



A defoliated stand of dead pines

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Tomato Tips: Encountering Blossom End Rot

By Jim Haupt, Master Gardener 2016

Blossom end rot (BER), a nutritional disorder, can be observed in ripening tomatoes. In the early stages of development, fruit appear to have light tan blotches, which then enlarge, and take on a black, dry, leathery appearance. BER, an unsightly annoyance, occurs on the blossom end of the fruit but may also be observed on the sides and even on the inside of the fruit.

The cause of BER is attributed to a lack of available calcium caused when tomato cells break down and calcium is unable to transport from the leaves to the fruit (translocation). On occasions, the breakdown can occur on the inside of the skin, making the outside of the fruit seem healthy and normal.

BER can become worse with high amounts of nitrogen, high concentrations of potassium and magnesium, inadequate or excessive soil moisture, high salinity, low humidity, root damage caused by nematodes, disease, and heavy pruning. With the many things that make it worse, BER has become a serious problem for home gardeners and the commercial field and greenhouse growers.

The University of Florida/IFAS Extension states that foliar sprays containing calcium can mitigate this condition to some degree, but has yet proven to be an effective control. On the other hand, watering properly, especially around the roots, adding calcium nitrate in the soil and around the roots, and proper fertilization are more effective practices. Mulching will also help in keeping the area around the roots moist and temperatures moderate.

For more information, visit:

<https://plantpath.ifas.ufl.edu/u-scout/tomato/blossom-end-rot.html>,

<http://edis.ifas.ufl.edu/pdffiles/VH/VH02800.pdf>,

<http://edis.ifas.ufl.edu/pdffiles/CV/CV26500.pdf>.



BER may also occur internally with no visible symptoms on outside of fruit.



Manatee County Watering Restrictions

Now that the dry season is fully upon us, please be aware that lawn watering is limited to two times per week, according to county ordinance. Even addresses may water on Thursday and/or Sunday. Odd addresses may water on Wednesday and/or Saturday. Watering must be done before 10:00 A.M. or after 4 P.M. Hand watering and micro-irrigation for plants (other than lawns) may be done any time. Newly installed lawns and/or plants are allowed any-day watering during the first 30 days. For more information, go to www.swfwmd.state.fl.us/.

March

CALENDAR OF EVENTS

Date	Time	Event
1 st Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – Island Library – 5701 Marina Drive, Holmes Beach. Visit the Extension Master Gardener information table and get answers to your gardening questions.
2 nd & 4 th Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – Rocky Bluff Library – 6750 US Highway 301 N., Ellenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
2 nd Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – South Manatee Library – 6081 26 th Street West, Bradenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
Saturday March 9	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour - Riverview Pointe Preserve – DeSoto National Memorial – Stroll through Riverview Pointe Preserve to learn more about Florida's native plants and inhabitants of a coastal habitat. Suitable for all ages. The hike begins in the parking area of the DeSoto National Memorial Park and enters into the Riverview Preserve at 8250 DeSoto Memorial Highway, Bradenton. To register call the Extension Master Gardeners at (941) 722-4524.
Saturday March 9	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour – Emerson Point Preserve - Stroll through Emerson Point Preserve to learn more about Florida's native plants and inhabitants of a coastal habitat. Suitable for all ages. Call the Extension Master Gardeners to register (941) 722-4524.
Saturday March 16	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour – Rye Preserve - Take a hike through upland habitats along Rye Branch and learn about Florida native plants, natural history, and early settlement of the area. Drinking water, sturdy shoes, and hiking sticks are recommended. Visitor Center open 9am-noon and 1-4pm. Call the Extension Master Gardeners to register (941) 722-4524.
Sunday March 17	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour – Robinson Preserve - Stroll through the Robinson Preserve's salt marshes to learn more about Florida's native plants and inhabitants of a coastal habitat. Suitable for all ages. Trail consists of shell paths with little shade. Good walking shoes, drinking water, hat, and sunscreen are recommended. Call the Extension Master Gardeners to register (941) 722-4524.
Wednesday March 20	10:00-11:30 a.m.	Orchid Care and Repotting - Do you have an orchid bursting from its pot and wonder what to do now? Learn the proper way to care for and propagate several varieties of orchids. Bring your overgrown orchid and pruners for a hands-on exercise of dividing the orchid. We will provide you with an orchid pot, potting media, and other materials. Registration and advance payment of \$15 for materials is due by March 8 and guarantees your spot in class. Register on-line at http://uf-ifas-extension-manatee.eventbrite.com or call the Extension Master Gardeners at (941) 722-4524.
Wednesday March 20	5:30-7:30 p.m.	"BYOB" Bring Your Own Bulbils – An Air Potato Control Presentation - Join the fight against the invasive air potato vine! Be one of the first recipients of air potato beetles! Rid your yard of pesky bulbils (air potato vine's aerial potatoes). Bag or containerize your air potato vine bulbils and bring them to this workshop for a chance to win an air potato beetle logo t-shirt! Get the inside scoop from Air Potato Biological Control scientist Dr. Christopher Kerr with the Florida Department of Agriculture and Customer Services. There will also be air potato beetle sign-ups, demonstrations, and hands-on activities. Register online at http://uf-ifas-extension-manatee.eventbrite.com or call the Extension Master Gardeners (941) 722-4524.
Tuesday March 26	5:30-7:30 p.m.	Irrigation with Water Conservation in Mind - Topics will focus on how to adjust your in-ground sprinkler system to conserve water, how you can repair parts, and the benefits of installing smart irrigation devices. Register online at http://uf-ifas-extension-manatee.eventbrite.com or call Erik (941) 722-4524, ext. 1828.
Thursday March 28	5:30-7:30 p.m.	Landscape Tips for Water Conservation - Topics will focus on Florida-Friendly Landscaping™ tips such as right plant vs right place, watering efficiently, and the benefits of mulch. Register online at http://uf-ifas-extension-manatee.eventbrite.com or call Erik (941) 722-4524, ext. 1828
Saturday March 30	10:00 a.m.-Noon	Palms for Manatee County - Learn the best palm selections for Manatee County's climate and conditions. When choosing a palm for your property, consider the palm's mature size, soil conditions, disease issues, and more. Register online at http://uf-ifas-extension-manatee.eventbrite.com or call Erik (941) 722-4524, ext. 1828

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