



Planting Landscape Trees 101

By Joy Derksen, Master Gardener 2004

Did you know that Arbor Day in Florida is the third Friday in January? Usually, that is the best time for planting trees here.

Tree planting in Florida is a little different than what you may be used to in the Northern states. Our soils and weather are vastly different. The first thing you need to consider is our climate and what trees grow successfully here. The University of Florida provides an excellent website to help you find the tree that will work well in your yard at (<http://hort.ifas.ufl.edu/woody/>).

Keep in mind that yards in Manatee County are in Zone 9b (temps 25-30°F.) If you are near the coast you are in Zone 10a (temps 30-35°F) and can consider yourself more like the Naples area and try more "tropical" (cold-sensitive) trees. Cold spells will give you a better idea of cold damage in your yard.

University of Florida has been studying ways to grow trees successfully with the results available online at <http://edis.ifas.ufl.edu/ep314> "Planting and Establishing Trees."

Success with any plant rests in planting the right plant in the right place. With a tree, you can't easily move it later when you realize it needs a different type of environment. Step 1 is to, "Look up and then, look around!" Don't plant tall trees under telephone wires, lights, or house eaves. Allow space for the tree to grow. Don't put a royal poinciana (*Delonix regia*) or southern magnolia (*Magnolia grandiflora*) next to the house, and don't put the live oak under the telephone lines. Manatee County has a list of shorter trees for under those utility wires. Visit: www.mymanatee.org/home/government/departments/building-and-development-services/environmental-review/articles/citizen-sfl-trp-conditions.html.

Choose the tree for the space, or choose the space for the tree. In Florida we worry about trees getting too much water. Some trees, like citrus, need excellent drainage.

The root ball of any tree should always be 1 to 2 inches above the soil, because soil settles over time. If it is a poorly draining site, plant higher in a mound. Dig a shallow and wide planting hole. The hole should be at least 1.5 to 2 times the diameter of the root ball with wider holes in areas of wet and compacted soils. Making a wider hole allows space for root growth, encouraging faster establishment. To estimate the depth of the hole, measure the distance from where the topmost root emerges from the trunk to the bottom of the root ball. You will probably need to dig away the dirt from the trunk to find this root. This root must be above the soil level in your hole. Cut back any top roots which are kinked or circling in the container. These can eventually girdle the growing trunk and kill the tree or cause it to fall over in high winds. Place the tree carefully in the planting hole, straighten the tree, and remove any synthetic materials that will not readily decompose in the soil. Real burlap can stay on, plastic burlap must be removed. Roots have been known to girdle even when real burlap has been left on the root ball after planting.

Fill the hole and firm the backfill soil around the root ball. Cover the sides (not around the trunk!) of the root ball with organic mulch (do not use peat or cypress chips since once dry they are difficult to wet and may restrict water movement into the soil).

You should mulch out to the drip line so that the growing tree does not compete with lawn grasses for water and soil nutrients. Stake if necessary. Water thoroughly initially and then follow by watering (2 gallons per inch of diameter) daily for 2 weeks for trees less than 2 inches in diameter, then every other day for two months, and weekly for about 3 to 4 months. Larger trees need to be watered daily for a month, every other day for 3 months and weekly for another month.

Follow Florida rules and you will be pleasantly surprised with how quickly your trees grow.



These two trees were planted at the same time. Live oak tree #1 is planted too deeply, the top roots are not above ground. It is struggling to grow.

Tree #2 was planted with its "shoulders" at the surface. The area around Tree #2 is clear of mulch and you can see the successful roots. This is not a tree that will easily blow over in a storm.



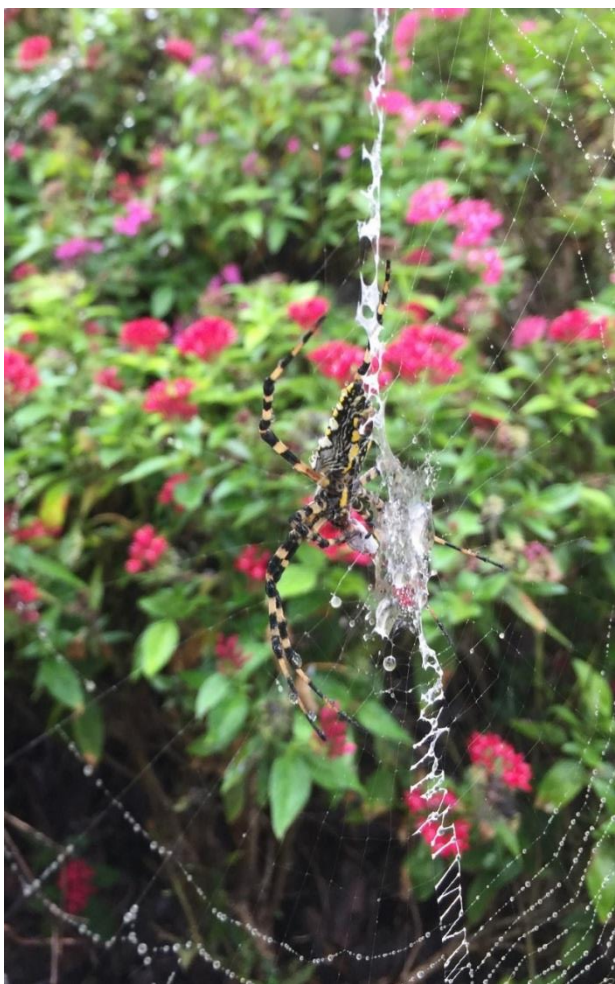
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What's This?

The Argiope Spider (aka Golden Orb Weaver)

Argiope aurantia, body measuring approximately one inch, captured on film in central Florida exhibiting characteristic "zipper" web weave (known as "stabilimenta" - purpose unknown). It is harmless to humans and a predator of garden pests.



Splendid Color

Visit the Master Gardeners at the Manatee County Fair (January 12-22, 2017) to pick up one of these beauties free!



Begonia (*Begonia spp.*) Favored for multicolored leaves and lovely flowers, these grow well in pots, beds, and hanging baskets. Keep soil moist but not soggy and feed lightly. Depending on the species, they do well in partial shade to full sun. Plant in late February in slightly acidic soil. This year's begonia: 'Eureka' in bronze/scarlet.



Snapdragons (*Antirrhinum majus*) are available in white, yellow, red, orange, pink, purple just about every color but blue! Generally used as a bedding plant, snapdragons do best in well-drained soil in full sun. Water daily until established, usually for a couple of weeks. This year's cultivar: a red 'Montego Series.'



Coleus (*Coleus x hybridus*) is a succulent evergreen perennial with brightly colored and patterned leaves used in beds or containers. Over 200 varieties are available. It prefers well-drained soil and frequent watering. Remove flower spikes as they appear to encourage growth. Place in light shade to bright sun depending on variety. This year's coleus is 'Wizard Select Mix.'



Pentas (*Pentas lanceolata*) is a moderately drought tolerant evergreen perennial sporting abundant clusters of brightly colored flowers in red, white, lavender, or pink. It stays in constant bloom in warm weather and is one of the best garden plants for attracting butterflies and hummingbirds. Fertilize regularly during the growing season and place in sun to shade, but blooms best in full sun. This year's cultivar is 'Graffiti Rose.'

Part Three: Nutrient Deficiencies in Landscape Palms

By Nancy Hammer, Master Gardener 2014

This installment covers boron and manganese deficiencies. (Part One appeared in September 2016 and Part Two in November 2016.)

Boron (B) deficiency is becoming increasingly common in landscape palms. Symptoms are visible on the *newest* leaves, but will remain as newer leaves appear. Symptoms can differ even within the same species, but may include failure of emerging spear leaves to open normally; bent or corrugated leaves, flower and fruit drop, and even a bending of the entire canopy.

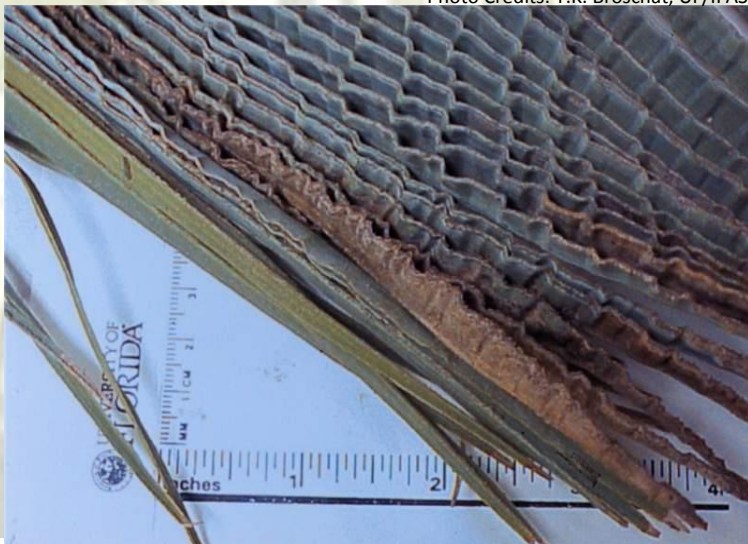
Boron deficiency is often caused by the leaching of B from the soil during heavy rains. When leaching subsides, boron levels increase, and provide adequate amounts for palms.

Read the UF/IFAS publication “Boron Deficiency in Palms” for more detailed information at <http://edis.ifas.ufl.edu/ep264>.



Multiple unopened spear leaves on B-deficient *Phoenix roebelenii*

Photo Credits: T.K. Broschat, UF/IFAS



Accordion-leaf in *Syagrus romanzoffiana*, a symptom of B deficiency

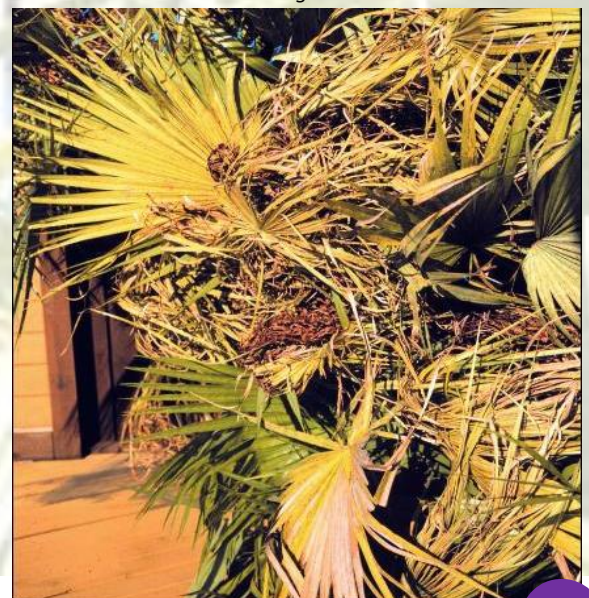
Manganese (Mn) deficiency symptoms occur on the *newest* leaves as chlorosis (yellowing) with necrotic (dead or dying) streaks. As the problem progresses, the leaflets look frizzled (commonly called frizzle top), and in severe cases, the palm will die.

Manganese deficiency is due to a lack of the nutrient, and / or alkaline soil, which inhibits the uptake of manganese. In cases of sufficient Mn, inability to take up Mn may be due to cold soil temperatures, or the use of composted manure in the planting site. Visual symptoms can be similar to boron or late stage potassium deficiencies. When manganese deficient soils are present, water soluble fertilizers containing Mn should be used.

For more detailed information on management of manganese deficiencies, read “Manganese Deficiency in Palms” at <http://edis.ifas.ufl.edu/ep267>.



Manganese deficient new leaf of *Phoenix roebelenii* showing longitudinal necrotic streaking



Manganese deficiency or “frizzle top” of *Acoelorrhaphe wrightii*

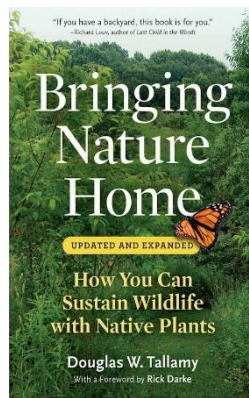
Florida Gardeners Can “Bring Nature Home”

By Bob Nicholson, Master Gardener 2008 and Florida Master Naturalist 2011

Many Master Gardeners go through the rigorous training and volunteer requirements of the Florida Master Gardener program because they have a sincere interest in the environmental health of our planet. Some specialize in advocating the use of native plants in landscapes because of the benefits that native plants provide to our ecosystem.

Others migrate toward environmental restoration activities. We get involved in rewilding efforts and volunteering in parks and preserves. Both Master Gardeners and homeowners can easily be tempted to lose interest in residential horticulture, believing that only large-scale projects can make a real difference.

Parks and preserves provide meaningful ecosystem services. Finding new areas is difficult and expensive to acquire and restore. In Manatee County, we are blessed with a wealth of professionally managed preserves. In Dr. Douglas W. Tallamy's book, ***Bringing Nature Home***, he helps us realize how important our residential landscapes are in the big environmental picture.



Dr. Tallamy explains that we have developed a “homes over here and nature other there” mentality in which we see “plants as decorations.” He suggests that we put biodiversity back in our neighborhoods, create corridors connecting natural areas, reduce the areas now in lawns, and begin the transition from alien ornamentals to native plants. Doing so will boost ecosystem services such as clean air and water, flood prevention, carbon sequestration, and mental health – things that mankind requires to exist on Earth.

So, why native plants? Many have learned that native plants in the right place require less water and fertilizer, once they are established, than do similar exotics. We've also learned that plants have chemical and mechanical defense systems. In order for insects to utilize these plants as food or shelter, they must overcome the plant's defense mechanisms.

It can happen, but it takes a really long time. Essentially

the plants and insects must co-evolve; that is, they must evolve in contact with each other. During the evolution process insects can become specialists. They require specific types of plants to exist. Thus, the need for native plants. If those plants disappear, so does the specialized insect.

Tallamy tells the story of how landscapers accidentally saved the Atala butterfly (*Eumaeus atala*). It seems Florida native coontie plants (*Zamia pumila* or *Z. floridana*) were once valued for their starch. Atala butterflies have a specialized relationship with coonties. When the starch industry depleted the plants, the Atala disappeared. It was long thought that the butterflies were locally extinct, so when coonties gained favor with landscapers, the Atala reappeared. (Apparently, there was an isolated pocket of Atalas somewhere in the Everglades.) For specifics on this relationship, see <http://edis.ifas.ufl.edu/mg347>.

But why should we want all those insects? Dr. Tallamy suggests we think of insects as bird food. Many birders plant fruiting plants to attract birds, but often are not aware that most birds raise their young on insects. More insects mean more birds, more reptiles, more mammals, and more ecosystem services. He writes: “Over ninety percent of insects can develop and reproduce only on plants with which they share an evolutionary history.” He gives the example that our native oaks (*Quercus spp.*) are known to support around 557 species of caterpillars while Brazilian peppers support only five species.

Must we use 100 % natives? Tallamy says not necessarily. We need native plants because we need ecosystem function. “Understand what each plant in your yard is doing,” he writes, “and use that knowledge to rebuild food webs.”

Florida gardeners and Master Gardeners may find their work to be even more meaningful and rewarding when they understand how important our residential yards are to our ecosystem. I found this book to be helpful in understanding these principles.

Several of Dr. Tallamy's lectures are available on YouTube including here: <https://youtu.be/QEhl2ZwzCr4> and ***Bringing Nature Home*** is published by Timber Press.

Cold Hardy Native Palms for Central Florida

By Norma Kisida,
Master Gardener 2012

Those foxtail, Christmas, royal, coconut, and other tropical palms look so tempting when we see them in landscapes and nurseries. It is easy to forget that there are nights in Manatee County when the temperatures are low enough to damage palms that are not cold hardy. We certainly saw that a few years ago when the night temperatures dropped below freezing for several hours several nights in a row. Wind chill and daytime temperatures less than 40 degrees exacerbated the damage. Many landscape plants were killed or damaged, including expensive palms.

Florida has thirteen native palms but not all are cold hardy or suitable for our climate in Manatee County. Here are some NATIVE, COLD-HARDY palms that are safe to plant.

For more information and other cold hardy and native palms see:

Ornamental Palms for Central Florida -

<http://edis.ifas.ufl.edu/ep020>

Florida Native Palms -

http://lee.ifas.ufl.edu/Hort/GardenPubsAZ/Florida_Native_Palms.pdf



The sabal or cabbage palm (*Sabal palmetto*) is our state tree. The name "cabbage palm" comes from its edible immature leaves, or "heart," which has a cabbage-like flavor. It is slow growing with typical dimensions of 35 ft. by 18 ft. It becomes self-cleaning with age, tolerates a wide range of soil conditions, and has low nutritional requirements. It has moderate to high salt, drought, and wind tolerance and is cold tolerant to 10 degrees F. If started small, it will not develop a trunk for several years. Although cabbage palms grow wild all over the state, they are great native trees for both home and industrial landscaping and are sold in various sizes and shapes. When transplanted, the fronds are trimmed and it will not regain a full complement canopy of fronds for about eighteen months.



The dwarf palmetto palm (*Sabal minor*) has a solitary trunk that is rarely seen because it is mostly subterranean. It is slow growing with a typical height of 2-6 feet and spread of 3-4 feet. It is extremely hardy and has a tropical appearance due to the large leaves. Because of the small size, it can be used as a ground cover if planted 4-6 feet apart. It grows best in part shade, moist, well-drained soils and under the canopy of hardwood (oaks) trees. There are no pests or diseases of major concern to this palm. It may be difficult to find as it is grown only in small quantities by a small number of nurseries but it can be propagated easily from seed.



The saw palmetto (*Serenoa repens*) makes a great landscape plant when used appropriately, especially for those who prefer a less formal and more native look. Nothing says "old Florida" better than native oak or pine trees with an understory of saw palmetto. A common native in Florida's natural areas, it is a long lived, slow growing, clumping palm with fan shaped leaves and multiple trunks. It grows low, typically 2 to 8 feet, creating a dense ground cover but may get taller under some conditions. The saw palmetto is extremely sturdy and tolerates a range of conditions including cold, salt, and drought, but it does best in well-drained soil. Although most saw palmettos have green leaves, there are some that have silver foliage. For home landscape use, it is best to buy and install container plants since it is difficult to propagate and very slow growing.



The needle palm (*Rhipidophyllum hystrix*) is a slow growing clustering palm with fan-like fronds and typical dimensions of 6 ft by 6 ft. The needle palm has lustrous, evergreen leaves and works well in home landscapes as an accent plant or beneath trees. It is extremely cold tolerant (to -5 degrees F) once established. It tolerates a wide range of soil conditions, has moderate drought tolerance, and high wind tolerance but low salt tolerance. Although it will grow in both sunny and shade conditions, it performs best if given some shade. The name is derived from the sharp, black needles along the trunk so give these palms plenty of room to grow and do not plant near walkways or play areas.



The paurotis or Everglades palm (*Acoelorrhaphe wrightii*) is a fan-leaved, slow growing, and clustering palm with typical dimensions of 20 ft. tall by 15 ft. wide. Although it is native to south Florida, it is cold hardy to 22 degrees F. It is moderately salt, wind, and drought tolerant although it prefers moist soils. This palm has bright green leaves with silvery underside, rows of sharp orange teeth and thin stems covered with loose brown fiber. It works well as an accent palm or visual and physical buffer. It is propagated from seed.



Homeowner Associations and Residents Become Florida Landscaping Savvy

By Jim Haupt, Master Gardener 2015

The Community Association Institute reported that over 60 million Floridians live in residential communities regulated by homeowner associations (HOAs). Because HOAs sometimes regulate the kinds of turf, kinds of plants, and how landscapes are maintained, they govern a substantial amount of green space.

The Florida-Friendly Landscaping™ (FFL) Program was developed in 1994 to promote safe and friendly environmental landscape practices in order to conserve Florida's natural resources. FFL impacts homeowners, HOAs, commercial and government properties, builders, developers, and commercial service providers throughout the state. The Florida State Legislature "finds the use of Florida-Friendly Landscape, and other water use and pollution measures, serves compelling public interest and that the participation of homeowner associations and local governments is essential in the state's efforts in water conservation and water quality protection and restoration." (<http://fyn.ifas.ufl.edu/legallyspeaking2014/FFL-In-Our-Courts.pdf>)

Existing communities understand that landscaping can become a huge investment, and also realize its significance in order to maintain property values, attract buyers, and preserve and maintain standards. As Florida's population grows, and more people move into HOAs, the environmental impact of decisions concerning land management should be paramount within these communities. Existing communities can set an aesthetically pleasing example for its residents and surrounding associations by making sure that common areas are planted in a Florida-Friendly manner.

As of 2009, newly built communities are required to "incorporate the model Florida-Friendly Landscaping™ covenants, conditions, and restrictions" approximately two years following the opening of the community to keep the Florida-Friendly designation.

Finding a qualified landscape contractor can be a daunting task, and if residents and board members have little or no experience, getting recommendations from other HOAs managers may be helpful.

The Manatee County Extension Office offers a workshop entitled "Tips on Hiring a Landscape Contractor" that helps to start the process, offering HOA representatives and homeowners the opportunity to meet professional contractors who follow and utilize Florida-Friendly Landscaping™ principles.

The minimum standard for Florida landscape professionals is certification in Green Industries Best Management Practices (GI-BMP), a science-based training program for landscape professionals, sponsored by UF/IFAS. Training is offered throughout the state to train landscape professionals in environmentally safe landscape practices. Florida State Law requires that all commercial fertilizer applicators must be licensed through the Florida Department of Agriculture and Consumer Services (Florida Statute 482.1562).

The Florida-Friendly Landscaping™ Program, along with the Florida Community Association Journal's 'Florida Communities of Excellence' award, recognize established communities that take steps to incorporate Florida-Friendly practices.

What I've Learned About Florida Gardening

By Nancy Hammer (Northerner!), Master Gardener 2014



I moved to East Manatee County from Northern Illinois in 2014. Instantly, I sensed: "Toto, I've a feeling we're not in Kansas anymore!" My basic gardening skills still applied, but I found myself searching online for University of Florida horticultural information and haunting the 635 section of our local library for books specifically on Florida gardening and plants. In the end, I trained to become a Manatee County Master Gardener. My basic learnings? Here are some of the basic differences I learned:

Let's start with grass. I'm still trying to get accustomed to St. Augustine. Up North, summer meant lying on the dreamy Kentucky bluegrass lawn staring at the passing clouds. And mowing maybe once a week for about 6 months of the year. Here, much to my husband's surprise, there are several months of the summer where he better be out there twice a week, or he will be making hay! Then there are fire ants, chinch bugs, mole crickets, and sod webworms! What has this Northern transplant learned? Proper cultural practices go a long way toward precluding these problems. An excellent reference is The Florida Lawn Handbook by L. Trenholm and J.B. Unruh. (Google the name and you can find out how to order the book or access key chapters for free on-line.)

Now onto vegetable gardening. For starters, the age-old rule about planting your tomatoes, peppers, and squash around Mother's Day is out the window in central Florida. If you want a veggie garden here in the summer, try your hand at okra, sweet potatoes, black-eyed peas and malabar spinach. We have two growing seasons for tomatoes starting in September and February. Eureka! (See Florida Vegetable Gardening Guide on-line at <http://edis.ifas.ufl.edu/vh021>).

Weeds are sometimes defined as plants in the wrong place. Before we moved to Florida, I remember relishing the thought of year-round gardening – especially in October when the first frosts would nip my beloved vegetables and flowers up North.

Now, I occasionally pine for that winter break – mostly from pulling weeds! We have weeds that pop up during the cooler months, and then a whole new gang that takes over during the hot, rainy months – and there are A LOT of them! Try to catch them before they go to seed. Call the Master Gardener Plant Diagnostic Clinic (941-722-4524) for information on how to "win" the weed war.

If you miss forsythia, lilacs, tulips, and apple blossoms, make a spring outing back North. They need the sustained cold temperatures that we rarely get here. On the other hand, you may grow mangoes, papayas, and fruits you may not be familiar with like lychee and star fruit. You may choose to grow plants with cool names like coontie, jacaranda, and frangipani! Florida offers you more plant choices than any other state, so get over the old favorites and adopt some new ones. For more information, order the free publication, "The Florida-Friendly Landscaping™ Guide to Plant Selection & Landscape Design" at <http://fyn.ifas.ufl.edu/homeowners/publications.htm>.

The truth is, gardening in Florida is a blast, and the array of plants is a wonder to behold. Grow your own pineapples, cherimoyas, and dragon fruit. Enjoy natives like Southern magnolia and beautyberry and plants that attract butterflies like firebush and cassia. Jot a note on your 2017 calendar to visit our plant fair the first Saturday in October where you will find a variety of Florida-Friendly plants for sale.

Manatee County Master Gardeners are available to answer your questions at our Plant Diagnostic Clinic, every weekday except Wednesday from 9:00 A.M. to 4:00 P.M. Call 941-722-4524 or visit us at the Extension Office 1303 17th St. W. in Palmetto. Or, email questions to ManateeMG@gmail.com. See page 8 for a schedule of our classes and make an appointment for a tour of our educational gardens for great ideas for butterfly gardening, vegetables, fruit trees, and Florida-Friendly Landscaping™.

December CALENDAR OF EVENTS

Photo: Forest & Kim Starr

Date	Time	Event
3 rd Tuesday of each Month	10:00 a.m.	Monthly Guided Tours of the Master Gardener Educational Gardens - Join us for a guided tour lasting about one hour. The gardens illustrate a variety of garden styles and techniques, demonstrate Florida-Friendly Landscaping™ principles, educate residents about plants that perform well in Florida landscapes, and inspire garden visitors to follow recommended gardening practices at home. Register by calling the Master Gardener Plant Diagnostic Clinic (941) 722-4524.
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.
Saturday December 10	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. Tour begins in tower parking area at 5801 17 th Street West, Palmetto. Call the Extension Master Gardeners at (941) 722-4524 to register.
Saturday December 10	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 December 10	10:00 a.m.-Noon	Get the Buzz on Beekeeping – Interested in keeping bees? This is a two-hour workshop on the history of beekeeping, what you need to get started, where you can keep bees, and what the rewards are of beekeeping besides the delicious honey! Pat and Rich Yacso, local beekeepers for five years, participants of the University of Florida Master Beekeeping Program, and members of the Suncoast Beekeeping Association will present this program. Register online at http://manatee.ifas.ufl.edu or call the Extension Master Gardeners (941) 722-4524.
Sunday December 18	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. Tour begins in parking area by main entrance at 1704 99 th Street Northwest, Bradenton. To register call the Extension Master Gardeners (941) 722-4524.

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