Florida boasts many fragrant native shrubs and trees that will take your landscape to a new level. These native plants will make you glad you live in Florida!

**Simpson’s stopper (Myrcianthes fragrans).** This hardy Florida native shrub/small tree has fragrance in its name. Its tiny, dark green leaves smell of nutmeg, and it has interesting reddish/brown exfoliating bark. It blooms periodically with scented white flowers which are followed by orange or red berries in the fall that are coveted by pollinators and birds. Zone 8b-11.

**Marlberry (Ardisia escallonioides)** is a native shrub which peaks at 12-15 feet, thrives in zones 10-11, displays semi-glossy leaves, and produces clusters of scented white flowers throughout the year. It isn’t particular about soil, is drought tolerant, and provides purple fruit for wildlife.

**Jamaica caper (Quadrella jamaicensis)** is a native shrub/tree suitable for zones 10-11. It sports stunning clusters of white to pink flowers that open at night from April to June. Attractive to butterflies and bees.

**Fetterbush (Lyonia lucida)** is a densely branched native shrub that usually grows to between 3-5 feet and delights the senses with 10-15 inch white to pink honey scented flower clusters in the spring. It prefers moist, slightly acidic soil in partial shade in zones 7A-10B. Butterflies and bees.

**Sweetspire ‘Henry’s Garnet’ (Itea virginica)** is a compact native shrub with distinctive glossy burgundy/green leaves on arching branches, and fragrant white flower spikes in the spring that attract butterflies. It thrives in zones 6-10.

**Fiddlewood (Citharexylum spinosum)** is a tall native shrub that has attractive glossy leaves, and fragrant white flower clusters in the spring and summer. It is adaptable to various soils, drought tolerant, and makes a great hedge.
**Southern magnolia** 'Little Gem' (*Magnolia grandiflora* 'Little Gem') is a slow growing more compact cultivar of the Southern magnolia suitable for smaller landscapes. It shines with glossy 8 inch long leaves, and fragrant creamy white blooms in spring and summer. It’s hardy in zones 7A-10A.

**Sweet acacia** (*Vachellia farnesiana*) is a distinctive small native tree that has finely divided leaflets, giving it an appealing airy look. Fragrant yellow flowers emerge from spherical-shaped heads in late winter, and periodically during the year – followed by purplish fruit attractive to wildlife. 9A-11. One caveat – it has numerous thorns, so landscape location is important.

Once established through recommended irrigation, these are easy care shrubs and trees...with so much to offer to the senses, and to wildlife. For more details, search ASK/IFAS.

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**LYCHEE ERINOSE MITE (LEM)**

By John Dawson, Master Gardener Volunteer

The lychee erinose mite (*Aceria litchii*) is a small insect; so small that it cannot be seen with a normal microscope, but it is causing widespread damage to lychee trees in our part of the state. The mite is native to Asia and has appeared here three times in the past - 1955, 1993, and 2018. Florida is the largest producer of lychee in the United States, and LEM has the potential of reducing crop production by eight percent.

The LEM feeds on immature leaves (new growth) causing small blisters with silver-white colored hairs called “erinea.” This may be the first sign of a LEM infestation, which as you may expect, would be difficult to detect on leaves high up in a tree. The erinea later becomes a reddish-brown hairy mass (easier to detect) that, in some instances, can cover the entire underside of the leaf, causing leaf curl.

Erinea can turn almost black as infested leaves mature. Erinea may also develop on other plant parts. As the LEM population grows, the mites migrate to other new shoots and feed upon petals, stems, panicles, flower buds, and fruit. Mites lay their eggs in the erinea and develop into adults in about fourteen days. They can spread very rapidly on trees during moderately hot and dry periods with low humidity. LEM can be transferred by wind, honeybees, by the movement of infested plants, when plants are propagated by air layering from infested parent trees, or by humans touching the infected leaves and working on other parts of the tree or another tree.

LEM infestations are not fatal to mature trees; but left unchecked, will do harm to tree growth and crop production. Removal of infested material (pruning) and treatments with sulfur are the recommended procedures for control. Infested plant material must be destroyed. Once pruning of infected areas has been completed, the entire tree should be sprayed with a sulfur solution. The University of Florida recommends using microthiol disperss. Treatment should be repeated every ten days while new growth appears. After working with infested trees, clothing should be washed and tools sterilized. Further information can be found at [https://edis.ifas.ufl.edu/publication/IN1347](https://edis.ifas.ufl.edu/publication/IN1347).
For years, Dr. Collins and I have cheerfully greeted one another as our busy paths cross at the Manatee County Extension office. And for years I have wondered what her typical day is like. I know she is super-occupied during red tide events and with issues like Piney Point wastewater disposal and hurricanes.

We finally sat down to chat. Angela's scope of operations is far-reaching, including our multi-county shellfish aquaculture industry, the commercial fishing industry, recreational anglers, and post-hurricane stewardship for all the above. She spends her days giving talks to boating and fishing clubs, commercial fishermen, community and volunteer groups, and, importantly, conducting research. One hugely important research initiative in which she is involved is the investigation of how hard clams in our estuaries may be used to restore water health.

One of Angela's favorite functions as a fisheries biologist is outreach to the above stakeholders. It is important to note that over 80 percent of all Floridians now live in coastal communities and that a sizable portion of our state economy is dependent on water tourism (beaches and angling) as well as commercial fisheries.

As a recreational angler myself, I asked Angela how she could help me be a more responsible fisherwoman. She said reduction of catch-and-release mortality is key. Hooking deeper water fish can result in barotrauma, wherein the fish's swim bladder expands with gas as the fish is brought to the surface. To help release the gas so they can swim back down, needles can be used to let the air escape. This is called “venting” the fish. She also whipped out a descending device which is a weighted tool that sinks the fish. It can be used instead of venting to reintroduce a caught fish into the water safely and more humanely!

One of Dr. Collins' most passionate pleas is that Floridians support “working waterfront” places in our state, such as Cortez Village in Manatee County, where commercial fishing, local seafood eateries, and recreational angling commingle to uphold and protect our shorelines from development. These historic areas are especially vulnerable to development and deserve our support (especially after being impacted by hurricanes or red tides). The best way to support working water fronts is to buy local and eat Florida seafood! See below for more information.

https://www.fdacs.gov/Consumer-Resources/Buy-Fresh-From-Florida/Seafood-Products
https://www.aliclamsondeck.org/
https://gulfseagrant.org/reef-fish-extension/
https://returnemright.org/
Every year when the rains come, we get frantic calls in the Master Gardener Plant Clinic about our noisy frogs and how to stop them. Knowledgeable Floridians know that frogs are our friends. When Kermit the Frog sings "You got a friend in me", he is so right. Scientists classify toads in the same large group as frogs. So when I write about "frogs," I am also including toads!

Frogs are an indicator of a healthy environment. They are both prey and predator. Frog eggs are eaten by some fish and insects, tadpoles are eaten by fish, birds, other amphibians, and large insects. Adult frogs are eaten by birds, reptiles, and fish. On the flip side, tadpoles eat algae and mosquito larvae. Best of all, most adult frogs eat approximately 100 insects every night! Anything that eats insects is a welcome part of Florida life.

Frogs that are happy in their ecosystem because they have clean water and healthy plants want to mate. For a male frog to find the female frog of his dreams, he must sing loudly. Other males gather around a strong singer and add to his song, in hopes that the females attracted to the strongest singer might cozy up to them instead. Frogs like to deposit their eggs in temporary ditches and puddles where there are fewer predators to eat the eggs and tadpoles. Temporary puddles come after rains—frogs know this and sensing the coming of rain, the males sing, the frogs mate, and the females lay eggs in the puddles.

As you might guess, we have many types of frogs in Central Florida because of our retention ponds, drainage ditches, rivers, creeks, and springs. (Except for one rare Asian variety, frogs do not live in salt water.) In Manatee County you can see and hear sixteen types of native frogs and three different invasive species. Since frogs are outstanding at camouflage, it is sometimes easier to identify them by the songs they sing. See below for a website with frog songs.

We have three categories of frogs: pond, land, and arboreal (tree) frogs. Pond frogs include Bullfrogs (Lithobates catesbeianus) which are commonly seen around permanent water sources. They can grow up to 12 inches outstretched. Bullfrogs will eat anything smaller than themselves. On the flip side, Floridians still hunt and enjoy frog legs. Other pond frogs are the Southern Leopard Frog (Lithobates sphenocephalus) which has leopard spots and the Bronze Frog (Lithobates clamitans) which has bronze coloration.

Toads and a few regular frogs make up the land frogs. The invasive Cane Toad (Rhinella marina), which was brought in to eat insects in the sugar cane plantations, is large and has poisonous skin. I recently read that several hundred were let go in Florida after the filming of a horror movie called FROGS! This is the one that will make your dog ill if it mouths it and will require a trip to the vet if it swallows the toad. You should learn to identify this one if you have pets, or make sure your pets leave all toads alone. Oak Toads (Anaxyrus quercicus) and Southern Toads (Anaxyrus terrestris) are smaller. They all sit under streetlights at night to catch insects which is a great time to identify them.
My favorite frogs are the arboreal frogs. Nothing makes me happier than to find a bright green frog, complete with a racing stripe down its side, on my windows at night. This is the Green Tree Frog (Hyla cinerea). If you find a bright green frog without the racing stripe, this is the Squirrel Frog (Hyla squirella). We have an invasive arboreal tree frog also, the Cuban Tree Frog (Osteopilus septentrionalis) which outcompetes the local frogs and is displacing them.

So be grateful to hear the singing of the frogs and rejoice when you think of all the insects they are gulping down!

For more information online:
Pictures and information about our local frogs - https://ufwildlife.ifas.ufl.edu/frogs/central.shtml

Q: I recently read a newspaper article about a new, invasive mosquito from Central America found in Florida. A few days later I found this mosquito in the house. It was much bigger than any mosquito I had seen, and the legs were long. A smaller one was spotted outside by a window. Could this be that invasive mosquito?

A: This insect is not a mosquito but a crane fly, or as we called them as kids, 'skeeter eaters.' Crane flies are quite a bit larger than mosquitoes, and there is no missing their long legs. Crane flies live around fresh water and damp soil. Their larvae make an important ecological contribution since they eat decaying plant material. Crane flies do not bite or sting, they do not eat mosquitoes, and they do not carry diseases as with mosquitoes. Once crane flies mature, they survive only long enough to reproduce.

According to the University of Florida, Culex lactator, the recently discovered invasive mosquito, has not been found in our area. This link will take you to a University of Florida blog with information about crane flies. https://blogs.ifas.ufl.edu/nassauco/2017/06/26/q-find-large-mosquito-looking-insects-house/

Master Gardener Volunteer Karen Holleran answers your email questions. Send questions and/or photos for identification or for diagnosis of residential gardening problems to ManateeMG@gmail.com. Or call us at 941-722-4524 weekdays from 9:00 A.M. to 4:00 P.M. and press 1 to speak to the Master Gardener Diagnostic Plant Clinic.

Feed your palms (and feed your landscape!)
By Amy Stripe, Master Gardener Volunteer

Of the most common nutrients that landscapes require, palms need all six. Turfgrass usually exhibits nitrogen (N) and iron (Fe) deficiencies and thus requires high numbers of both elements. Broadleaf ornamentals and trees are most often deficient in magnesium (Mg), iron (Fe), nitrogen (N), potassium (K) and manganese (Mn). Guess what? Palms may show deficiencies in all the above, plus boron (B). By applying a balanced fertilizer containing these macro- (N, K, Mg) and micro- (B, Mn, Fe) nutrients throughout your landscape, you should have all deficiencies licked.

Except... specialized palm fertilizers containing the correct analysis and elements derived from the proper sources can be too pricey for application on large areas of turfgrass, for example. Complex topic, indeed!

For information, go to:
http://edis.ifas.ufl.edu/ep516
http://edis.ifas.ufl.edu/topic_palm_nutrition

Or call the Extension Master Gardener Plant Diagnostic Clinic at (941) 722-4524 and ask for a Master Gardener.
Firebush (Hamelia patens) has a lot to love. It is hard to imagine a better shrub!

Found naturally in hammocks and thickets, firebush will grow 8-12’ H by 5-8’ W and bloom continuously from early spring until frost in Zones 9-11. This is a great plant for hedges, mixed borders, as a stand-alone shrub, and it can even be made a standard (tree.)

If there is no frost, firebush will bloom all year with eye-catching (to both human and pollinator) red to orange-red tubular flower clusters. Bees, wasps, butterflies, and hummingbirds are attracted to the nectar held in the tubular flowers. Firebush is the larval host to the zebra longwing and Pluto sphinx moth. After the blooms are spent, black berry clusters appear – birds devour them! While these are also human edible, they are bitter until cooked. Indigenous people used the fruit to make wine/syrup and the entire shrub to make poultices for skin irritations.

Firebush is easily pruned, not fussy about soil, and attracts no serious pests. It is drought/heat tolerant, although it may require a bit of extra water while it is establishing a good root system. This is a beautiful addition to any garden and super attractive to pollinators and birds. A word of caution: Many non-native cultivars are available, and there is some concern that they may cross pollinate and edge out this native. Purchase from a reputable native nursery.

https://gardeningsolutions.ifas.ufl.edu/plants/ornamentals/firebush.html
https://edis.ifas.ufl.edu/publication/FP237

Master Gardener Volunteer Plant Clinics

<table>
<thead>
<tr>
<th>Location</th>
<th>Address</th>
<th>Day(s)</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>Bob Gardner Park</td>
<td>2710 White Eagle Blvd., Lakewood Ranch</td>
<td>Third Sundays</td>
<td>9AM – 12PM</td>
</tr>
<tr>
<td>Crowder Bros. Ace Hardware</td>
<td>5409 Manatee Ave W., Bradenton</td>
<td>Third Saturdays</td>
<td>9AM – 12PM</td>
</tr>
<tr>
<td>Central Library</td>
<td>1301 1st St. W., Bradenton</td>
<td>Third Saturdays</td>
<td>11:30AM – 2:30PM</td>
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<tr>
<td>Lakewood Ranch Farmers Market</td>
<td>Waterside Place, 7500 Island Cove Terrace, Sarasota</td>
<td>First Sundays</td>
<td>10AM – 2PM</td>
</tr>
<tr>
<td>Rocky Bluff Library</td>
<td>6750 US Hwy 301 N., Ellenton</td>
<td>Second &amp; Fourth Saturdays</td>
<td>10AM – 1PM</td>
</tr>
<tr>
<td>St. George’s Episcopal Church</td>
<td>912 63rd Ave. W., Bradenton</td>
<td>First and Third Thursdays</td>
<td>9AM – 12PM</td>
</tr>
<tr>
<td>Island Branch Library</td>
<td>5701 Marina Dr, Holmes Beach</td>
<td>First Saturdays</td>
<td>10AM – 1PM</td>
</tr>
<tr>
<td>UF/IFAS Extension Manatee County</td>
<td>1303 17th St. W., Palmetto</td>
<td>Every weekday except Wednesdays</td>
<td>9AM – 4PM</td>
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</tbody>
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Tel. 941-722-4524
manateemg@gmail.com
The Florida Scrub: Ancient Islands from the Sea

By Jim Haupt, Master Gardener Volunteer

During the ice age, when much of the earth’s sea water was trapped in massive ice sheets, the Florida peninsula was three times its present size. As temperatures rose, glacial meltwater flowed back into the sea, leaving only sandy island ridges above water level. Today, these high ridges are home to the scrub habitat. Born from the sea, and maintained by fire, the Florida scrub is considered one of Florida’s oldest ecosystems. It hosts a collection of rare plant and animal species, many of which are found nowhere else on Earth.

Florida scrubs are characterized by low-growing plants adapted to dry conditions. Plants and animals found in Florida scrubs have evolved for millions of years to survive where soil, almost pure quartz, is extremely dry with few nutrients. With little shade, moisture quickly evaporates. Florida rosemary, an endemic shrub, conserves water by reducing evaporation. Sand live oaks have curled leaves with waxy surfaces to help retain moisture. Some scrub plants have hairs, called pubescence, on the undersides of leaves that increases surface areas for dew to form. Scrub hollies position leaves vertically to direct water to its roots. The root systems of scrub oaks are genetically identical and are connected by a single stem to extract as much moisture from the sand as possible.

Plants and animals could not survive without fire to maintain the scrub’s fragile balance. Florida scrub-jays need open areas of bare sand to forage for acorns, bury their surplus, and watch for predators. Gopher tortoises, a keystone species, dig burrows 15 feet long and 6 to 8 feet in depth that multiple other animals use for protection and shelter during fires and tropical storms. To keep these areas open, natural fires, although infrequent, occur every five to forty years in sand pine scrubs. Only the intense heat of forest fires can release the waxy coated seed of sand pines. Oaks produce long deep roots and quickly regrow after a fire.

The Florida scrub is the country’s fifteenth most endangered habitat. Only ten to fifteen percent of the scrub remains. Because much of the scrub is located on higher ground where water drains away quickly, the land is ideal for housing development and agriculture. Now, much of the scrub has been fragmented and altered. Fire suppression, occurring in areas where scrubs are located near housing developments, has caused many plants to grow excessively tall and dense. Fire suppression, necessary to protect homes, however, has allowed plant debris to accumulate and blanket areas of bare sand important to many plants and animals.

Organizations like the Florida Fish and Wildlife Service, the Archibold Biological Station, the Lake Wales Ridge Working Group, and private donors are helping to preserve and protect the Florida scrub. There are many places in Florida to visit and enjoy this intriguing ecosystem. Lake Wales National Wildlife Refuge, The Ocala National Forest, and Lake June in Winter State Park are just a few. Visit the Florida State Park web site for more information (http://www.dep.state.fl.us/parks/index.html).

blogs.ifas.ufl.edu/polkco/2019/01/03/the-importance-of-scrub-communities-in-central-florida
frps.org/natives-native-plant-community/scrub
edis.ifas.ufl.edu/publication/UW441
Photos: Mark and Jill Gordan
**MAY CALENDAR OF EVENTS**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>5/8/23 &amp; 5/24/23</td>
<td>10:00AM</td>
<td><strong>Community Tree Care</strong> Join us for a crash course in trees. We will cover selection and planting, maintenance, pruning and long term care considerations. Specifically targeted for individuals with responsibility for tree care in their communities. <a href="https://www.eventbrite.com/e/community-tree-care-tickets-608556919127">https://www.eventbrite.com/e/community-tree-care-tickets-608556919127</a></td>
</tr>
<tr>
<td>Friday 5/19/23</td>
<td>10:00AM</td>
<td><strong>All About Trees</strong> Join us for a crash course in trees. We will cover selection and planting, maintenance, pruning and long term care considerations. Specifically targeted for individuals with responsibility for tree care in their communities. <a href="https://www.eventbrite.com/e/all-about-trees-tickets-608646848107">https://www.eventbrite.com/e/all-about-trees-tickets-608646848107</a></td>
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<tr>
<td>Saturday 5/20/23</td>
<td>10:00AM</td>
<td><strong>Orchid Mounting: Make &amp; Take Workshop</strong> A workshop demonstrating how to mount an orchid on wood or other found objects – and you will make your own to take home! Learn about these beautiful epiphytes and how they can enhance your home and landscape. <a href="https://www.eventbrite.com/e/orchid-mounting-make-and-take-workshop-tickets-608684601027">https://www.eventbrite.com/e/orchid-mounting-make-and-take-workshop-tickets-608684601027</a></td>
</tr>
<tr>
<td>Tuesday 5/16/23</td>
<td>10:00AM</td>
<td><strong>Gardening with Mushrooms</strong> Join UF/IFAS Extension Manatee County for a conversation about using mushrooms to enhance your gardens. Not always nefarious, fungi in the garden can be used to help build soil, process compost and support plant health. <a href="https://www.eventbrite.com/e/gardening-with-mushrooms-tickets-519089038287">https://www.eventbrite.com/e/gardening-with-mushrooms-tickets-519089038287</a></td>
</tr>
<tr>
<td>Friday 5/31/23</td>
<td>8:00AM</td>
<td><strong>Mangrove Trimming BMP</strong> This workshop will cover: Mangrove Ecology and Identification, Mangrove Trimming Regulations, Mangrove Trimming Demonstration of Best Practices. Preapproved with ISA CEUs. <a href="https://www.eventbrite.com/e/mangrove-trimming-best-management-practices-tickets-532008781587">https://www.eventbrite.com/e/mangrove-trimming-best-management-practices-tickets-532008781587</a></td>
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**University of Florida IFAS Extension - Manatee County**  
1303 17th St. W., Palmetto, FL 34221  
**Telephone:** (941) 722-4524  
**Website:** [http://sfyl.ifas.ufl.edu/manatee/](http://sfyl.ifas.ufl.edu/manatee/)  
**Email:** ManateeMG@gmail.com

*Master Gardener Volunteer Amy Stripe & Joy Dersken, Co-Editors Contents reviewed & edited by Alyssa Vinson, Extension Agent. The University of Florida is committed to providing universal access to all our events. For disability accommodations such as alternate formats of written material, please contact Katie Granberg katiebg@ufl.edu at least 1 week in advance.*