



The Master Gardening Bench



The Manatee County Master Gardener Newsletter
June 2019 - Volume 18 – Issue 6

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



We would like to invite you to visit our Educational Gardens at the Manatee County Extension offices. Master Gardener Volunteers are enjoying their 40th Anniversary in Manatee County and we have spiffed up our gardens to celebrate. Summer is here and our plants are blossoming. We have shady areas to rest and contemplate the quiet.

We have fresh ideas for all types of gardening. If you are curious what plants attract butterflies and pollinators, we can show you!

Come and Visit! Our Gardens are 對人學學學

Feeling crafty? We have some fun ideas to recycle pots, bottles, and other materials. Have kids? We have an alphabet garden and sensory gardens especially for them. Do you want to know how to garden in small spaces? We can show you that too. Can't bend over easily anymore? (Join the crowd!) We have samples of raised

beds for flowers and herbs and vegetables. Succulents and bromeliads and air plants are all trending now and we have many on display. Do you want to know what plants really love to live in this area? We can help you with that too. If you are conservation minded, we have ideas for composting and water saving. Do you just like to

take photos of flowers and butterflies? Come and see and snap your pictures. Phone ahead to make sure we have a guide for you or to arrange an outing for a group. Call us at (941) 722-4524 and ask for the Plant Diagnostic Clinic or the Master Gardener Volunteers. There is no charge.





ASK A MASTER GARDENER VOLUNTEER

Q: Dear Master Gardener Volunteer,

Can you tell me what this is growing on the outside of my healthy foxtail palm? Someone said it is an insect boring into my palm and what I'm seeing is its feces. Susan



Dear Susan:

Thank you for contacting the Manatee County Extension Master Gardener Volunteers. Can you please go to the palm and see if the tubes are crumbly or firm? That may signify the difference between an outside pest and a boring beetle.

Reply from Susan:

From our landscape professional, David: "I pulled one of the tubes off and squeezed it and there is a black worm inside. It does not appear to have made a hole in the bark."

From MGV Karen:

Dear Susan & David,

Good news! Ambrosia beetles do attack palms and create "frass" tubes extending out of the trunk as they tunnel; however, they rarely attack healthy palms. The good news is that since there is a worm in the tube, your "frass" tube is a "case," and your pest is a bagworm, not a boring beetle.

Bagworms weave a case around themselves out of plant debris for protection from predators and are harmless to the palm. They can be pulled off and discarded.

Following is a link to information about Ambrosia beetles in palms:

http://idtools.org/id/palms/symptoms/factshe et.php?name=Ambrosia+Beetle+Damage

Master Gardener Volunteer Karen Holleran answers your email questions and looks at photographs for identification of problems at ManateeMG@gmail.com. Or visit our Plant Diagnostic Clinic Monday through Friday (closed Wednesdays) from 9:00 A.M. to 4:00 P.M. at 1303 17th St. W., Palmetto, FL. Or call us with questions at 941-722-4524 and ask for a Master Gardener Volunteer.





June is for Jasmine

By Rob Hinz, Master Gardener Volunteer 2016

Jasmine is known for its fragrant flowers. The name is thought to be of Arabic or Persian origin. Not all jasmines are "true" jasmines. This distinction is given to plants from the olive (Oleaceae) family and genus Jasminum. Plants such as orange jasmine (Murraya paniculata), Confederate jasmine (Trachelospermum jasminoides), Chilean jasmine (Mandevilla suaveolens) and Carolina jasmine (Gelsemium sepervirens) are not "true" jasmines. That is why the use of scientific names is important. Of the 200 species of "true" jasmines, Florida is home to seven.

None of these plants are native to Florida; in fact, Gold Coast and Brazilian jasmines are considered invasive in most parts of Florida, as they have found their way into our local wild habitats.

Jasmines can be either vines or shrubs and are generally hardy plants. Their black berries are enjoyed by birds and other animals which then disperse them. Their flowers are tubular, single-flowered in a star or pinwheel pattern, with Jasminum sambac and Jasminum mesnyi having doubled flower petals. They bloom from spring to fall. Most have a wonderful, sweet, full, aromatic fragrance for which they are known. Jasmine is most fragrant at night when its scent is released.

Growing jasmine in Florida is fairly easy. Plants grow best in zones 8-11 and prefer a moist, well drained area, with sandy or loose soil. Too much or too little water can cause the plant to lose leaves and in severe cases, death. Spacing plants between 7-8 feet apart is important to prevent them from growing into one another. Planting in full sun to part shade is best. Jasmine plants grow rapidly so count on pruning them in fall, after the blooms are finished.

"True" jasmine is not toxic to birds, animals or humans, however, plants from other families such as Carolina jasmine are highly toxic. Therefore, caution should be used in the selection of plants named "jasmine". Many teas, perfumes, oils, cosmetics, and soaps contain "true" jasmine. They are beautiful in gardens and are used culturally around the world in religious ceremonies, rituals, and as adornments for hair and body. Leis, popular in Hawaii, are made from Jasminum sambac. "True" jasmine, with its wonderful fragrance and delicate flowers, may be a delightful addition to your garden.

For more information, visit:

https://gcrec.ifas.ufl.edu/GCREC-Garden/docs/pdf/Downy_Jasmine https://freshfromflorida.s3.amazonaws.com/botany-circular-38.pdf









Jasminum dichotomum Vahl Gold Coast jasmine Flower Color: white/pink Invasive (NO USES)

> Jasminum fluminense Brazilian jasmine Flower Color: white Invasive (NO USES)

Jasminum mesneyi
Primrose jasmine, yellow jasmine,
star jasmine
Flower Color: yellow

Jasminum multiflorum

Downy jasmine

Flower Color: white

Jasminum laurifolium (prior name:
Jasminum nitidum)
Shining jasmine, pinwheel jasmine,
royal jasmine
Flower Color: White/pink

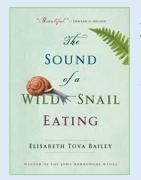
Jasminum grandiflorum L. (prior name: Jasminum Officinale L.)
Flower Color:

Jasminum sambac Arabian jasmine Flower Color: White/pink



Great Summer Reads for Gardeners and Naturalists

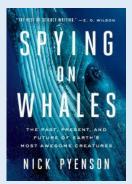
By Amy L. Stripe, Master Gardener Volunteer 2008



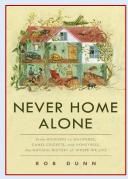
The Sound of a Wild Snail Eating by Elisabeth Tova Bailey (Green Books, 2010) is a quick (200+ pages), endearing, and true-story read about the bedridden author and her year-long observation and cultivation of a woodland snail (*Neohelix albolabris*) from her bedside vantage. If you know anything about land snails, you know they are hermaphrodites (having both male and female reproductive organs on board a single specimen.) Elisabeth's single snail eventually yielded multiples along with thoughtful life lessons.



<u>Buzz: The Nature and Necessity of Bees</u> by Thor Hanson (Basic Books, 2018) is a fascinating and meticulous exploration of native bees. Hanson makes a clear distinction between domesticated honeybees and all the rest – a vast population of solitary native bees. He also documents the huge pollination job done by these bees and how human society would be bereft – and starving - without them.



<u>Spying on Whales: The Past, Present and Future of Earth's Most Awesome</u>
<u>Creatures</u> by Nick Pyensen (Viking, 2018) explores the amazingly difficult-tofollow fossil record of whales on our planet, how they have been hunted to
virtual extinction, and the many mysteries that remain to be discovered
about these amazing deep-sea marine mammals. It is full of interesting
science.



Never Home Alone: From Microbes to Millipedes, Camel Crickets, and Honeybees, the Natural History of Where We Live by Rob Dunn (Basic Books, 2018) tops my list of this summer's reads for trivia-talk at parties. When you inform people they are sharing their "clean" homes with an average of 80 arthropods (insects), they will freak. Reassure them that most microbes, insects, and arachnids are beneficial, and efforts to sanitize our homes may not be such a good idea. Another book filled with fascinating natural science.

I've got more fabulous books up my sleeve as Christmas gift recommendations for you/your favorite gardener. So, stay tuned to "The Bench."

A MOST Interesting Insect...the Ladybug



By Nancy O. Porter, Master Gardener Volunteer 2014



Lady bugs (of the far-ranging Coccinellidae family of beetles) are the subject of many fairy tales, myths, and legends. They are known as beneficial insects, meaning they predate on the baddies in our gardens.



There are 4000 plus species of ladybugs in this world, with a little less than 100 living right here in Florida! A few are native, many immigrated from other countries, and some were introduced as biological control.



The Middle Ages legend says that prayers to the Virgin Mary to put a stop to crop-destroying aphids were answered by the little beetle, dubbed "our lady's beetle" and from there to "ladybeetle."



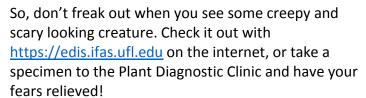
Ladybugs undergo multiple instars (larval stages) during which they resemble nothing like their adult selves. At some point, they look like little alligatortype insects, and many people mistake them for harmful bugs.



Here in Florida, the largest number of ladybugs eat scale insects and a much smaller group feed on aphids. Those feeding on aphids live in the fast lane. They develop, age, move faster, and are usually larger than other ladybugs. They lay their eggs in groups. Those feeding on scale insects are a bit more laid back. They are smaller, slower, live longer, and lay their eggs individually.



Depending on the species there are other food sources for ladybugs, consisting of plants, mildews, mites, whiteflies, cottony cushion scale, mealybugs, and sometimes nectar, water, and honeydew.





Ladybug information abounds, and much can be obtained from the following:

https://edis.ifas.ufl.edu/in327, http://floridagardener.com/critters/Beneficial Insects/ladybugs.htm, https://entomology.ifas.ufl.edu/creatures/beneficial/lady_beetles.htm, http://sfyl.ifas.ufl.edu/archive/hot_topics/environment/ladybugs.shtml/.















Hydroponic Growing for the Home Gardener

By Jim Haupt, Master Gardener Volunteer 2015

Hydroponic gardening is not a new concept, but rather, one that dates back to the Hanging Gardens of Babylon and the ingenious Floating Gardens of the Aztecs. The Holy Roman Emperor, Tiberius, during the 1st century, ate offseason cucumbers grown hydroponically. In Florida, because of sandy soil and intrusive soil-borne pests and diseases, hydroponic gardening has become a popular alternative for home gardeners and is taught in many high school curricula.

Hydroponics is the method of growing plants without soil by adding essential nutrients to a plant's water supply. There are two systems. In the first, roots of plants are submerged in a water culture, and in the second, a moistened soil-less medium is used.

In water culture, roots are submerged in a nutrient enriched solution by dissolving a water-soluble fertilizer, such as 10-10-10 or 20-20-20 with micronutrients, into water. Nutrient-based solutions can also be purchased at many garden supply centers. The rest of the plant is supported above the water line using floral foam, or other materials to hold the plant in place. Containers can vary, from Styrofoam cups to five gallon buckets, trash cans, and kiddie pools.

The other method utilizes a soil-less medium that takes the place of soil. Soil-less media or aggregates do not provide nutrients as soil does, nor do they break down and decay, but rather, support the weight of the plant, and hold it upright. Perlite, vermiculite, coconut coir, floral foam, gravel, sand,

and rockwool are porous, and hold moisture and oxygen that roots need in order for the plant to grow. A reservoir is provided which holds the nutrient solution and moistens the soilless medium.

Hydroponic gardens can vary in how they operate, containing no moving parts or as many as you want. Ebb-and-flow, aeroponic, and vertical drip systems are used primarily by commercial growers. However, a home gardener can build a floating hydroponic garden by referring to the following University of Florida IFAS documents:

https://nwdistrict.ifas.ufl.edu/hort/2017/12/14/hydro ponic-bucket-garden/ or https://edis.ifas.ufl.edu/pdffiles/HS/HS18400.pdf.

Hydroponic gardening can be a fun and exciting way to grow vegetables. According to UF/IFAS, "leafy" salad crops usually do well in hydroponic gardens. Some cool season choices include romaine, Bibb, mustard greens, mizuna, mint, and kale." Other recommendations include "basil, Swiss chard, zinnias, and sunflowers." During the summer months, like other garden arrangements and techniques in Florida, hydroponic gardens have the same limitations.

http://gardeningsolutions.ifas.ufl.edu/plants/edibles/vegetables/hydroponic-vegetable-gardening.html

"Hydroponics in the Classroom," 2011 National Agriculture in the Classroom Conference, Cindy Davidson, Youth Environmental Alliance and UF/IFAA OCI.

Gopher Tortoises in Our Manatee County Preserves

By Norma Kisida, Master Gardener Volunteer 2012









If you have been in one of the Manatee County preserves you may have seen a gopher tortoise (Gopherus polyphemus) or the mound (apron) of a burrow. According to Aedan Stockdale, Education Program Manager for the Parks and Natural Resources Department in Manatee County, gopher tortoises occur on most conservation areas with significant upland habitat. He has seen tortoises or their burrows at Rye, Duette, Emerson Point, Leffis Key, Moody Branch, Riverview Pointe, and Perico preserves. In the last decade, they have become more common because they are now protected by the state.

Gopher tortoises are ancient, land dwelling tortoises with oblong tan, gray, or brown shells up to 15 inches in length. The hind feet are short and stumpy while the strong front feet are flat and adapted for digging. They are longlived, up to 60 years in the wild. They reach sexual maturity late, females around 9 to 21 years and males somewhat earlier. The average clutch size is 6 eggs, and there is heavy predation of the eggs. The tortoise's habitat is upland areas with well drained sandy soils, low growing vegetation, and scrubby trees as well as coastal dunes. They dig large burrows which are typically about 7 feet deep and 15 feet long but can be much longer. The mound, which has only one entrance in and out of the burrow, is distinguished by an apron of sandy soil which is flat at the bottom and rounded at the top. They are herbivores, feeding on low growing vegetation that varies with the time of year. They spend most of their time in the burrow, which is usually around 70 degrees, and come out during cooler times of the day to feed on young plants.

Gopher tortoises are a keystone species. This means that without the tortoises the surrounding ecosystem would rapidly degrade. Three hundred seventy species use tortoise burrows to escape from fires, weather conditions, and predators, including the diamondback rattle snake, the federally protected indigo snake, gopher frog and mouse, as well as many other animals and insects. Gopher tortoises keep the vegetation low to maintain scrub habitats. Scrub habitats are vital for the species that are adapted to it, including the Florida scrub jay, a federally threatened species with only about 8,000 remaining.

Scrub habitats are fire dependent ecosystems. Historically they were maintained by frequent, naturally occurring fires, but now lack of these fires has resulted in habitat loss. Prescribed burns are a way to recreate or maintain these critical habitats. Manatee County has accepted a grant and approved spending additional money to restore scrub areas in Rye Preserve. Several prescribed burns have been done this year.

According to the US Fish and Wildlife Service, the majority of gopher tortoise habitat is on private land, so it can be difficult to monitor and protect them. Because the tortoises and their burrows are protected under state law, they must be relocated before clearing, and permits must be obtained before capturing and relocating them. To report an injured or dead gopher tortoise, or if you have concerns or questions about relocation, contact the Florida Fish and Wildlife Conservation Commission https://myfwc.com/license/wildlife/gophertortoise-permits/. If you see a gopher tortoise, please do not put in the water as they are land animals.



Date	Time	Event
1 st Saturday	10:00 a.m1:00 p.m.	Ask a Master Gardener Volunteer – 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.m1:00 p.m.	Ask a Master Gardener Volunteer – 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.m1:00 p.m.	Ask a Master Gardener Volunteer – South Manatee Library – 6081 26 th Street West, Bradenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
Saturday June 8	10:00 a.m11:30 a.m.	Mangroves are Survivalists! - Mangroves are survivors. With one foot on the land and one in the water, mangroves live in salt water that would kill most other plants within an hour. They also gobble up huge amounts of carbon from the atmosphere, protect the shoreline from storm surges, and provide habitats for birds, mammals, fish, and crustaceans. This presentation will provide an interesting insight into this important ecosystem. \$5 advanced administrative fee, \$8 day of workshop. Register online at http://uf-ifas-extension-manatee.eventbrite.com/ or call the Extension Master Gardeners (941) 722-4524.
Tuesday June 18	9:30 a.m 1:00 p.m.	Air Potato Challenge - Leaf Beetles Available for the Public - Manatee County residents and public land managers are invited to come out to the Manatee County Agriculture and Extension office to learn more about the invasive air potato vine and a biological control, the potato leaf beetle. Receive a free supply of beetles for use on your property. The insects will only be available for pick-up during this event. For those who have registered, your beetles will be set aside for pick-up during the event. All others will be on a first-come-first served basis. Limited supply of beetles. Residents are encouraged to bring a cutting of air potato for confirmation. Register online at http://uf-ifasextension-manatee.eventbrite.com/ or call the Extension Master Gardeners (941) 722-4524.
Thursday June 20	10:00 a.m Noon	A Meet and Greet - What is the Master Gardener Volunteer Training Program? What does it take to become a Manatee County Master Gardener? It takes special gardeners who wants to expand their Florida gardening knowledge and share it with the community. The Florida Master Gardener Program is a volunteer-driven program that benefits the University of Florida/IFAS Extension and the citizens of Florida. The program relies on dedicated volunteers who have an interest in gardening and in giving back to their communities. At this meet and greet you will learn about the training expectations, meet the instructor Alyssa Vinson, Residential Horticulture Extension Agent, and have an opportunity to ask questions. A brief tour of the educational gardens and greenhouse to follow the brief presentation. Open to Manatee County residents only. The next Master Gardener Volunteer Training class begins on August 7, 2019. Register online at http://uf-ifas-extension-manatee.eventbrite.com/ or call the Extension Master Gardeners (941) 722-4524.
Saturday June 22	11:00 a.m12:30 p.m.	Rain Barrels for the Rainy Days of Summer - Conserve water and prevent stormwater runoff using rain barrels to water your plants in between rains. After the class, you will have an opportunity to purchase a rain barrel at \$30 (Cash or check only) for a non-drilled, DIY barrel with basic parts included. Register online at http://uf-ifas-extension-manatee.eventbrite.com/ or call the Extension Master Gardeners (941) 722-4524.

UF IFAS Extension

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The University of Florida is an Equal Opportunity Institution.



Now accepting applications for the 2019 Master Gardener Volunteer Training.

Call today for an application and mark your calendars for June 20th to attend our Meet and Greet to learn more about this Volunteer Training Program, now celebrating our 40th year!