The 5th Principle of the Florida-Friendly Landscaping Program is “Attract Wildlife.” This may be accomplished by selecting native plants with seeds, fruit, foliage, flowers, or berries that provide their natural foods and by supplying sources of water, such as a rain garden or bird bath, and areas for shelter. It does not mean setting out additional food for them either intentionally or by accident. Human and pet food are not healthy for wild animals, and it is illegal to feed them (you can be fined!). Having wildlife dependent on humans for food is dangerous for both people and the animals themselves. Animals being routinely fed often lose their natural fear of people and can become aggressive or lose their instinct and ability to feed themselves.

While feeding songbirds is encouraged, feeding waterfowl and wading birds is not. Setting out traps and lures to control vermin such as mice, rats, moles, and gophers is legal, but you must be responsible to ensure poisons do not accidentally enter your landscape or nearby waterways. Vermin are food for many wild creatures.

There are all sorts of rules regarding removal/trapping of nuisance wildlife such as raccoons, deer, rabbits, squirrels, reptiles, possums, armadillos, hogs, foxes, coyotes, bobcats and alligators and invasive species. Most removal activities require a permit and should be done by trained professionals. Trapping or hunting wildlife by the average homeowner can be dangerous and illegal without proper permitting and training. The Florida Wildlife Conservation Commission website [https://myfwc.com/] is the primary source for all things related to Florida wildlife, rules, regulations and permits. Be aware that most wildlife removal efforts do not involve relocation, but euthanasia.

As more natural habitat is destroyed for human development, there will be more instances of negative wildlife encounters. Raccoons rummaging through trash, deer nibbling on shrubbery, armadillos and wild boar tearing up lawns, alligators in retention ponds, foxes, bobcats, and coyotes being spotted in neighborhoods are all part of forced survival for these creatures.

If you want to control some of the negative aspects of attracting wildlife, here are some things you can do: stop leaving unnatural food for them, don’t allow bird food from feeders to accumulate on the ground, keep meat scraps and non-leafy foods out of your compost, bring small pets, pet food and water containers indoors at night, pick ripe fruit from your trees and clean up fallen fruit off the ground, and use trash cans with secure lids. Enjoy viewing wildlife at a respectable distance, help them in a positive manner, and respect their wild nature. Please keep the “wild” in wildlife before they disappear forever.
Books to Cure Winter Blues for Gardeners and Naturalists

By Amy Stripe, Master Gardener Volunteer

The Palmetto Book: Histories and Mysteries of the Cabbage Palm by Jono Miller (University Press of Florida, 2021) Whether you are a Florida native or a newcomer, it behooves you to learn more about our stalwart yet misunderstood and much-maligned state tree, *Sabal palmetto*, the cabbage palm. The author, a natural historian, delivers a book that is entertaining, insightful, even-handed, and often witty, detailing his decades long search for fundamental answers and observations about this palm.

The Monk of Mokha by Dave Eggers (Knopf, 2018) This is the true account of a young Yemeni American man striving to restore the ancient art of coffee (*Coffea arabica*) cultivation in its native Yemen amid a civil war, putting him in almost constant danger. The habituating stimulant plant qat (*Catha edulis*) had long overtaken coffee as a cheaper crop amongst beleaguered farmers in this impoverished, yet oil-rich country. This book is a nail-biting thriller, a political economy text, and a horticultural monograph (I had little idea of how labor intensive – or fascinating - it is to grow and process coffee.)

The Ardent Swarm by Yamen Manai (Amazon Crossing, 2021) The “bee whisperer” Sidi finds his honeybees massacred overnight in this thinly veiled Middle Eastern country (Tunisia or Qatar?). This is an allegorical account of socio-politics and the effects of an invasive species attacking hives, as well as an interesting lesson in apiculture. Sidi finds his way to the attacker (spoiler alert: a wasp, one much in the news nowadays).

Super Fly: The Unexpected Lives of the World’s Most Successful Insects by Jonathan Balcombe (Penguin Books, 2021) Packed with more information than you want to know about the family Diptera, I found myself dipping in and out of this book over several weeks. Diptera are the most common carriers of insect-borne diseases in the world today (zika, malaria, dengue, encephalitis, etc.) and yet also play critical roles as pollinators, predators of pest insects and recyclers/composters. The family includes true flies, mosquitoes, gnats, and midges.

Below the Edge of Darkness by Edith Widder, Ph.D. (Random House, 2021) The fascinating and little-explored field of oceanic bioluminescence takes us to the darkest depths of our seas and creatures before unseen. The author’s own personal journey – from near blindness to life-threatening equipment malfunctions – reads like a novel.

Fuzz: When Nature Breaks the Law by Mary Roach (W.W. Norton & Co., 2021) From dumpster-diving bears, pickpocketing monkeys, toppling tree perils, to poisonous plants, Roach explores in-depth many troubling clashes between humans and nature, going from fauna to flora in her exploration of ages-old battles. She is a highly engaging, entertaining writer, but also delivers deep wisdom in such phrases: “(Humans) feeding wildlife is the first step on the road to conflict.” And “squirrels in a park are adorable; squirrels digging up your plant beds are deplorable.” She investigates the tenuous balance between us and the natural world and finds it lacking. (Editor’s note: Refer to MG John Dawson’s article in this issue: “Keep Wildlife Wild”)
Q: I have been finding these flower-like structures in my mulch. Do you know what they are?

A: These are not flowers, but a fungus called Earthstars of the genus *Astraeus*. This is the fruiting body of the fungus, the root-like parts known as ‘mycelium’ are underground. Earthstars are sometimes called “Barometer Earthstars” because humidity and rain cause them to open. The round, ball-like structure is the spore case, and when the 'arms' of the Earthstar open and fold down, the ball is exposed to pelting rain that helps the spores release. Earthstars are doing what other fungi do in the landscape, that is, they break down organic material and return it to the soil. Earthstars cause no harm to your garden. Following is a link for your reference.

Following is a link for your reference.
https://www.mushroomexpert.com/astraeus_hygrometricus.html

Master Gardener Karen Holleran answers your questions at ManateeMG@gmail.com. Visit our Plant Clinic and Demonstration Garden at the Manatee County Extension Office weekdays (except Wednesdays) 9 am to 4 pm at 1303 17th St W, Palmetto, or call us with questions @ 941-722-4524.

What’s This?: Cuban Knight Anole

Text & Photos by Nancy Porter, Master Gardener Volunteer

Whilst Cuban knight anoles are native to Cuba, they are being seen more frequently in Florida. They are larger than the green and brown anoles we are used to seeing, anywhere from 13 to 20 inches in length. They have a prominent brow, giving them a rather malevolent appearance. Their color is a vivid and bright green with a yellowish stripe under the eye and on the shoulder. Cuban knight anoles are not poisonous and normally will not bite. Of course, if you aggravate them, that is another story! Their diet primarily consists of insects and smaller lizards, but can include snails, frogs, baby birds, and rodents.

If you're wondering where you might find one of these colorful creatures, look in areas of leafy green vegetation and in trees. They prefer vegetation that is dense and humid, like much of Florida!

If you happen to see one, it is a good idea to contact 1-888-IVE-GOT-1 (Florida Fish & Wildlife's exotic species hotline.) This helps with tracking efforts of non-native-species.

Nematodes are microscopic roundworms that live in the soil. Even the largest is thinner than a hair and cannot be seen by the naked eye. They are already in your yard; in every handful of soil you pick up! Should you be worried? Is there anything you can do about them? Fortunately, most nematodes are either benign or beneficial. They help other microorganisms break down organic matter to release essential nutrients for our plants. Several prey on other bugs in the soil, like grubs or even other nematodes, so they are helpful in keeping our gardens healthy. There are commercial products available that introduce colonies of beneficial nematodes into your soil. Though the approach seems promising, testing is still ongoing, so no definitive recommendations for these products can be given.

The handful of nematode pests are all root-feeders. Some, like root-knot nematodes, burrow into the root to live and multiply. While they will attack healthy plants, they usually cause minimal damage unless the plant is already weak or struggling. The damage is nondescript: there may be irregular patches of brown grass or an area of lawn being taken over by more nematode-resistant weeds like sedge. Root-knot nematode is positively diagnosed after the plant is pulled out of the ground and the deformed roots are evident. Nematodes may be suspected in a plant failing to thrive only after more obvious problems with the soil, amount of water and sunshine, or other cultivation issues are ruled out.

IFAS offers resources to get a special nematode assay to determine the right treatment to use in the case of severe nematode pest infestation. Usually, this service is utilized by commercial growers. Home gardeners should rely more on prevention, which is easier, cheaper, and more effective than chemical eradication. The first thing we can do is make sure to incorporate as much organic matter (humus, compost, composted manure or “green manure”) into the soil as possible. IFAS studies, among many other research studies, have shown a decrease in nematode damage with this technique, as well as many other benefits.

Second, remember “Right Plant, Right Place.” Bahia grass, seashore paspalum and some St. Augustine grasses are resistant to at least some nematodes. Other plants must be put where their cultivation requirements are met. A struggling plant is a magnet for pests, including nematodes!

Finally, follow Florida- Friendly Landscape management practices. Strong, healthy roots mean strong, healthy plants, so avoid over-watering, over-fertilizing, and over-pruning/over-mowing! If you suspect you have nematode damage, use the Extension resources before attempting a program of nematode eradication. And when you pick up a handful of healthy soil, remember to say “thank you” to all the beneficial nematodes in there!

Nematode management: https://edis.ifas.ufl.edu/publication/NG047 ENY-012/NG005: Nematode Management in the Vegetable Garden (ufl.edu)
Nematode Assay: entremdept.ufl.edu/nematology-assay.blo/
Small Fruit Trees for Small Spaces
Text and photos by John Dawson, Master Gardener Volunteer

Most new homes are built on smaller sized lots, which limits the number and height of landscape trees. Smaller sized trees for smaller sized lots makes sense, but how small is small?

A native mango tree in India may reach 100 feet tall. That same tree grown in Florida may reach only 30 to 60 feet tall, mainly because we do not have the optimal growing conditions that match their native environment. The Florida grown tree would be considered standard size for our area. Even a 30-foot tree may be too big for a small lot, and you would need special equipment just to pick the fruit.

Semi-dwarf trees grow up to 15 to 20 feet tall and are usually 30 to 80 percent as tall as the standard size of that variety. These trees have been hybridized for smaller size. Still, a 15-to-20-foot tree may be too large for a small lot. Pruning can keep trees smaller. In our area, all fruit trees can be kept at a height of 10-to-12 feet by careful yearly pruning. If pruning is not your thing, you may want to choose a dwarf, compact, or miniature tree (different names for the same tree).

Dwarf trees grow to about 8 to 10 feet tall and wide, while still providing full-sized fruit. Less pruning is needed since dwarf trees have limited root systems and a compact growth habit. Most dwarf fruit trees are grafted to root stock with naturally small growth habits, limiting the size of the scion (top portion of the graft). A full-sized Carambola or Star Fruit (Averrhoa carambola) tree may grow 20 to 30 feet tall and produce up to 300 pounds of fruit. Pruning a tree to 10 feet tall may reduce fruit production by 1/3, and a dwarf tree may give you half that. Even smaller, ultra-dwarf fruit trees usually grow only 3 to 6 feet tall and 3 to 6 feet wide. These trees are perfect for patio container gardening. A 3-foot Carambola in a container may produce 10 to 20 fruits.

Container gardening allows for more trees in a smaller space and provides the benefit of movement. Movement allows for more diverse selection and greater protection. If you really like a tropical fruit but know your area may be prone to frost and freezes, you can plant it in a container and move it indoors for protection from cold or from the intense winds of tropical storms and hurricanes. Although small, dwarf, and ultra-dwarf trees still provide full sized fruit, the quantity is less than the taller sizes. Trees grown in the ground, regardless of their size, will produce more fruit than trees grown in containers. See https://edis.ifas.ufl.edu/publication/mg243 for more information on container growing and which trees do well in containers for Florida.

Even smaller are bonsai trees, which can be kept anywhere from one to sixty inches tall. Bonsai (the Japanese art of growing small trees) requires constant pruning and shaping; though the fruit, if any, will be regular size. Small trees still require the same conditions of sunlight, soil drainage, pollination, and nutrients as their larger counterparts. Self-pollinating trees, such as most citrus, can be grown in containers inside screen enclosures such as a pool cage or lanai enclosure. No-see-um screening is best to keep out insects that may carry disease, but there is no guarantee. It is possible to grow container fruit indoors, if provided adequate sunlight. When selecting a dwarf or ultra-dwarf tree, know the mature size and allow sufficient space between trees if planting more than one. Not all trees can be grown in smaller sizes, but good things can come in smaller packages!
Proper Tree Planting
By Joy Derksen, Master Gardener Volunteer

Tree planting in Florida is particular; our soil and weather are vastly different from most of the country. The first thing to consider is our climate and what trees grow successfully here. The University of Florida provides an excellent website to help you select trees for your cold hardiness zone https://edis.ifas.ufl.edu/entity/topic/woody_ornamentals. Manatee County lies within zones 9 through 10. As a rule of thumb, consider east of I-75 zone 9 and west zone 10.

After choosing a tree, step one is “Look up!” Do not plant trees under power lines, telephone wires, or eaves. Allow space for the tree to grow. Do not put a widely spreading royal poinciana (Delonix regia), for example, next to your house nor a live oak (Quercus virginiana) under overhead lines. Choose the tree for the space or the space for the tree.

In Florida we worry about trees getting too much water. The root ball should always be 1 to 2 inches above the soil when you plant a tree. If it is a poorly draining site, you should plant it higher. Dig a shallow and wide planting hole. The hole should be at about 1.5 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 thus 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. If water starts filling the hole, add soil until the tree’s roots are above the water. (You will probably need to dig away the dirt from the trunk to find the topmost root.)

Cut any roots that 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 it, and remove any materials (burlap, plastic) from around the root ball. Then backfill and firm this soil.

Cover the sides of the root ball with organic mulch (not peat or cypress 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 new tree does not compete with lawn grasses for water and nutrients. Stake the tree if necessary.

Water thoroughly initially (2 gallons of water per inch of trunk diameter) every other day (unless it rains) for about 60 days. Visit https://edis.ifas.ufl.edu/pdf%5CEP%5CEP31400.pdf for full details.
There are many joys associated with volunteering as a Master Gardener. To me, helping others is Number One! But also, the opportunity of lifelong learning, working with wonderful colleagues from varied backgrounds and areas of expertise, and gaining knowledge about plants in our Barbara Davis Educational Gardens.

Getting our customers involved with hands-in-the-dirt is an especially rewarding benefit of being a Master Gardener. Also, demonstrating ways to start gardening on a small scale if someone is new to Florida and Manatee County. Our demonstration gardens are wonderful for highlighting success at a manageable level, with salad tables, plant-a-pail, and other mini-gardens on display.

Getting children involved is the best part of helping others. Exposure to gardening, and especially successful experiences early in life, can make a difference in a kid’s adult approach to gardening. The demonstration garden’s children area, under the guidance of Master Gardener Lois Panner and devoted crew, is a fun place for kids to see, smell, feel, and witness the wonders of plants.

Recently, I became the recipient of a useful stack of wood. So, what to do to appease my dear wife by getting rid of this “eye sore”? Make salad tables for old and young alike!

Using as a guide the kid ones constructed by our own MGV John Dawson, I commenced. One for my eighty-four-year-old neighbor and wife, others in the works for friends, and one as a Christmas gift to a dear friends Mac and Judy Aldrich’s granddaughter.

On Christmas Day I received a heartfelt picture of Mac and Judy’s granddaughter out preparing the salad table to receive seeds the following week. I was fulfilled for the holiday season!

Please apply to the Manatee County Master Gardener training program if volunteerism speaks to you!
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday 2/11/22</td>
<td>10:00AM</td>
<td><strong>Gardening 101: The Scoop on Dirt</strong> Join UF/IFAS Extension Manatee County for the inside scoop on dirt! New to gardening in Florida? We have the info you need to be successful. This course will cover basics of Florida soils and how to build a healthy foundation for your plants. In person at the Demonstration Garden. <a href="https://www.eventbrite.com/e/gardening-101-the-scoop-on-dirt-tickets-228873746537">https://www.eventbrite.com/e/gardening-101-the-scoop-on-dirt-tickets-228873746537</a></td>
</tr>
<tr>
<td>Friday 2/18/22</td>
<td>10:00AM</td>
<td><strong>Gardening 101: Which End is Up?</strong> Join UF/IFAS Extension Manatee County to learn about planting your garden. New to gardening in Florida? We have the info you need to be successful. This class will cover planting methods for a variety of different plants, from herbs to trees and everything in between. <a href="https://www.eventbrite.com/e/gardening-101-which-end-is-up-tickets-228881248977">https://www.eventbrite.com/e/gardening-101-which-end-is-up-tickets-228881248977</a></td>
</tr>
<tr>
<td>Friday 2/25/22</td>
<td>10:00AM</td>
<td><strong>Gardening 101: Good Bug, Bad Bug</strong> Join UF/IFAS Extension Manatee County to meet the bugs you need to know for success in your landscape. New to gardening in Florida? We have the info you need to be successful. This class will cover common beneficial insects and pests of Florida gardens. Be prepared to get up close and personal with live insects. <a href="https://www.eventbrite.com/e/gardening-101-good-bug-bad-bug-tickets-253304369187">https://www.eventbrite.com/e/gardening-101-good-bug-bad-bug-tickets-253304369187</a></td>
</tr>
<tr>
<td>Saturday 2/26/22</td>
<td>10:30AM</td>
<td><strong>Compost Happens</strong> Learn why home composting is so important and has so many benefits, to you and to the environment! When you register you will have the option of purchasing a bin to pick up after the class (just show your paid receipt) or you can just register to attend the class. <a href="https://www.eventbrite.com/e/compost-happens-tickets-253323747147">https://www.eventbrite.com/e/compost-happens-tickets-253323747147</a></td>
</tr>
</tbody>
</table>