As hurricane season approaches, my original thought for this article was to give tips on tree species least susceptible to wind damage by hurricanes and thunderstorms. As a resident of Florida for over thirty years – and a veteran of multiple hurricanes – I figured I could identify by experience the trees that seem to not fare well in high winds: Tabebuia spp. (or “trumpet trees”), the native Swietenia mahagoni (or mahogany tree), and Senna surattensis (or “scrambled egg tree.”) I WAS WRONG!

Turns out it is not so much the species that is susceptible (in fact the mahogany is rock solid!) as it is the way trees have been planted, their age, spacing, and overall health. Trees with lots of space in which to grow roots survive better than those placed in narrow medians of roadways or surrounded by the pavement of curb and sidewalks.

We witnessed this in parking lots and sidewalks around Manatee County public buildings following Hurricane Irma where live oaks (Quercus virginiana) started to fail one-year post-storm, their limited root system literally ripped from the soil by high winds.

Palm trees fare better than broadleaf trees since their fronds are designed to let air flow through rather than against them, and their extensive fibrous root system helps to anchor them. And native trees (no surprise) do better than some of our most insidious invasives like Chinese tallow tree (Triadeca sebifera L.), melaleuca (M. quinquenervia), and Australian pine (Casuarina spp.)

Older trees will have less chance of survival in high wind events than younger ones. But poor structure and poor pruning also contribute to failure. Of course, the length of the storm and amount of rain will factor in. But just because a tree has lost all of its foliage (leaves) does not mean it is dead.

To learn more about this topic go to: “Wind and Trees: Lessons Learned From Hurricanes” at https://edis.ifas.ufl.edu/fr173 and edis.ifas.ufl.edu/pdffiles/EP/EP30900.pdf.
A. Dear S.:

Your insect is a late-stage instar of the cotton stainer bug, *Dysdercus suturellus*. This 'true' bug undergoes five stages, or instars, to adulthood. The black spots on its back are undeveloped wings.

As the name implies, this bug is a pest of cotton, piercing the cotton-boll and leaving a stain, rendering the cotton unusable. Since commercial cotton production has decreased significantly in Florida, the insect has lost its importance as a crop pest.

However, the cotton stainer is a pest of ornamentals such as hibiscus (*Hibiscus* spp.) oleander (*Nerium oleander*), and occasionally fruit trees. I've included a link to information about the cotton stainer for your reference.

https://edis.ifas.ufl.edu/in606

*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 during office hours 9:00 A.M. to 4:00 P.M. at 941-722-4524 and ask for a Master Gardener Volunteer.*
Craft Projects for Gardeners
By Nancy Hammer, Master Gardener Volunteer

With so many of us spending time at home during the COVID-19 pandemic, here are several fun ideas for gardening-related activities.

The project that inspired this article is a DIY mini-greenhouse kit that a fellow Master Gardener Volunteer received as a gift. The detail is extraordinary, and the finished product is absolutely beautiful! It is made from wood, paper, and plastic and includes furniture, plants, a birdhouse, watering can, an LED light, and other accessories. It took about 40 hours to complete, as it must be fully assembled. The finished greenhouse is 7.25” x 9” x 7.5” It is available from several companies online. Search “DIY mini-greenhouse kit” online.

Making hypertufa planters is a rewarding project. Hypertufa is a stone-like material that is lighter than stone. Parts can vary somewhat, but the basic recipe is one part Portland cement, one-part peat moss, and one-part perlite or sand mixed with water. This mixture is pressed into a mold like a cardboard box, or plastic container and allowed to cure. Then the mold is removed and the mixture allowed to further cure. These make unique planters for succulents, annuals, and fairy gardens.

There are a variety of websites with instructions – including videos. Just search “How to make hypertufa containers.” A variation is the draped hypertufa pot which uses cloth with a mixture. Visit UF/IFAS Extension Levy County blog/diy-draped-hypertufa for a video on the process.

Another creative activity for the gardener is making decorative mosaic stepping stones which can be used as garden art or for a garden path. Purchase a concrete stepping stone at a garden center, or create your own concrete mold with a metal cake pan or plastic container. Then decorate your stepping stone with pieces of porcelain, glass tile, or flat marbles in thin set mortar. Search “how to make mosaic stepping stones” online for more details.

Another enjoyable project is creating a terrarium. Terraria can be made using clear plastic or glass containers or an aquarium. It is recommended that a layer of pea gravel be placed in the bottom for drainage, followed by a layer of horticultural charcoal, then weed barrier fabric or window screening, and topped off with a layer of potting mix. Small figurines, driftwood, shells, and other natural items can be added to create whimsical gardens. Look for foliage plants in two to four inch pots that will remain small - or that may be pruned - with similar light and moisture requirements. Making a dish garden is another rewarding activity.

A shallow dish set up similarly to a terrarium is an especially attractive setting for succulents as well as for fairy gardens. See Dish Gardens and Terrariums-UF/IFAS Extension Solutions for Your Life for ideas.

Finally, explore the outdoors with your smartphone camera. Flowers, foliage, and insects make interesting subjects. Enhance your home with favorite framed enlargements. Take your photography to the next level with a macro lens for your smartphone camera which provides between 10x and 20x magnification. (See Nov/Dec 2018 issue of “The Garden Bench”.) Kits which may include wide-angle, fish-eye, and telephoto lenses, in addition to a macro lens, can be purchased online.
Teaching Children to Garden
By Mary Lange, Master Gardener Volunteer

Take advantage of stay-at-home recommendations by getting your kids and grandkids started on their own vegetable garden. Gardening opens up a new world to children as they learn about where food comes from, how to grow their own food, and how to support bees and other insects that we rely upon to pollinate plants. With some luck and hard work, you will not only have smarter kids, but may save yourself a grocery bill by harvesting fresh products from your own back yard.

Summer is the time to prepare for the fall months when planting can begin. (Apart from okra, some peppers and beans, we don’t recommend trying to grow many vegetables in the hot, wet months of June to August. Visit https://sfyl.ifas.ufl.edu/lawn-and-garden/summer-vegetables-in-florida/ for summer vegetables.) But now, there are several home-based activities you can do with children to prepare for planting:

- **Garden Bed Preparation:** Identify a spot in your yard that gets at least eight hours of sun. Establish in-ground bedding space, raised beds (using treated lumber or bricks/pavers), EarthBoxes®, or large pots. Children will have fun not only helping you build their garden but also painting and decorating plant containers. They can paint large rocks, giving the garden some decorative, bright summer color.

- **Tools and Gloves:** Let children search online for garden gloves, hats, and tools including small shovels, watering cans, and spray bottles. Teach them about garden safety (wear sunscreen!), hygiene (wash those hands!), and how to clean and store tools.

- **Compost:** Start a compost bin with your kitchen food scraps (eggshells, banana peels, etc.) as well as biodegradable paper products and lawn clippings. Establish a low-cost compost pile in any aerated enclosure, encouraging children to use their shovels to turn over the compost periodically. Visit https://edis.ifas.ufl.edu/EP323 for tips on home composting and https://ufdc.ufl.edu/IR00003583/00001 for construction of home composters.

- **Seed selection:** Visit https://edis.ifas.ufl.edu/ep486 for sources of seeds for Florida gardens. Let children pick out seeds themselves, steering them towards plants that are most likely to succeed in our environments; show relatively early results; and are foods that children may actually want to eat (e.g., strawberries, blueberries, tomatoes, lettuce, carrots, peas, and beans).

Native pollinator-friendly plants should also be included in the garden. For extra fun, let them cut out pictures of what you are ordering and help them make a photo collage or a colorful plan for their future garden.

- **Seed growth:** Plant a few beans from your pantry for quick results using a see-through plastic cup or a small terrarium. The beans will sprout quickly, giving you the opportunity to teach children about the parts of the plant (roots, stem, leaves, and fruit). You can also use spices such as caraway seed, coriander, dill, and mustard seeds which can later be added to an herb garden.

continued on page 5
• **Pollinator Garden**: Summer is a good time to plant Florida native flowers and shrubs around your future garden that will support pollinators and attract beautiful birds and butterflies. Look for plants such as sunflowers, salvias, blanket flowers, and native milkweeds. For information on pollinator plants, go to [https://gardeningsolutions.ifas.ufl.edu/design/gardening-with-wildlife/bee-plants.html](https://gardeningsolutions.ifas.ufl.edu/design/gardening-with-wildlife/bee-plants.html).

Add a birdbath that children can paint and decorate and maybe a bee house. Finally, encourage children to keep a pollinator journal, recording the date and time of pollinator sightings along with photos if possible. They can earn beautiful certificates from Wings Over Florida by recording their butterfly observations.

Fall - Starting in September as weather cools down, children will be able to expand their garden activities, building upon the work they started over the summer. For example:

- **Soil**: Fill those beds and containers with nice rich soil, adding in your compost. Children will enjoy looking at the soil under a microscope or hand lens to observe creepy critters.

- **Seed Starting**: Either in a well aerated soil or seed starter medium, plant tomato and pepper seeds in small cups (egg cartons, empty yogurt or pudding cups, or plastic cups all work well so long as there is a drainage hole). Seeds should begin sprouting within a week. Children can use their spray bottles to keep the soil moist as plants establish.

- **Garden Transplanting**: When the plants are large enough (usually 5 – 6 weeks), kids can transplant them to the garden plot or container. At the same time, they can also plant seeds such as beans, peas, carrots, and lettuce directly in the garden. Popsicle sticks or paint stir sticks serve for kids to decorate and use as plant identification markers. This is also another good opportunity for kids to record and photograph plant growth and to identify harmful and helpful insects.

- **Watering**: Show children how to best water plants (at the base, not overhead) and talk about water conservation and quality. Set up a rain barrel to collect water runoff from your house. Let kids paint and decorate rain barrels as they learn more about the importance of quality water.

Winter should find kids beginning to enjoy the fruit of their labor.

- **Cooking**: Show children how to make a salad, spaghetti sauce, or pizza toppings with their produce. You might even convince them to try a green smoothie (good luck!).

- **Charity**: If you have an abundance of vegetables, encourage children to contribute their produce to neighbors in need (especially those who may be staying at home). Half the fun of gardening is sharing your bounty with others, a lesson children can apply for years to come.

For more information on gardening with children, particularly curriculum and activity ideas, check out Kidsgardening (www.kidsgardening.org).

For general information on vegetable gardening in Florida: [https://gardeningsolutions.ifas.ufl.edu/plants/edibles/vegetables/vegetable-gardening-in-florida.html](https://gardeningsolutions.ifas.ufl.edu/plants/edibles/vegetables/vegetable-gardening-in-florida.html).

Happy Gardening!
Pocket gophers, moles, and voles are burrowing, tunneling mammals that spend much of their time beneath the soil.

Moles (Scalopus aquaticus) grow to four to six inches long and weigh two to four ounces. They have very small eyes and ears and large front legs used in digging their tunnels. A permanent tunnel is usually about two inches in diameter and eight to twelve inches below the surface. These tunnels serve as hallways for their living spaces while temporary tunnels, or runways, (usually right under the surface and seen as raised areas in a lawn) are mainly used for foraging food. The runways have little volcano-shaped mounds where moles deposit the soil they have excavated.

Moles eat mostly insects, grubs, ants, and earthworms; they do not eat vegetation or roots. Their underground activities are beneficial in aerating the soil and ridding the lawn of pests. On a well-kept thick lawn, the tunnels usually go unnoticed. For those who find their activities unacceptable, the most effective control is eliminating the food source. The application of grubicides will force moles to go elsewhere. Home remedies usually don’t work, poisons are unsafe and illegal in Florida, and traps are not easy to use. Some dogs (like my Husky) are great mole catchers; my cat, however, can’t be bothered!

Pocket gophers (Geomys pinetis) are known for their fur-lined cheek pouches which they use to carry food, much like a hamster (though not related). They are brown-gray rodents, measuring nine to twelve inches from nose to tail. They eat roots, fleshy rhizomes, bulbs, and tubers of a wide variety of plants.

Pocket gophers are prolific diggers and are the bane of farmers and ranchers whose livestock get injured by stepping in their holes. They make several tunnels that interconnect and produce dirt mounds (as many as three a day) at entrances. There may be many mounds in a field, but they could all have been made by a single gopher. Not all mounds lead to active tunnels, making it difficult to determine active from inactive tunnels. They also close old tunnels to confuse and avoid their primary predator, the Florida pine snake.

They are rarely seen during daylight, being most active during the darker parts of the day. Traps can be used but must be placed in an active tunnel.
What’s This?
Beware the Bufo Toad
By Norma Kisida, Master Gardener Volunteer

“All toads are frogs but not all frogs are toads”

Among the extensive list of invasive animals in Florida is the bufo toad (Rhinella marina), also referred to as the cane, giant, or marine toad. With warmer, wetter weather approaching, there is more danger of pets or children being exposed to this toad, which could result in injury or even death, especially in dogs, who are more likely to try to eat or play with it.

These toads became established in Florida in the 1950’s as far north as Tampa. Their favorite habitats are yards, schools, golf courses, and other disturbed areas. Bufo toads are true toads, belonging to the family Bufonidae. There are several native toads in this family which can be confused with the invasive one, particularly the Southern toad (Anaxyrus terrestris), so it is important to properly identify a toad before it is destroyed.

One of the features of the bufo toad is that it is larger than all the native toads after reaching the mature size. It can be larger than 3 inches and up to 6 inches in length while the Southern toad is not usually larger than 3 inches. The poison glands are larger and triangular, and there are no knobs or crests on top of the head whilst the Southern toad has two obvious crests. In addition, the bufo toad has a ridge around the eyes and above the nose.

Animals can be poisoned by secretions from the enlarged parotid glands on the shoulders of bufos. The glands can ooze if the toad feels threatened or squirt if squeezed. The secretions can also be irritating to the eyes or open areas on skin. If contact with this toad is suspected in a pet by such signs as seizures, drooling, pawing at the mouth, or pink or red gums, rinse or wipe out the mouth thoroughly and contact a vet. Danger to pets can be lessened by not leaving pets outside unattended when these toads are most active at dawn, dusk, and night; keeping dogs on a short leash when walking during these times; and removing things that attract the toads such as water sources, pet food, and debris.

If a bufo toad is positively identified (vs. our native toads), it can be captured (gloves and eye protection are essential) and humanely euthanized by applying benzocaine or lidocaine ointment or spray to the toad’s back or abdomen, then placed in freezer overnight.

For positive identification before destroying the frog, a photo can be emailed to Dr. Steve Johnson tadpole@ufl.edu. You can also send a photo to the Manatee County Master Gardener Volunteers manateemg@gmail.com for help with identification. A very helpful University of Florida publication is available at http://edis.ifas.ufl.edu/uw432. This publication contains photos and detailed information about how to distinguish the bufo toad from our native toads and even some helpful videos.
**June CALENDAR OF EVENTS**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</th>
<th>Event Link</th>
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<tbody>
<tr>
<td>Thursday</td>
<td>11:00 a.m.-Noon</td>
<td>Webinar: Florida Native Plants for the Home Landscape - Join UF/IFAS Manatee County Extension and the Manatee County Libraries for a discussion on Florida native plant species that can be used for home landscapes. Native plants provide essential environmental services and are often lower maintenance than traditional landscape plants. This program is free and will be available by Zoom. Click this link to register: <a href="https://ufl.zoom.us/webinar/register/WN_WYxCK6nTCWpfaEX9AbZA">https://ufl.zoom.us/webinar/register/WN_WYxCK6nTCWpfaEX9AbZA</a></td>
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<tr>
<td>Friday</td>
<td>11:00 a.m.-12:30 p.m.</td>
<td>Webinar: Native Plants for the Home Landscape - Native plants can be very beautiful and quite beneficial but are still rather underused in the average landscape. They can do a lot to help sustain pollinators and other wildlife. Learn about some of Florida’s gorgeous native plants that will work well for your particular area of the county, maybe you’ll be inspired to add a few to your own landscape! This presentation is free and will be available by Zoom. Click this link to register: <a href="https://ufl.zoom.us/webinar/register/WN_cRTe71F_T2m8t6AsCWIA">https://ufl.zoom.us/webinar/register/WN_cRTe71F_T2m8t6AsCWIA</a></td>
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<td>Thursday</td>
<td>2:00-4:00 p.m.</td>
<td>Webinar Series: Climate Smart Floridians (6/18, 6/25, 7/2, 7/9, 7/16, 7/23) - Join UF/IFAS Manatee County Extension and the Manatee County Libraries for a series of webinars highlighting the current science concerning climate change and recommended individual actions for improving our collective climate future. This series is free and will be available by Zoom. Click this link to register: <a href="https://ufl.zoom.us/webinar/register/WN_9zPTuuXIRM2G1HtSrQhobg">https://ufl.zoom.us/webinar/register/WN_9zPTuuXIRM2G1HtSrQhobg</a></td>
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<td>June 18, June 25, July 2, July 9, July 16, July 23</td>
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<td>When you register, you will be signing up for 6 sessions of webinars. The series will include the following topics: 1. Florida Climate Change: A discussion of the current status of climate change globally and how it’s effects are being monitored in Florida. We will cover the differences between adaptation strategies and mitigation strategies. 2. Home Energy Use and Renewable Energy Solutions: A discussion of methods at the large scale and individual scale on how to improve our energy footprint. 3. Green Building and Transportation: A discussion of the ways we can improve or climate footprint through thoughtful building and planning for future transportation needs. 4. Consumption: A discussion of the nature of our consumptive society and ways to rethink our relationship with stuff to lessen our global climate footprint. 5. Water: A discussion of the current state of water use and quality and why the ways we use water impact our climate footprint. 6. Yards: A discussion of the impact of urban landscapes and residential yards on individual and societal climate footprints.</td>
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<tr>
<td>Friday</td>
<td>11:00-noon</td>
<td>Webinar: Rain Barrels for the Rainy Days of Summer - Conserve water while preventing stormwater runoff by using rain barrels to water your plants in between the rains. This program is free and will be available by Zoom. Click this link to register: <a href="https://ufl.zoom.us/webinar/register/WN_PCEeGVp-RD07h2Eaxy6ZGA">https://ufl.zoom.us/webinar/register/WN_PCEeGVp-RD07h2Eaxy6ZGA</a></td>
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