



The Master Gardening Bench





The Manatee County Master Gardener Newsletter
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All articles are researched utilizing UF/IFAS Extension and/or other educational sources unless otherwise noted.











Owl is the grand and rather clever old man of the forest. He can also spell Tuesday.

(How can one argue with the above statement from <u>Winnie the Pooh</u>?)

By Nancy Porter, Master Gardener 2014

The owl was the constant companion of Athena, the Greek goddess of wisdom; so by association, the owl has come to be identified as wise.

Some extraordinary features of owls include their ability to swivel their heads 270 degrees so they can take a backward look. This is because their eyes are so large, their eyeballs cannot move either side to side, or up and down. Another highly defined owl sense is their hearing. Their ears are placed just behind their eyes and are well hidden by flaps of skin and feathers. (Those tufts of feathers some owls have look like ears but are not!) Owls swallow their food whole, but if their prey is too large, they vomit up the indigestible remains. These are identified as "owl pellets" and are quite intriguing - if you are so inclined - to examine closely. In these pellets, you will find bones, fur, and teeth.

Florida is fortunate to be the home to five species of owls. Our owls are most helpful in keeping pesky rodent populations to a manageable level. Smaller owls contribute by eating cockroaches!

The **Eastern screech owl** (*Megascops asio*) is the smallest of the Florida owls at 7 to 10 inches in height with a wingspan of 18 to 24 inches. The screech owl is found in Florida hardwoods, swamps, pinelands, and groves, as well as urban and suburban areas. Its call sounds like a horse whinnying. Insects, rodents, birds and reptiles are its mainstay diet. Screech owls mate for life. They nest in owl nest boxes or cavities of trees and will lay two to five round eggs. The male feeds the female while she sits on the eggs during the 21- to 30-day incubation period. Chicks hatch out in brown, red and gray, but usually brown is the dominant color.

The **burrowing owl** (*Athene cunicularia*) stands 8 to 10 inches tall and has a wingspan of 9 to 11 inches. It is found in dry grasslands and prairies, as well as urban and agricultural areas. It eats a variety of insects especially dung beetles, small birds, rodents and amphibians.

The burrowing owl has a flat head, long legs, and a white brow, it nests in the ground. It flies low and will hover while hunting at night, but it is also active during the day either perched or standing near its burrow. It bobs its head when alerted, making a series of chirpy, raspy sounds.

The **barn owl** (*Tyto alba*) has a wingspan that ranges from 43 to 47 inches and stands from 14 to 24 inches tall. Its habitat includes the edges of woodlands, clearings, farms and suburbs. The diet consists of rodents and insects. It builds a nest in the dark recesses of tree cavities, barns, and abandoned buildings. Nests contain 3 to 11 oval eggs, and a pair may raise two families per year. The barn owl has a distinctive white heart-shaped face with dark eyes and long legs. Unfortunately, this lovely owl is rare in Florida.

The **barred owl** (*Strix varia*) sounds the familiar call "hoo hoo-oo hoo hoo!" (Also phrased: "who cooks for you?") The barred owl is 16 to 24 inches in height and has a wingspan from 50 to 60 inches. You can find it in pine scrubs, swamps, mixed forests, prairies, sand hills and agricultural areas. It dines on rodents and some birds. Nests, containing two to three round eggs, are placed in cavities in palm trees and hardwoods. Distinctive vertical (chest) and horizontal (wings and tail) bars in brown and white help identify this owl.

Last, but by no means the least, is the **great horned owl** (*Bubo virginianus*), the largest of Florida's owls. The head tufts resemble ears. It can stand a bit taller than the barred owl at 18 to 25 inches with a wingspan of 36 to 60 inches. Living in forests, prairies, swamps, and marshes, it will raise one to four owlets a year in nests located in broad forks of trees or vacant nests of other raptors. Unlike the brown eyes of the barred owl, the great horned owl has glowing yellow eyes. A formidable predator, this bird's diet includes rodents, rabbits, skunks, opossums, ducks, domestic cats, and other owls.

For more information, visit: http://edis.ifas.ufl.edu/topic owls.

Manatee County Agriculture and Extension Service

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Master Gardeners Amy Stripe & Joy Derksen, Co-editors Contents reviewed & edited by Lisa Hickey, Extension Agent Send a photo or gardening problem via e-mail to the Master Gardeners at ManateeMG@gmail.com or visit them at the County Extension Office Monday – Friday 9:00 a.m. to 4:00 p.m.; closed on Wednesday





ASK A MASTER GARDENER

Dear MG:

IFAS Extension

FLORIDA MASTER

GARDEN

The bark is splitting at the base of my young (10-yearold) mahogany tree. Other than this, it looks perfectly normal. The trunk is about a foot in diameter and the tree is about 8 feet tall. It's growing in sandy, compacted soil and receives supplemental irrigation only in the driest months. Thank you,

N.A., Palmetto



You rightly identify your tree as young since some Mahogany trees (*Swietenia mahogini*) live upwards of 350 years. As a long-lived tree, it doesn't even produce it's tell-tale fruit, or capsule, until around 30 years old. On young trees the bark is smooth and gray, but it becomes dark and furrowed with age. The splitting of the bark is the natural order of things for this tree and nothing to worry about.

I have included a link to a publication about the Mahogany tree for your reading pleasure and education, http://edis.ifas.ufl.edu/st608.

Master Gardener Karen Holleran answers your email questions and looks at photos 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.

Roses Are Red and Violets are Blue

By Jim Haupt, Master Gardener 2015







Why are some roses fiery red while others are yellow, crimson, or pink? Furthermore, how does the African violet produce such beautiful shades of pink, purple, and white petals? We gaze in wonder at the spectrum of colors in our landscapes, but do we fully understand the science that goes into their color production? Pigments, stored in the vacuoles - small spaces - within a cell, selectively absorb wavelengths of sunlight while reflecting others. Chlorophyll, the green pigment found in all green plants, absorbs red and blue pigments of light so that the color green is reflected back to us.

Except for chlorophyll, flavonoid and carotenoid are the most prominent plant pigments. Flavonoids are natural water-soluble molecules that absorb light in blue-green wavelengths, and release red wavelengths visible to us such as in a red rose. Carotenoids absorb light in blue-green and violet wavelengths and reflect the red, yellow, and orange colors found in carrots, sunflowers, tomatoes, and the colors we see in autumn leaves.

Orange, red, pink, blue, blue-black, magenta, and purple that we see in flower petals, fruits, and vegetables derive from anthocyanin pigments.

Anthocyanin and carotenoid pigments are dependent on soil pH, soil mineralogy, and temperature. French hydrangeas, for example, produce blue, purple, and pink flowers, but these pigments are dependent on the cultivar and soil conditions. Temperature also affects pigmentation. Blood oranges are not grown in citrus regions of Florida because of the absence of cold temperatures that allow blood oranges to "color up." In the cooler climates of Spain and Italy, blood oranges maintain their red and maroon colored flesh.

Flower color plays an important role in attracting pollinators. Honeybees, for example, cannot see shades of red, but they do see yellow, white, blue, and purple. Furthermore, bright and dull colors, found in the genes of a flower, can be regulated by bees and birds. Bright colors to attract insects and animals cause fruit to have a sweeter and more pleasing taste. When pollination is done by wind and air, the pigmentation tends to be dull, and fruit will not have as pleasant a taste.



The Air Potato Patrol

A University of Florida Extension/Citizen Scientist Program

By Jim Haupt, Master Gardener 2015

"I've often thought about the public's opinion of scientists as the man behind the curtain in The Wizard of Oz. Scientists are often seen as the enigmatic figure, acting in secrecy, to create things that appear to work by magic."

Kevin O'Horan, Communications and Marketing Coordinator, UF/IFAS, Sarasota County Extension

During my childhood in the 60's, I had a chemistry set, a microscope, and a small telescope; but in those days, I felt you had to have brains like Albert Einstein and Nikola Tesla to be a scientist. Consequently, I chose another career path but still maintained that same passion and curiosity.

My passion was rekindled by the Citizen Scientist program: an opportunity to take part in real, on-going scientific research, working with real scientists making real discoveries. Scientists and researchers are often hindered by the amount of time and manpower that's necessary to collect and analyze huge amounts of data and thus have enlisted the help of science enthusiasts like myself: Citizen Scientists.

The University of Florida is involved in Citizen Scientist programs in many academic areas with a kaleidoscope of intriguing topics. One in particular, the Air Potato Patrol, was created by Dr. William Lester, Hernando County Agent II, and Dr. Chris Kerr of the Florida Department of Agriculture and Consumer Services (FDACS). Per Dr. Lester, "Florida's natural resources are being degraded by an invasion of non-native plants. The invasion is partially responsible for the decline of native biotic communities throughout Florida." Dr. Lester stressed that one species, the air potato vine (Dioscorea bulbifera), is continuing to spread, endangering native habitats. "In the past, herbicides and air potato collection were used to slow down its spread, but it came back stronger the following year."

In 2012 the USDA, after rigorous and thorough testing, proved conclusively that the leaf beetle (Liliocerus cheni) of China,

feeds ONLY on the air potato vine. Hence, the Air Potato Patrol was created to involve the public in collecting data as to the air potato leaf beetles' distribution and their impact on the air potato vine. In a recent phone conversation, Dr. Lester commented that "...as many as 200 children, along with teachers, and residents of Hernando County, are playing an active role in this program."

In his blog, Dr. Lester says more help is welcomed. "If someone has air potato vines on their property, we want to get status updates on these plants. Are they growing and expanding?" At https://airpotatobeetle.com, anyone interested can become a member of the Air Potato Patrol. There are several tutorials to help identify the vine and the beetles and a contact form to provide GPS coordinates of your patch of air potato vines. Periodically, surveys are sent requesting additional data as to the growth of the vine and beetle counts.

Other exciting Citizen Patrol opportunities offered by UF include "Backyard Beetles," "School of Ants," "Native Buzz," and "Project Butterfly Wings." Another Citizen Scientist program, "The Florida Gopher Tortoise Watch," makes it possible to download the app on your phone to report sightings and record data. The Taylor County Extension is spearheading three Citizen Scientist projects: "Water Watch," "Florida Microplastic Awareness," and "Horseshoe Crab Monitoring."

Any individual who dreams of being a scientist, who has a passion to preserve Florida's vast natural resources, or has a desire to invest time in an important cause can become a Citizen Scientist.

"Most people say it's the intellect which makes a great scientist. They are wrong: it is CHARACTER." Albert Einstein

Post in la fact less







False Rosemary

By Norma Kisida, Master Gardener 2012

Although similar in appearance to the culinary herb rosemary (*Rosmarinus officinalis*), false rosemary (*Conradina sp.*) is a group of unrelated, Florida native shrubs with a minty smell. Conradinas are small perennials that can last several years in a home landscape.

I was first introduced to false rosemary while on a native garden tour sponsored by our local Florida Native Plant Society chapter. It was growing happily and attractively in a hot dry area with no irrigation. I have since found two different species at a nearby native plant nursery and used them in my home landscape as well as in two public wildlife gardens that I am involved with. All have done well so far.

C. canescens, also known as beach rosemary, has showy, fragrant, lavender flowers in the spring (often into fall) and fine grey-green foliage. This is the only species of the six Conradinas in the state that is not threatened or endangered. It grows 2-3 feet tall and 2-3 feet wide. Because it is very salt tolerant, it is an excellent choice for beach restoration and provides habitat for small creatures such as the beach mouse. It is also recommended as a border plant or in a wildflower garden in zones 8a-9b.

Large flowered rosemary (C. *grandiflora*) is a bit larger (3-4 feet tall by 1-2 feet wide) and has purple or lavender flowers. It is **not** salt tolerant and does best in zones 9a -9b. It also works well in borders and wildflower gardens.

Both of these Conradina species are an excellent choice for dry sandy soils in full sun. They don't like to be fertilized and are very drought tolerant once established, although they may require some watering during periods of extreme drought. They are excellent for attracting bees and other pollinators. As these are rare plants, you will likely only find them at native plant nurseries. They may be propagated from soft cuttings or seeds. See link below for more information on propagating.

Propagation and Production of False Rosemary: http://edis.ifas.ufl.edu/ep230









Help for Hungry Plants During County Fertilizer Ban

By Rob Hinz, Master Gardener 2016



Application of synthetic nitrogen fertilizer to your lawn and landscape is prohibited in Manatee County from June 1st to September 30th. Certain situations are exempt from the blackout period, including containerized plants, vegetable gardens and new installations. (Full information can be found in the Manatee County Code of Laws, Chapter 2-14-Enviornmental Regulation, Article IV – Landscape Maintenance and Fertilizer Regulation.)

This does not mean your garden will suffer; you can apply:

- Potassium (K) the third number in fertilizer formulations
 plays a key role in many growth-related processes in plants.
- Micronutrients, such as magnesium (Mg) and manganese (Mn).
- Iron (Fe), which is particularly useful for keeping lawns green.

Be judicious when applying individual nutrients; application of just one may create an imbalance in others and make problems worse!

Organic products are good options and exempt from the ban. This includes compost-based products, such as animal manures, composts, worm castings, coffee grounds, and eggshells.

Animal Manures (chicken, cow, pig, sheep, horse, and rabbit)

Benefits: Excellent source of nutrients such as organic carbon, calcium, magnesium, nitrogen, phosphorus, and helps retain soil moisture.

Concerns: Over-application can cause phosphorus/nitrogen to leach into streams and other water sources.

Note: When using animal manures, be sure to compost these before use to prevent food safety issues. Dog, cat, and human manure should never be used due to the risk of disease transmission.

Plant Manures (organic matter made from decomposing plants, kitchen scraps and yard waste, i.e., composting)

Benefits: Excellent source of organic matter for garden soils.

Contains micronutrients. Bacteria and fungi that break down organic matter to produce material are rich in nutrients. Soil maintains moisture.

Concerns: Over-application can cause phosphorus/nitrogen to leach into streams and other water sources.

Cover Crops (a type of plant manure, usually legumes)

Benefits: Adds organic matter and decreases the loss of nutrients. Considered a slow release fertilizer. Protects the soil from wind and water erosion. Reduces annual weeds. **Concerns:** Additional cost in planting the crop. May hold

Coffee Grounds

too much water.

Benefits: Found in many homes. Is sometimes acidic (pH is variable in used grounds) and good for plants needing a more acidic soil such as azaleas and blueberries. Contains other nutrients.

Concerns: Know the type of soil you have so that you don't make it too acidic. It does contain nitrogen which can leach into streams and other water sources.

Egg Shells

Benefits: A great source of calcium. It deters soft-bellied

animals such as slugs.

Concerns: Eggshells don't decompose readily.

Worm Castings (vermicomposting and vermicasting)

Benefits: Worms accelerate the composting of kitchen waste, producing waste with micronutrients and nitrogen. Retains soil moisture.

Concerns: Not all kitchen waste is suitable, e.g., citrus.

When using alternative fertilizers, be aware of how to use them properly. Do a little research (a soil test for pH, for starters.) As with ANY fertilizer application, misuse of these products can be detrimental to your plants.

A list of fertilizers that comply with the ordinance is available at www.mymanatee.org - Manatee County Fertilizer Ordinance. More information available at: http://edis.ifas.ufl.edu/aa205 and http://gardeningsolutions.ifas.ufl.edu/care/fertilizer/organic-matter.html.

Wings Over Florida: Looking and Learning About Florida's Flying Wildlife

Text and Photographs by Joy Derksen, Master Gardener 2004

We've all been reading about the need to get up and get moving to keep our brains and ourselves in good shape. We've also been reading about how we and our children and grandchildren are becoming more sedentary and more tethered to electronics. Being outside is good for us, reducing stress, activating all our senses, and making us attentive to our surroundings.

Florida's Fish and Wildlife Commission (FWC) wants to encourage you and yours to get outside and see the state's birds and butterflies. The program "Wings Over Florida" awards colorful certificates to anyone (resident or visitor) who ventures outdoors, views, and identifies our birds or butterflies.

Before racing outside, go to http://floridabirdingtrail.com/wof/. There you will find the rules for the program and downloadable checklists. Or you can order the checklists by mail. The program has pictures of birds you can see in your area and has suggestions for viewing areas. Since I live near Emerson Point Preserve in Palmetto, it was easy for me to check off many water birds. A trip to the beach at Anna Maria Island gave me another whole group of shoreline birds. It was easy to achieve my Beginner's certificate by identifying at least 25 birds. There are many spots in our area that are excellent for bird viewing. My neighbor who has a bird feeder also found that she could qualify for the Beginner's certificate without leaving her back porch!

We did need color pictures to help identify the birds. You can purchase books or borrow them from the library. There are also birding apps available to download on your cell phone for more identification information. Manatee County libraries even loan out binoculars.

The next program I am going to try when it gets a bit warmer is butterfly identification. I have already seen some zebra longwings (the state butterfly) in the backyard. A Beginner's certificate only requires ten butterfly ID's, so I think I can manage that. The Wings over Florida program has on-line pictures of the different groups of butterflies and there are also many good books and brochures to help with identification. Visit the Plant Diagnostic Clinic at the Manatee County Extension Office or call us (941-722-4524) and we would be happy to supply you with a brochure of local butterflies. You can also visit our butterfly garden to get started with your list. Call us for visit times.

So grab a friend, a relative, or a bored child and get out there and meet your flying neighbors!















TROPICAL SOD WEBWORMS

By Lisa Hickey, Urban Horticulture Extension Agent

Along with preparing for tropical hurricane season, May is the month to prepare for the tropical sod webworm. Scouting for this insect should begin in April. If the population goes unchecked, by the month of May, your lawn will show the results of this pest! During dry periods, the damage of drought and webworm feeding may be difficult to decipher. Scouting is not labor intensive but you need to get down on your hands and knees to see their damage up close.

Scouting for tropical sod webworm requires the investigation of areas in the lawn that are patchy and brown or dead. The original area may have looked like dog urine damage; a small circular area of yellow or dead grass. The height of the grass is usually shorter in the damaged area since the fifth larval stage of webworms feeds heavily on the grass blades of all our warm-season grasses. To scout a large damaged area, you may want to test two separate areas, one square yard section each, to compare your results. Apply a two-gallon mixture of non-degreaser type dish soap and water (most references indicate 2 tablespoons of soap to two gallons of water). Slowly pour the mixture over the test plot and watch for the webworms to come to the top of the leaves. Dr. Paul Heller, Penn State University, says that 10 to 12 webworms per square yard warrants treatment.

Tropical sod webworm have six life stages before they become an adult moth. The brown moth is ¾ inch long and feeds on nectar plants. It does not cause lawn damage. The female lays a cluster of eggs on the top of the leaf blades during dusk. As you walk through your lawn near dusk, watch for small flying moths as an indicator if you have lawn damage as described above. During the day, the moths take respite in nearby shrubs.

Webworm larvae are cream colored with dark spots on each body segment. They grow to be about ½ inch in

length in the fifth stage of life. They are night feeders. Oh, did I forget to mention that you will be on your hands and knees to scout during the evening hours? What will the neighbors think? In its first few stages of life, the webworm scrapes only the top layer of the leaf blade, leaving behind the cellulose fiber creating a "window" on the blade. As the worm ages, more of the leaf is consumed. Frass (worm poop) can be observed in the feeding area but usually only detected as the webworms get larger.

During the day, sod webworms hide in the thatch layer. Excess fertilization contributes to thatch buildup and a higher potential of webworm infestation. The sod webworms will form their cocoon in the thatch material.

There are many control measures from biological (beneficial nematodes) to chemicals (too many to list). Cultural controls are measures we can control; over watering, incorrect mower bed height, over fertilization, and host plant selection. There are several cultivars of St. Augustinegrass (SAG) and zoysiagrasses that have been bred to resist tropical sod webworms. Check out SAG 'Amerishade,' 'Floratine,' 'FX-10,' 'Captiva,' and 'Winchester' as listed on the University of Florida's Featured Creature publication. Zoysia resistant cultivars are 'Cavalier,' DALZ850 1, and JZ-1.

Your planning schedule should be to scout in April and May watching for early signs of infestation; go over your cultural practices and make sure they are appropriate for the lawn type you have; use biological controls if possible, and if you lost the battle by August and September, visit your local Extension Office for suggestions in chemical controls.

For more information, visit: http://edis.ifas.ufl.edu/in968.



Date	Time	Event
1 st Saturday	10:00 a.m1:00 p.m.	Ask a Master Gardener – 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 – 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 – South Manatee Library – 6081 26 th Street West, Bradenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
Saturday May 12	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.
		May 6-12 th is International Composting Awareness Week!
Saturday May 12	1. Collection of Compost at Manatee Extension 9:00-9:30 a.m. 2. Beginner's Compost Workshop at Manatee Extension 9:30-11:00 a.m. 3. Celebration Lunch party in Sarasota Noon-2pm at Robert L. Taylor Community Complex	We are celebrating this event by: 1) Compost-a-Thon: bring your compost deposit to the Extension office. (9-9:30am) Drive through Gate 3 at the corner of 17th St. W. and 13th Ave. W. Follow the signs. Visit the Compost-A-Thon on-line registration https://www.sunshinecommunitycompost.org/events/compost-a-thon/form Compostable list here: https://docs.wixstatic.com/ugd/9a4839_87f4ad9b12a34083b3289f6a60088136.pdf 2) Beginner's compost workshop - learn the facts about composting (9:30-11am). \$5 administrative fee. Bins available while supplies last for \$40 cash or check only. 3) Enjoy lunch in Sarasota which follows the Beginner's Compost workshop (Noon-2pm). Register for the beginner's compost workshop on-line or call the Extension Master Gardeners. \$5 administrative fee for workshop.
Saturday May 19	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour - Rye Preserve - 805 Rye Wilderness Trail, Parrish 34219. Meet at Rye Preserve on the east side of Rye Road and North of Manatee River. Drinking water and hiking sticks are recommended. There are places to enjoy a picnic lunch, if desired. Register by calling the Extension Master Gardener Plant Diagnostic Clinic (941) 722-4524.
May 23, June 27, July 18, & August 22	5:30-7:15 p.m.	Garden Educator Training Series — Calling all teachers, community gardeners, Master Gardeners, and garden enthusiasts! Join the UF/IFAS Extension Family Nutrition Program for a FREE training series featuring dynamic local speakers, hands-on activities, seasonal gardening skills, curriculum connections, community organizing strategies, opportunities to network and build your school garden team. Attend all four sessions to earn professional development credits. Register at https://getsmanatee.eventbrite.com or call Mack at (941) 722-4524, ext. 1821.



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