



The Master Gardening Bench



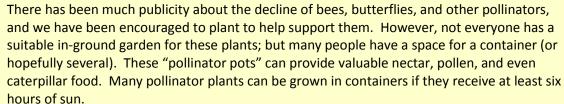


The Manatee County Master Gardener Newsletter
April 2019 - Volume 18 – Issue 4

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

Pollinator Pots _ Saving the Bees and Butterflies One Pot at a Time

By Norma Kisida, Master Gardener 2012



Select a container at least 14 inches in diameter across the top and with drainage holes. Have on hand a good quality potting soil. Some potting soils will contain a slow release fertilizer, or you may need to add your own. As far as size of the plants, it is best to start with small ones (4-inch pots up to 1 gallon) so you will be able to fit several into one container. If you are planting for butterflies, choose at least two butterfly host plants (the plants their caterpillars eat) and two to three nectar plants.

Some taller perennials which work well in the back or center of the container are Stokes aster (Stokesia laevis), purple coneflower (Echinacea purpura), scarlet sage (Salvia coccinea), and starry rosinweed (Salphium astericus). Some examples of plants for the middle space are blackeyed Susan (Rudbekia hirta) and blanketflower (Gaillardia pulchella). An example of a short plant for the front is lanceleaf coreopsis (Coreopsis lanciolata). Some "spillers" which can cascade over the side are prostrate porterweed (Stachytarpheta jamaicensis) and frogfruit (Phyla nodiflora). If you have room for a trellis in or behind the pot, a native vine such as passionflower (Passiflora spp.) could be included. As for host plants for butterfly caterpillars, plant members of the carrot family such as dill, fennel or parsley for the beautiful black swallowtails and native milkweed (Asclepias spp.) for the monarch and queen butterfly.

Water in new plants well and daily until established. Continue as needed which may be every day depending on rainfall and temperature. Prune back plants to keep fresh, and fertilize with a slow release fertilizer according to label directions. Expect the butterfly host plants to be eaten as that is the whole point of being a host!

By using native plants, pests are not usually a problem. Use of pesticides on the pollinator plants or other plants in the garden can be deadly to the pollinators, so use the least toxic method. This includes targeting only identified pests and only the specific plants where they dwell. Do not apply pest control when pollinators are active during the day. Pruning off the affected part of the plant may be the best choice. Native plant nurseries not only have pesticide-free native plants but have available staff who are happy to assist you with choosing pollinator plants for your pot.

Perfect Plants for Pollinators http://gardeningsolutions.ifas.ufl.edu/design/gardening-with-wildlife/bee-plants.html,

Pollinator Plants Florida https://www.xerces.org/wp-content/uploads/2016/10/2017-046_FloridaPlantList_Dec2017_web-4page.pdf.









IFAS Extension

FLORIDA MASTER

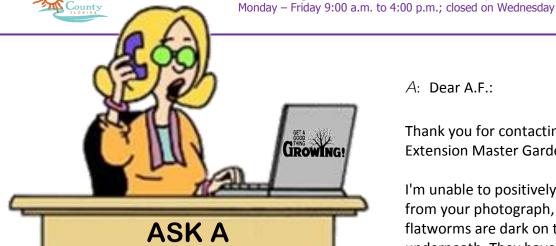
GARDENER

Manatee County Agriculture and Extension Service

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Telephone: (941) 722-4524 ~ http://manatee.ifas.ufl.edu Master Gardeners Amy Stripe & Joy Derksen, Co-editors Contents reviewed & edited by Alyssa Vinson, 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





MASTER GARDENER

Q: Dear Master Gardener,

I found this tiny flat worm on my back porch. Is this a New Guinea flatworm? Thanks.

A.F. Bradenton



A: Dear A.F.:

Thank you for contacting the Manatee County Extension Master Gardeners.

I'm unable to positively identify the flatworm from your photograph, but New Guinea flatworms are dark on top and lighter underneath. They have a lighter, lateral stripe on their bodies that isn't apparent in your photograph but may have been visible when you first captured it. Unfortunately, presence of the invasive New Guinea flatworm (Angiostrongylus cantonensis) - also called rat lungworm - has been verified in Manatee County. They prey upon our native snails and slugs.

These flatworms arrived from other countries and continue to move around in the soil of potted plants and trees. They are virtually impossible to see in soil, and currently there is no recommended chemical method of control for homeowners. You could try to attract and remove them by laying a rigid piece of plastic or wood out in the landscape overnight and checking underneath it first thing in the morning where they would likely seek shelter from the daylight. Be sure to wash your hands after handling this critter as they are a carrier of a dangerous parasite that can infect humans.

I've included a publication link on Commission about the New Guinea flatworm: https://myfwc.com/wildlifehabitats/nonnatives/ invertebrates/new-guinea-flatworm/.

Master Gardener 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.

I'm New to Florida, So Help Me with Flowering Shrubs!

By Nancy Hammer, Master Gardener 2014











All photographs from UF/IFAS

This is the third article for transplanted gardeners from up North. You may pine for the striking display of vibrant yellow blooms of forsythia, the intoxicating fragrance of lavender-blue lilacs, or the citrus scented dogwood-like white blooms of the sweet mockorange. Mourn not because Florida offers a bountiful array of spectacular flowering shrubs — many that will attract butterflies and hummingbirds to your landscape.

Looking for sunny yellow? An attractive native shrub is the privet senna (Senna ligustrina) which grows 4-8 feet, and sports butter-yellow flowers. Plant this shrub, and it won't be long before you see bright yellow cloudless sulfur and sleepy orange butterflies flitting about your landscape. (Avoid the Senna bicapsularis which UF botanist Marc Frank says is frequently mislabelled and is S. pendula, a Category 1 invasive.)

Thryallis or rain-of-gold (*Galphimia glauca*) grows to 5-9 feet, with showy bright yellow flowers most of the year. Its open growth habit is ideal for informal plantings, and it is attractive to birds and butterflies.

Bush allamanda (*Allamanda neriifolia*) grows between 5-15 feet and bears groups of large trumpet-shaped yellow flowers at branch ends during summer and fall. (Avoid the vining yellow allamanda - *A. cathatica* – which is invasive.)

Have a passion for purple? King's mantle, or bush clock vine (*Thunbergia erecta*) is a vigorous, slightly weeping shrub (4-6 feet) that boasts attractive purple blooms with yellow throats. It was Florida Nursery, Growers, and Landscape Association's (FNGLA) Plant of the Year 2005.

Chaste tree or vitex (*Vitex agnus-castus*) can be grown as a shrub or small tree. It displays attractive sage scented grey-green leaves, and in summer showy lavender flower spikes which attract birds and butterflies.

Beautyberry (Callicarpa americana) is an easy to grow native shrub which grows 5-8 feet and has small lavender-pink flowers in spring followed by dense clusters of striking purple fruits in fall, a favorite of wildlife.

Looking for that pop of white in your landscape? Natal plum (Carissa macrocarpa) grows between 2-20 feet depending on the cultivar. It has deep green leaves and fragrant white blooms followed by edible red, cranberry-like fruit (and spines!). This is an attractive, drought resistant, salt tolerant shrub--and you can make jam!

Crepe jasmine or pinwheel flower (*Tabernaemontana divaricate*) has glossy, dark green leaves and ruffle-edged, white flowers which are fragrant at night.

Gardenia (Gardenia jasminoides) is not a low maintenance shrub, but is prized by many Florida gardeners for its white, sweet scented flowers. It requires acidic soil and can be plagued by nematodes in the landscape, so is often planted in containers.

For an overview of flowering shrubs and other Florida-Friendly plants, see "The Florida-Friendly Landscaping™ Guide to Plant Selection & Landscape Design" online at:

https://ffl.ifas.ufl.edu/pdf/FYN Plant Selection Guide 2015.pdf.











Many myths surround lovebugs (of the *Bibionidae* family.) This overly amorous critter is a fly sometimes called "the Plague of Florida." Other names include: "March flies," "double-headed bugs," "honeymoon flies," and "united bugs." Florida's climate probably encourages the reproduction of these annoying pests. Two such fly species exist in Florida: the non-native *Plecia nearctica* and a woodland species that is native to the Southern United States, *Plecia americana*.

A common myth is that entomologists from the University of Florida brought the non-native lovebugs to Florida and some escaped captivity and wildly reproduced. Another is that these same scientists genetically engineered this fly as a predaceous insect to attack mosquitos. Wrong on both counts.

P. nearctica was first discovered in Louisiana and Texas in the 1920's. Over the next twenty-five years, through wind, animals, and transportation vehicles, it slowly transferred its citizenship to Mississippi, Alabama, Florida, and northward into Georgia and the Carolinas. *P. nearctica* were first discovered in Florida in the late 1940's, and like many non-native species it thrived. By the 1970's their population had exploded. Perhaps they were in search of theme parks or retirement communities! However, their retirement is short lived, lasting only about four days.

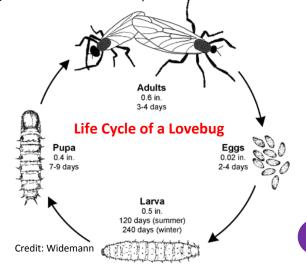
The slow-moving adult flies are herbivorous, feeding on pollen and nectar found in flowers. Males live ninety-two hours and females live for seventy-two hours, and their flight is restricted to daylight hours. Both are entirely black with a red thorax. The pairs are most commonly seen April to May and August to September, for a few weeks each time. Mating begins when males swarm and are joined by females coming up from the grass. Mating takes about 12.5 hours and occurs during the night while resting on vegetation. Higher temperatures (84°F +) contribute to larger populations. In short, the life of this fly is "hatched, matched, and dispatched."

Another common myth is that lovebugs are attracted to automobiles. The attraction is not to the automobile but to conditions surrounding cars. Heat from the paved roadway, components of auto exhaust fumes, and organic litter (detritus) alongside roadways are all favorable conditions

for lovebugs. Thus the flies become a particular nuisance to drivers in their breeding seasons (spring and fall) with swarms peaking between 10-11 A.M. and 6-8 P.M. Savvy Southern motorists try to schedule their drive times around swarm peaks.

Lovebug insect splatter on a windshield can impair visibility and an accumulation of insects on the grill can clog radiators leading to malfunctions. One myth is that vehicles coated with lovebugs' acidic carcasses will immediately begin degrading painted finishes. The truth is, sunlight for a day or two bakes lovebugs' eggs and changes the body fluids of the adult from an almost neutral 6.5 to an acidic 4.5. Time and sunlight create the damage. If the flies and eggs are removed within 24 hours, damage can be mitigated.

"Lovebugs" do have significant natural enemies such as spiders, dragonflies, birds, armadillos, fungal pathogens, and some parasites, but theses hardly make a dent in the population. Pesticides are mostly ineffective in controlling the population. Efforts to eradicate these flies by public agencies are minimal because they are more a nuisance than a threat. The chemicals that would be used would be more detrimental to the environment than the flies themselves. These flies do not bite, are non-poisonous, and are not vectors of disease. They are, in fact, considered a normal part of the natural environment of the Gulf states. Lastly, lovebug larvae play a beneficial role in decomposition of decaying vegetation and organic debris, acting as one of nature's composters.





Charleston, SC. The tree is estimated to be 400-500 years old.



Hidden in the mountains of CA, NV, and UT are some of the oldest known longliving species of the Great Basin bristlecone pines.

Plant Longevity

By John Dawson, Master Gardener 2007

Sometimes people forget that plants are living things with definite life spans. Most understand that annuals live out their lives within one year. They are born from seed, grow, reproduce, and die within a year unless something occurs to cut their life short. Biennials complete this cycle in a two-year period.

But things become more confusing when dealing with perennials-plants that live more than two years. Do they live forever, or do they all have specific life spans? Life spans can be determined in dead trees by counting growth rings. Life estimates can also be determined in fossil plants through carbon dating. Some trees can live hundreds of years, and a few can live for a thousand or more, but only if left undisturbed and provided with ideal growth conditions. Some bristlecone pines (*Pinus longaeva*) have been estimated to be over 4,000 years old.

Most of our local tree life spans usually fall within 25 to 50 years. Citrus (*Rutaceae* family) has an average lifespan of 50 years in ideal conditions. But like people, they become non-productive as they age and become less resistant to disease. Mangos (genus *Mangifera*) can live to 300. Whereas live oaks (*Quercus virginiana*) may have a lifespan of several hundred years, the laurel oak (*Q. laurifolia*) rarely exceeds 70 years.

Liberty trees were planted by each of the colonial states to celebrate the end of Revolutionary War (1790). An elm (*Ulmus* spp.) in Boston survived until 1925 and a tulip poplar (*Liriodendron tulipfera*) survived in Maryland until 1999 when it was blown over by a hurricane. A white oak (*Q. alba*) still barely survives today in New Jersey.

Each species of sexually propagated plants have a specific average lifespan under ideal conditions. Plants that reproduce asexually (without seed) seem to live forever,

because each plant is a clone of some original mother plant.

The king's holly (Lomatia tasmanica), has been propagating vegetatively for between 40,000 to 140,000 years. This tall shrub (which isn't an actual holly) grows in a small isolated area of Tasmania and reproduces by branches breaking off in storms or high winds, making contact with the ground, and setting roots. Like the Cavendish banana (the ones you buy in the store), its seeds are sterile. Each king's holly is a direct copy of a plant which may have originally existed 40,000 years ago, but that does not mean each cloned plant is 40,000 years old. Sadly, the plant is currently under attack by a root-killing fungus.

The Cavendish banana (*Musa acuminata* Cavendish subgroup) also faces a fungal threat that banana growers have been battling for years. It is possible that it may disappear forever. Whereas citrus is currently facing the serious threat of citrus greening, the seeds of all citrus species and varieties have been safely stored for future planting once the crisis subsides. Asexual plants like bananas have no seeds to store.

On the flip side, the shortest-lived plants are summer annuals or spring annuals living only a few weeks. These usually include the various weeds that invade your lawn and landscape, which pop up seemingly overnight and then two weeks later are dead. The seeds they leave behind, however, can survive in your landscape for many years just waiting for the right time to germinate and pop up again.

Ideal conditions for plants rarely exist, and there are many factors that limit its lifespan. These include weather, fire, disease, insect damage, and us. Last year, it was very painful for me to watch as a majestic live oak (the largest I've ever seen), easily several hundred years old, was cut down and bulldozed to make room for a gas station.







Adult drain flies, *Psychoda* sp., stuck to clear packing tape. The tape was placed over a drain to monitor for a drain fly infestation.

An annoying insect has been popping up in my houseteeny, tiny flies are dead and dying in my bathtubs. Every morning I clean up the tub and rinse the dead bodies down the drain. The next day there are more. Where are they coming from, and why are they in the bathtub? And, more importantly, how do I get rid of them?

My unwelcome visitors are drain flies (*Psychoda* spp.) also known as the "moth fly" because under a microscope they look a little like fuzzy moths. Fortunately, the drain fly doesn't bite and doesn't carry disease, but it can cause allergic or respiratory reactions in susceptible humans. The adults are emerging from my bathroom drains which is what they do in early spring and into late summer.

The tiny males meet and mate with females near their home drain (my bathtub has become a dating center!) The males only live two to three days. Females don't live much longer, but they can stay alive for seven days if the right guy doesn't come along. The female returns to the drain and lays eggs in the biofilm in the drainage pipe. This is a good thing in the wild; just not in my house. The worm-like larvae hatch out in one to two days. And the worms become adults in 9 to 15 days. If I don't stop them, I will have more and more drain flies each day.

Despite their delicate appearance, drain flies are resistant to Clorox® being poured down the drain and to the usual alkaline drain cleaners (Drano® for example). Never mix a

chlorine product and an alkaline product because the combination causes a poisonous gas which will hurt your lungs! Boiling water doesn't kill them either. I can attest to the futility of these methods; every day more flies in the tub! The only way to be free of drain flies is to remove their biofilm (gunk) habitat. You can use a metal pipe brush which will scrape the inside of the drain. After that, you use boiling water to loosen and flush out any organic material scraped off by the pipe brush.

For those of us who don't want to dismantle the drains to use the plumber's snake, there is another solution. There are enzyme-action products that are designed to break the sticky bond that bacteria and algae form on the pipes. Several can be purchased on-line or at a custodial supply company. I ended up typing in "bioenzyme to get rid of drain flies" on the computer and several brands were displayed. The product I purchased is partly made of orange oil which smells lovely and is safe to use in home sinks, tubs, and showers. Read the label and follow the directions to keep yourself safe and the drain flies under control.

For more information and photographs:

http://entnemdept.ufl.edu/creatures/URBAN/FLIES/drain_fly.html or

https://ohioline.osu.edu/factsheet/ENT-41.

What's This? Powerline Decline of Palms

Article and Photos by Amy Stripe, Master Gardener 2008









Is your palm not looking altogether healthy? Are random parts of the canopy browning out? Look up. Way up. In my neighborhood, with many overhead powerlines and many mature palms of all kinds, this is a noticeable phenomenon. It is a disorder called "powerline decline."

For unknown reasons palms are affected whereas broadleaf trees are not. Palm fronds touching or in close proximity to overhead powerlines may show necrosis (death); the whole canopy or only parts of the canopy may be involved, and not necessarily those closest to the powerlines. This does not mean the death of the palm, although if severely weakened, may hasten death due to another cause, such as a disease or nutritional deficiency.

Cure? None. Prevention: Don't plant a palm under a power line.

For information on this and other physiological disorders of palms, visit: http://edis.ifas.ufl.edu/ep263.



Electromagnetic fields within five feet of a high voltage power line appear to cause injury to palm foliage. Leaves do not need to physically contact the wires for injury to occur and often occurs on the side of the palm opposite the wires as well as those nearest to the lines.



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 April 13	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.
Saturday April 13	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour – Emerson Point Preserve - Stroll through Emerson Point Preserve to learn more about Florida's native plants and inhabitants of a coastal habitat. Suitable for all ages. Call the Extension Master Gardeners to register (941) 722-4524.
Friday April 19	5:30-7:30 p.m.	Seed-Saving Workshop - This two-hour workshop is focused on developing the beginning seed-saver's skills. The class will cover plant biology and mating systems, isolation techniques and varietal maintenance, and harvesting and cleaning practices. The workshop will also discuss individual seed-saving strategies for commonly cultivated vegetable crops in central Florida. \$5 advanced administrative fee, \$8 day of workshop. Register online at https://seedsavingstrategies.eventbrite.com or call Mack Lessig at (941) 722-4524 ext. 1821.
Saturday April 20	9:00-11:00 a.m	Extension Master Gardener Plant ID Tour – Rye Preserve - Take a hike through upland habitats along Rye Branch and learn about Florida native plants, natural history, and early settlement of the area. Drinking water, sturdy shoes, and hiking sticks are recommended. Visitor Center open 9am-noon and 1-4pm. Call the Extension Master Gardeners to register (941) 722-4524.
Saturday April 27	11:00 a.m12:30 p.m.	Florida-Friendly Landscaping™ for Pollinators - If you plant it, they will come! Pollinators are losing habitat and face many other challenges in our urbanizing environment. Learn how to identify local pollinators like bees, butterflies, and hummingbirds and what their needs are so that you can provide them with the elements they require to thrive. \$5 advanced administrative fee, \$8 day of workshop. Register online at https://ffl for pollinators.eventbrite.com or call the Extension Master Gardeners (941) 722-4524, ext. 1819 or 1820.
Saturday May 4	10:00 a.mNoon	Herbs in Your Daily Life - Congratulations! You have succeeded in growing your own herbs - now what to do with your green harvest? Learn the benefits of herbs, how to incorporate common herbs into your everyday diet, and how to create creams and lotions for your skin. Workshop includes handouts, tastings, and demonstrations. \$5 advanced administrative fee, \$8 day of workshop. Register online at https://herb_garden_harvest.eventbrite.com or call the Extension Master Gardeners (941) 722-4524, ext. 1819 or 1820.
Saturday May 11	9:00-10:30 a.m.	Compost Happens – Home Compost Class - Composting is easier than you might think, happens very naturally, and creates a useful soil amendment for your landscape plants and vegetable gardens. Join us as we participate in Compost-a-Thon, an effort to create awareness of the environmental benefits of composting our vegetable food scraps rather than letting them go to the landfill. Bring a bag of vegetable scraps/shredded paper products to the class and we will weigh-in to see how many pounds we diverted from the landfill. \$5 advanced administrative fee, \$8 day of workshop. Compost bins available for purchase after class for \$60 each (cash or check only.) Register at https://home_composting.eventbrite.com or call the Extension Master Gardeners (941) 722-4524, ext. 1819 or 1820.
University of Florida IFAS Extension - Manatee County		



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