

The Master Gardening Bench



The Manatee County Master Gardener Newsletter

September 2018 - Volume 17 – Issue 9

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



Privet Cassia
Photo: N. Kisidia, MG



Ironweed
Photo: N. Kisidia, MG



Sunflower
Photo: FNPS.org



Dotted Horsemint
Photo: K. Eckert, MG

A Clash of Colors Natives for Your Fall and Winter Garden

By Mack Lessig, Master Gardener 2016

Florida goes through two dramatic color changes each year. In the spring, our state is transformed into a bouquet of yellow and gold. This sunny-colored blanket slowly disappears as the dreaded heat of summer advances. As summer passes, we enter the next color transition. Fall marks the beginning of a mauve metamorphosis. That's not to say that other colors are not represented during each transformation, but as a general rule, a good majority of native wildflowers are some shade of yellow or purple. During each of these color conversions, a secret battle rages, unbeknownst to most.

Late August and the beginning of September mark the initiation of this confrontation. As a homeowner, you can participate in this dynamic dispute. Many wildflowers may be incorporated into your landscape to join the color clash.

Some of the most common and show-stopping species for fall include the blazing stars or *Liatris* species. Blazing stars form a tall flower spike during the summer months. This boring, grass-like spike blends in with the surrounding vegetation until it is signaled to bloom. Suddenly, from the top of the spike, brilliant purple blossoms explode. These purple explosions instantly become butterfly magnets! Not to be outperformed, the goldenrods (genus *Solidago*) respond to this purple barrage. The goldenrods unleash miniscule clouds of brilliant yellow blossoms. To complement their golden counterparts, the silkgrasses (genus *Pityopsis*) begin to reinforce with warm, sunny yellows.

Towards the rear of your fall wildflower garden, another technicolor battle is raging. In this theater, giants are at play. The *Vernonias* or Ironweeds are filling the air with veils of immense ultraviolet spots. These are some of the favorite nectaring spots for our state butterfly, the zebra longwing. Then the native sunflowers (genus *Helianthus*) begin a counterstrike! To answer the mauve marauders, the *Helianthus* gather inspiration from the sun. Dense clusters of large, yellow daisy-like flowers radiate

from the sunflowers, drawing bee and butterfly alike away from the ironweeds.

Simultaneously, both plants are secretly battling underground. Most *Helianthus* and *Vernonia* spread through underground runners, so consider their placement with care. Tipping the scales in favor of the purple posse, dotted horsemint (*Monarda punctata*) discharges the finishing salvos of light purple flowers. These small, unassuming flowers are extremely attractive to every type of pollinator, thus, resolving our colorful conflict...for this season.

As winter settles in, we achieve a certain harmony within our landscapes. Most native wildflowers begin a dormancy period, so competition is at a minimum. However, our yellow and purple friends are still skirmishing. Continuing the conflict during our "winter," are the golden blossoms of our native *Senna* species. Bahama cassia (*S. chapmanii*) and privet cassia (*S. ligustrina*) reliably fire off glorious, gilded blossoms that not only attract numerous bees, but also the attention of sulphur butterflies. Following suit, Carolina jessamine (*Gelsemium sempervirens*) provides a multitude of luxurious, golden trumpets to dazzle the senses in the dead of winter.

Acknowledging the stiff competition, another native vine, climbing aster (*Symphytotrichum caroliniana*), releases a beautiful bouquet of lavenders and pinks that capture the attention of all who encounter it. Finally, to even the score, a delicate procession of periwinkle buds appear on the false rosemary (*Conradina* spp.).

This harmonious balance provides a fitting conclusion to the perennial competition between our conflicted color wheels, which perfectly describes Floridian wildflowers. Consider incorporating these plants into your landscapes to personally participate in this skirmish of shades.



ANNUAL PLANT SALE OFFERS SAVINGS AND SELECTION

Do you have a spot in your yard where you would love to have a butterfly garden, or does your landscape just need a little splash of color? Interested in growing more Florida natives? Manatee County Master Gardeners may have the answer.

Saturday, October 6th from 8:00 A.M to 1:00 P.M., the Manatee County Master Gardeners will hold their annual plant sale fundraiser at the Manatee County Extension Office at 1303 17th Street West in Palmetto. These plants raised by the Master Gardeners include a wide array of natives, perennials, shrubs, and ornamental grasses and are all priced to sell. Gardening accessories will also be on sale.

Many sought-after plants on offer include natives, vegetables, herbs, sea grapes, orchids, bromeliads, trees, butterfly plants, ornamentals, groundcovers and more!

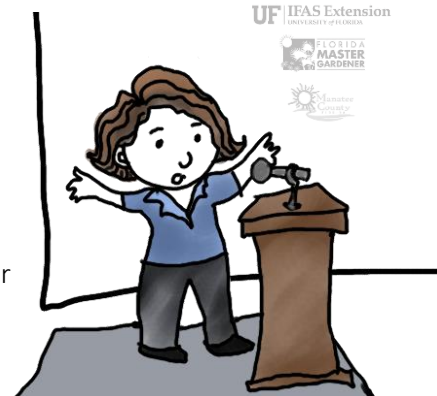
Come early for the best selection and bring along your own wagon or garden cart to stock up. We accept cash or personal checks ONLY. The first 50 customers will receive a free native plant seedling.

All proceeds from this event go to the operation and maintenance of the Extension Master Gardeners' Educational Gardens and Greenhouse and to support Master Gardener educational and outreach programs.

Book Speakers Now for Your Group or Club Master Gardeners are Expert Presenters!

Interested in a talk on a gardening-related topic? Landscaping tips for a Florida-friendly yard, gardening for butterflies and other pollinators, container or vegetable or herb gardening? Nuisance wildlife, growing orchids, pruning tips?

Your Manatee County Agriculture Extension Service can help! Our Extension Master Gardener volunteers are available to give presentations to gardening clubs, homeowners' associations, and community organizations of all kinds. The service is free. Call (941) 722-4524, extension 1816 Kathy Oliver.



We do ask for a one-month lead-time and groups are limited to two engagements per year. Select your topic and we will try to accommodate your needs! If you would like suggestions, call Kathy and ask what might be a suitable topic for your group.

Alternatives to Invasive Plants in Florida

Part 5 in the Series

Carrotwood (*Cupaniopsis anacardioides*)

By Nancy Hammer, Master Gardener 2014

The carrotwood is also known as carrot weed, beach tamarind, green-leaved tamarind, and my favorite, tuckeroo. It is so named because of its bright orange inner bark. The carrotwood can reach a height of 25-35 feet, with a similar spread. The tree has yellow-green leaves and produces yellow-green flower clusters January-March, followed in April or May with yellow-orange seed capsules containing three black seeds.

Carrotwood is a native of Australia which was introduced in Florida in the 1960s and became popular as a shade tree in the 70s and 80s. Unfortunately, it escaped unsuspecting Floridians' landscapes, largely due to the spread of the seeds by feasting fish crows. Without the natural controls found in its homeland, it has become invasive and spread to marshes, pinelands, scrub habitats, mangrove habitats, and disturbed areas. Carrotwood trees compete with native trees and shrubs, and even the equally invasive Brazilian pepper, forming dense stands. They are particularly destructive to our critical mangrove habitats. It is listed as a zone 10A-11 tree which means that it will be found mainly in the western parts of Manatee County, and on the islands (as opposed to out East). In 1999 it was designated as a Category 1 invasive by the Florida Exotic Pest Plant Council.

For information on how to remove carrotwood, refer to Natural Area Weeds: Carrotwood (*Cupaniopsis anacardioides*) by K.A. Langeland and S.F. Enloe at <http://edis.ifas.ufl.edu/ag111>.

Following are several outstanding Florida-friendly shade trees to replace carrotwoods.

Live oak (*Quercus virginiana*) is a popular native with high wind resistance it can soar to 40-80 feet, with an impressive 60-120 foot spread. It is suitable for large lots in zones 8b-10b, away from sidewalks and drives. It can be challenging to grow grass under these mature shade trees. For details, see University of Florida/IFAS EDIS publication ENH-722.

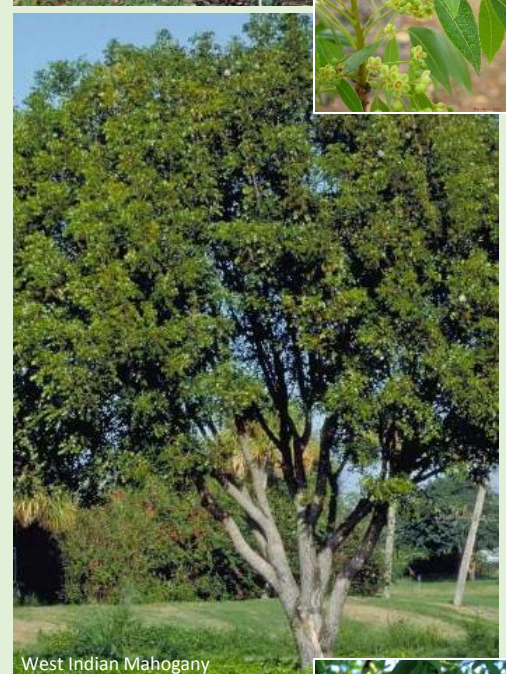
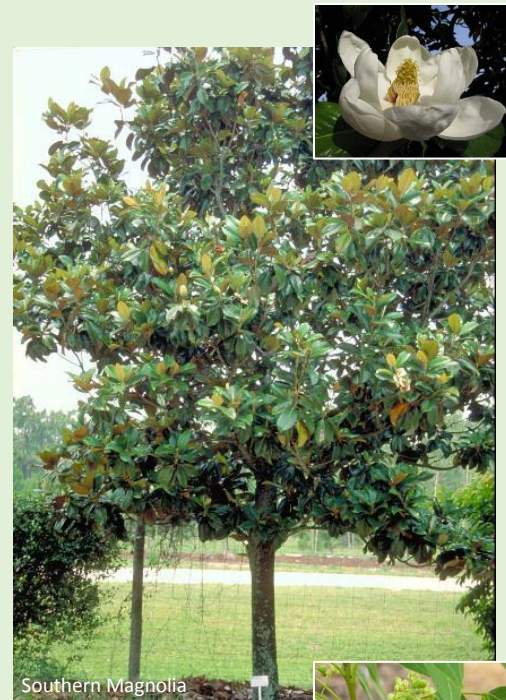
Southern magnolia (*Magnolia grandiflora* 'Majestic Beauty') is a particularly good cultivar for shade on large landscapes as it can grow to a height of 50 feet with a 20-25 foot spread in Zones 7A-10A. In late spring and occasionally during the summer, this North American native lights up the landscape with large 8 inch fragrant white blossoms. Other cultivars are described in the UF/IFAS EDIS publication ENH-535.

West Indian mahogany (*Swietenia mahagoni*) is a semi-evergreen, wind-resistant, drought resistant, and salt tolerant native of south Florida. This zone 10B-11 tree is happiest in the warmest areas of our county along the Gulf. It reaches heights of 40-50 feet, with a similar wing span. UF/IFAS EDIS publication #ENH-766.

Black olive (*Bucida buceras*) does not produce the black olives we know. This wind-resistant zone 10B-11 tree should only be planted in frost-free areas of our county. It displays blue-green leathery leaves, spines along the branches, and can grow to 40-50 feet with a similar spread. UF/IFAS EDIS publication ENH-261.

Other options may include paradise tree (*Simarouba glauca*), Jamaican dogwood (*Piscidia piscipula*), and false mastic (*Sideroxylon foetidissimum*).

Don't hesitate to call our knowledgeable Extension Master Gardeners at (941) 722-4524 for other Florida-friendly alternatives to the carrotwood tree.





Nuisance Armadillo

By Gretchen Lindelof, Master Gardener 2017

The nine-banded armadillo, (*Dasypus novemcinctus*) was first documented in Florida in the 1920s and 30s and is now a nuisance invasive species. Their preference for moist soil makes your beautiful lawn and flowerbeds a target. Their range is from Texas and east throughout the southern states with their northern border defined by cold climates. While not native to Florida, they have expanded their range and are considered naturalized.

Armadillos feed on many insects and related critters, including earthworms, scorpions, spiders, snails, small vertebrates, eggs, army-worms, wasps, flies, beetles, grasshoppers, and ants. They are the only predator of fire ants in North America. Although their voracious appetite is a positive attribute they are also known to undermine structures with their extensive burrowing. They may also disturb lawns and flower beds when foraging for insects. While feeding in the upper layer of the soil, they can dig dozens of holes 3-5 inches wide and 1-3 inches deep in a single evening.

They are solitary creatures; males and females socialize only to mate. Identical quadruplets are raised by their mother without male assistance. (Females have a litter that develops from one egg that splits into four babies.) The young are born in February or March.

Adults weigh from 8-17 pounds and are good runners and swimmers. They can walk underwater across streams or ponds, having the ability to hold their breath for up to six minutes. They can also inflate their stomachs to swim across a body of water. When startled, they will jump straight up which results in many deaths by vehicles. They rest in burrows by day and are active at night. The burrows are 7-8 inches in diameter and can be 15 feet long. With poor eye-sight and hearing, they have developed a keen sense of smell.

Armadillos are not known to carry rabies but have been known to carry other diseases. They are the only known natural

host of leprosy (Hansen's disease), besides mankind. The Florida Department of Health recommends washing your hands after handling an armadillo.

Suggested methods to control armadillos include discouraging them from the site by removing or moving their food source. This can be accomplished in your yard by reducing watering and fertilization to remove the perfect environment for insects and larvae. Another method is making their burrow undesirable by placing a radio next to it or lighting up the burrow at night. Creating barriers such as fencing requires taking into account their ability to burrow and jump. Traditional methods such as poison, chemical repellents or fumigants are currently not registered for use. Relocating is not recommended and as a naturalized species it is illegal to transport and release. Where it is legal, shooting is another control method.

In Florida, the armadillo's positive attributes of eating large amounts of insects including fire ants may not outweigh their destructive behavior of undermining structures and destroying lawns and agricultural crops whilst foraging.

For more information, go to:

www.myfwc.com/wildlifehabitats/profiles/mammals/land/armadillo Florida Fish and Wildlife Conservation Commission, Armadillo: *Dasypus novemcinctus*

<https://edis.ifas.ufl.edu/pdf/UW/UW40800.pdf> University of Florida, Facts about Wildlife Diseases: Leprosy, WEC363

<https://edis.ifas.ufl.edu/uw082> University of Florida, The Nine-Banded Armadillo (*Dasypus novemcinctus*), WEC76

<https://edis.ifas.ufl.edu/uw362> University of Florida, Baiting the Nine-Banded Armadillo, WEC317

There's Something Fishy Going On!

Fish Response to Habitat Changes

By Jim Haupt, Master Gardener 2016

As Hurricane Irma threatened Florida in 2017, thousands of Floridians fled in a northerly direction, out of harm's way. Like humans, fish display a similar behavior when their habitat is endangered. In fact, fish are excellent indicators of the environmental conditions around them.

Known as "fish assemblage," fish have the ability to move to safer waters - providing there are no barriers - when their habitat is endangered by disruptive weather conditions, decreasing oxygen levels, fluctuating temperature, salinity, and sea level rise.

In 2001, before Tropical Storm Gabrielle made landfall, UF researchers made a surprising discovery: 14 tagged blacktip sharks (*Carcharhinus limbatus*) swam to deeper water in Terra Ceia Bay. Similarly, in 2004, as Hurricane Charley approached Charlotte Harbor, another assemblage of tagged blacktip sharks occurred, moving to open water. UF researchers found that the timing of the sharks' movement correlated to decreasing air and water pressure caused by the approaching tropical storm.

Fish located in open water, far out at sea, may not be aware of an approaching hurricane; however, coastal fish sheltered among mangroves and feeding amongst sea grass beds certainly can. Researchers claim that fast moving fish and marine mammals seem to be minimally affected by hurricanes as they can quickly leave the area. Smaller, slower moving fish and other aquatic organisms may not be able to seek safe water in time.

Freshwater and saltwater both hold and release oxygen, making respiration possible. According to UF researchers, "oxygen concentrations in aquatic environments are rarely stable." Fish depend on dissolved oxygenated gas produced by aquatic vegetation. Heavy rains and prolonged periods of cloud cover produce shade that can impede photosynthesis.

When water temperatures increase, fish become more active using up more oxygen than plants produce it. Consequently, this impacts fish assemblage, or leads to a die-off if fish are unable to reach more oxygenated waters.

Fish are cold-blooded creatures, having a body temperature that corresponds to the temperature in their natural habitat. Fish search instinctively for tolerable temperatures when waters become too cold or too warm. Saltwater fish can easily relocate to deeper water where conditions are more tolerable. On the other hand, fish confined to shallower freshwater ponds, lakes, and streams, may not be able to escape.

Estuaries are one of the most productive ecosystems in Florida. About 80% of the crabs, shrimp, fish, and oysters harvested by Florida's commercial fishing industry spend a large part of their life cycle in estuarine water. These aquatic organisms are adapted to salinity variations, but "Florida's estuaries could be heavily impacted by sea-level rise and altered river flow" which ultimately result in higher salinity (Karl Havens 2015). If salinity levels exceed what fish can tolerate, fish will move to deeper water or further up river where the salinity is lower. Abrupt changes in salinity levels, lower amounts of dissolved oxygen levels, and contaminated water can be deadly to fish in rivers, streams, and channels. Fish can be confined to the water where they are hatched when their ability to swim up or downstream is restricted by dams, levees, and erosion.

In Florida, higher temperatures have impacted snook and mangrove snapper assemblages. During the last 10 years, greater numbers of snook are being spotted further north near Cedar Key. Mangrove snapper have also been observed further north along the east and west coasts. UF researchers are now trying to determine to what extent abrupt cold temperatures have on these assemblages.

For more information, visit:

<https://edis.ifas.ufl.edu/pdf/files/SG/SG13800.pdf>

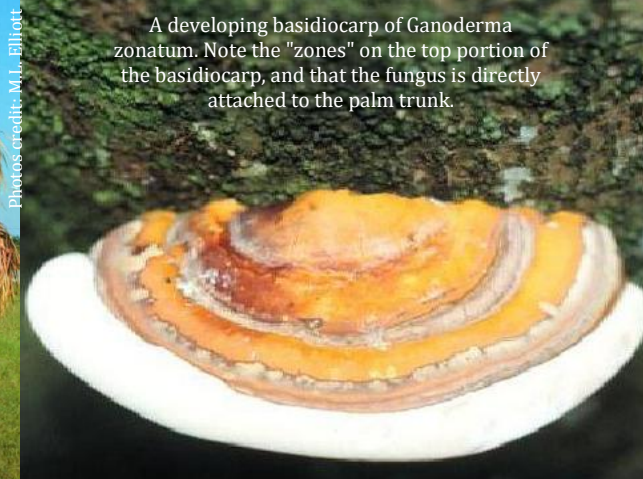
<https://plants.ifas.ufl.edu/manage/overview-of-florida-waters/water-quality/dissolved-oxygen/>

<http://blogs.ifas.ufl.edu/clayco/2018/02/03/understanding-relationship-cold-weather-fish-kills-florida/>

<http://blogs.ifas.ufl.edu/charlotteco/2017/10/11/climate-2/>



Sabal palmetto exhibiting an overall wilted canopy and premature death of the oldest leaves due to *Ganoderma* butt rot.



A developing basidiocarp of *Ganoderma zonatum*. Note the "zones" on the top portion of the basidiocarp, and that the fungus is directly attached to the palm trunk.



The *Phoenix canariensis* on the left is exhibiting premature death of the oldest leaves due to *Ganoderma* butt rot. This contrasts with the healthy palm on the right.

The "Game Changer " in Landscape Palms

By Amy L. Stripe, Master Gardener 2008

Ganoderma butt rot (*Ganoderma zonatum*) is a fatal disease that will impact ANY species of palm. I am quoting our top University of Florida emeritus palm scientist, Dr. Monica Elliott, in the use of this term: "game changer."

What she means is that our ubiquitous Florida landscape ornamental - the palm - is under massive pressure from this indiscriminate disease of palm trees. Thus, palms may be disappearing from our home landscapes.

Ganoderma is a fungal disease, which means it spreads by spores. Symptoms include a more than average wilting of lower fronds. A key sign of the disease is a conk (resembling a mushroom) abutting from the lower third of the trunk. These conks represent the disease *emerging* from the trunk, not entering. This means the palm is already infected and removal of the conks will do nothing to save it.

Immediate removal of the infected palm once the conks are spotted is recommended, as the spores may spread to

other palms in your landscape. You should contain the palm remains in garbage bags.

Unfortunately, if no conks are present, it is only when the palm is removed and cross sections of the trunk can be examined that the disease diagnosis can be made. Rot at the center of the lower cross sections will be present.

Ganoderma persists in the soil for some time, so don't replace a dead palm with another palm. Luckily, in Florida we have many trees and shrubs to plant as alternatives to *Ganoderma* victims.

For more information about *ganoderma* butt rot, go to: <http://edis.ifas.ufl.edu/pp100>.

For recommendations on replacement trees and shrubs, call the Manatee County Extension Master Gardeners at (941) 722-4524 or visit <https://edis.ifas.ufl.edu>.

Yoga Stretches for Gardeners

By Mary Lange, Master Gardener 2017

Have you ever looked at your overgrown lawn or garden and said to yourself: "I'll just spend an hour working on it this morning" - only to find yourself still hard at work four hours later? Your garden may be happy but by the end of the day your body is saying, "What have you done to me?" The next morning you wake up and every muscle aches.

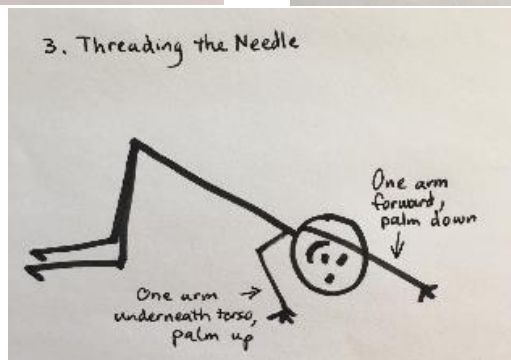
One of the best ways to minimize post-exercise muscle soreness is by stretching both before and after any strenuous activity. Yoga offers several good poses that elongate muscles to help keep them from tightening up. I used to think of yoga as some strange Eastern practice with people twisted into pretzels, listening to gongs, and chanting!

While many yoga classes still incorporate these elements, others cater towards those of us who are less limber, less spiritual, and just want a good stretch.

I spoke with Amy Stickler who teaches restorative yoga at Anna Maria Island Center and was recently voted best yoga instructor on the Island. We discussed yoga poses that would be useful for gardeners and together we came up with the following simple routine:

Shoulders and Arms: To ease biceps, triceps, and rhomboids overworked by too much weeding, and lifting, these three stretches (see drawings on next page) should help:

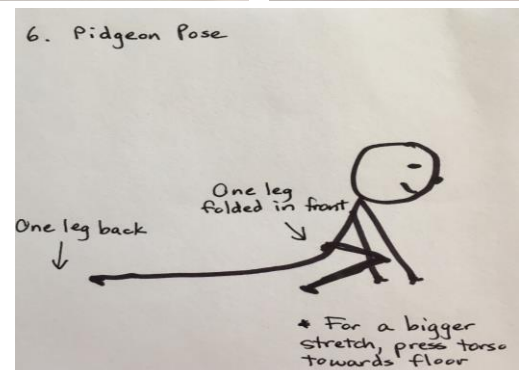
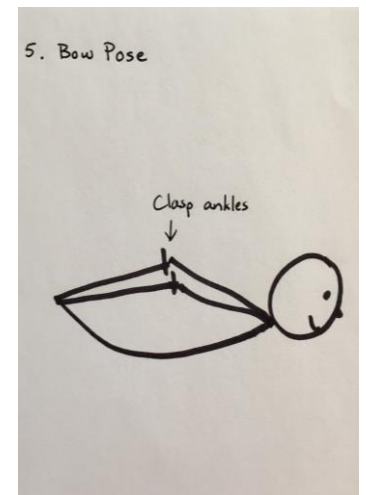
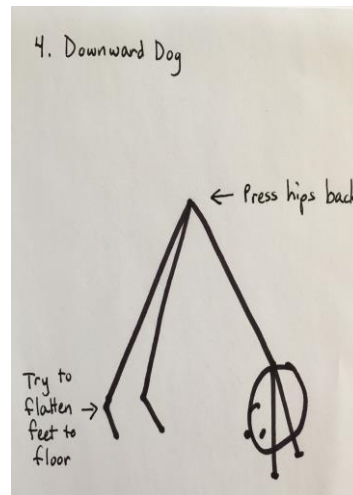
1. **Eagle Arms:** With right arm under left, cross forearms and palms in front of you, pushing out with the shoulders for 20 – 30 seconds. To make it more active, raise the arms up with your breathe in and down as you exhale for 10 – 20 repetitions. Repeat with left arm under right.
2. **Cow's Face:** With right arm behind head and left behind back, clasp hands behind back, using a strap or belt if you can't quite reach. Pull up for 20 - 30 seconds, then down. Repeat with left arm behind head and right arm behind back.
3. **Threading the Needle:** From your knees, gently bend, sliding left hand forward palm down and right arm underneath palm up, resting right shoulder on mat. Hold for 30 seconds. Repeat on other shoulder.



Legs and hips: All the squatting that we do as gardeners is great for building strength in our hamstrings, quadriceps, and gluteal muscles, but boy do we feel it the next day! Try the following stretches, holding each for 30 seconds, to minimize leg and hip stiffness:

4. **Downward Facing Dog:** Feet shoulder length apart, bend forward at the hips, with head between outstretched arms. Press the hips back and try to flatten your feet to floor.
5. **Bow Pose:** Lying on belly, reach back and grab right ankle with right hand and left ankle with left hand. with knees hip-width apart, extend the chest and legs to the sky, pulling the ankles towards your head.
6. **Pigeon Pose:** With left leg straight behind, gently fold right knee placing right ankle in front on mat. Slowly lower your torso down. If this is painful, you can simply sit in a chair with your right ankle on top of your left knee. Repeat on other side.

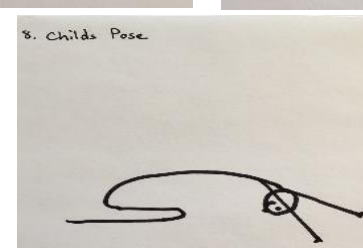
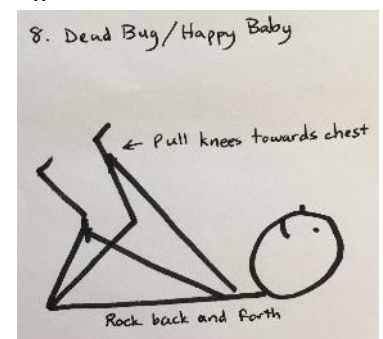
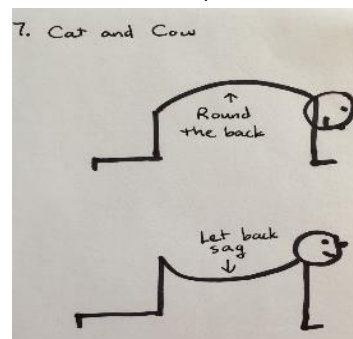
Bend, Stretch, Dig, and Grow!



Back: Lifting heavy bags of garden soil and compost can wreak havoc on your back. If you can't avoid heavy lifting, at least do a few stretches to keep the back muscles as loose as possible.

These yoga poses should help:



7. **Cat and Cow:** From all fours with wrists directly under shoulders and knees directly under hips, exhale and round the back towards the sky (cat). Inhale, arching the back so that the tailbone, chest, and chin are turning upwards (cow). Repeat 10 to 20 times.
8. **Dead Bug/Happy Baby:** Lying on back, knees into chest, grab the back of the thighs, pull elbows towards to floor and hold for 30 seconds. Turn your dead bug into a happy baby by grabbing big toes with fingers, bringing knees towards chest, and slowly rocking side to side.
9. **Child's Pose:** From hands and knees, push hips back to heels, keeping arms outstretched in front. For a right lateral side stretch, you can shift arms to left and hold. For a left lateral side stretch, shift arms to the right. Hold for 30 seconds.



September

CALENDAR OF EVENTS

Photo: Getty Images

Date	Time	Event
1 st Saturday	10:00 a.m.-1:00 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.m.-1:00 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.m.-1:00 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 September 22	9:00-11:00 a.m.	Sharpen Your Garden Tools - Learn how to maintain and sharpen your garden tools. Students may bring their tools for possible demonstration. Time does not permit us to sharpen everyone's tools that are brought to class. Learn the "how to" so that you can sharpen and maintain your tools at home. Presented by John Dawson, Master Gardener. \$5 administrative fee. Register on-line at https://sharpen_your_garden_tools.eventbrite.com or call the Extension Master Gardeners at (941) 722-4524.
Saturday September 22	9:30-11:00 a.m.	Florida-Friendly Landscaping – The Nine Principles - Learn how to help preserve our fragile natural resources by making changes in your landscape and irrigation practices to conserve water, reduce pollution, protect and provide a habitat for wildlife. \$5 administrative fee. Register on-line at https://ffi_the_9_principles.eventbrite.com or call the Extension Master Gardeners at (941) 722-4524.
Tuesday September 25	10:00 a.m.-Noon	Design Your Landscape to Your Site Conditions - Learn about how your soil type, sun exposures, location, drainage, proximity to salt water and soil pH, among other factors effect which plants would best be suited for your landscape. This class satisfies the landscape educational requirement for the Manatee County Outdoor Water Conservation Rebate Program. Register on-line at https://design-your-landscape.eventbrite.com or call Joann (941) 722-4524, ext. 1828.
Thursday September 27	10:00 a.m.-Noon	Basic Irrigation System Operation and Maintenance - Don Adkins, Irrigation Program Assistant, will present the basic in-ground irrigation system operation along with how you can repair your system by yourself. This class satisfies the irrigation educational class requirement for the Manatee County Outdoor Water Conservation Rebate Program. Register on-line at https://irrigation-operation-maintenance.eventbrite.com or call Joann (941) 722-4524, ext. 1828.
 University of Florida IFAS Extension - Manatee County 1303 17 th St. W., Palmetto, FL 34221 Telephone: (941) 722-4524 Web site: http://manatee.ifas.ufl.edu E-mail: ManateeMG@gmail.com 		

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OCT 6

2018 Master Gardener Plant Fair
8AM to 1PM
1303 17th St. W. Palmetto
We've Got a Good Thing Growing!

