



The Cutting Edge

Master Gardener Vision “to be the most trusted resource for horticultural education in Florida”

2266 N. Temple Ave., Starke, 904.966.6299 Email: jtd@ufl.edu

July 2017



Laurie Compton has retired! Our program assistant, Master Gardener, friend and the creator of the Cutting Edge let it be known that she intends to put all the information she has had the pleasure of sharing with others this past decade to use by gardening to her hearts content! She is pictured to the left with her trusty weed ID book poised for action. A familiar pose we became accustomed to over the years. Check out the scheduled workshops on the bottom of page one. Gardening activities for July, August and September are on pages 2, 3 & 4 and a feature on frogs is on pages 5, 6 & 7. And, if you have ever thought about becoming a Master Gardener, take a look at page 8 and give us a call. We'd love to have you!

Happy Gardening!

[Jim DeValerio, Extension Agent](#)

Scheduled Horticultural Workshops

\$5 course materials for all workshops RSVP 1 week prior at 904-966-6299

Succulent Magic with Master Gardener Celina Rohman

August 3, 2017, Bradford Senior Center, 1805 N. Temple Ave. Starke, FL 32091 1:30 to 2:45 PM

Learn how to arrange & care for an attractive, care free dish garden that is yours to keep!

Attend The Next Two Events And You Will Be Ready To Enter A Plant In The Horticultural Show At The Bradford / Union County Fair In March

Ceramic Pot Painting with Artist & Master Gardener Tracy Meadows

August 15, 2017, Bradford County Extension, 2266 North Temple Ave. Starke, FL 32091 9 to 11 AM

Attendees will leave this workshop with a decorative flower pot they created that they can use for the plant they enter into the plant show.

Get Your Plant Ready For The Fair

Saturday, August 26, 2017, Bradford County Extension, 2266 North Temple Ave., 10 to 12 Noon

Learn how to prepare and care for you horticulture entry at this summer plant show. Entries will be on display to provide examples of entries. Attendees will learn how to set up a new **plant or spruce up an old plant to make them “show ready” for a horticultural fair.**

In the Garden: What to Plant in July

Marigold can be planted from March to September. As the heat continues, water annuals when needed to keep the soil evenly moist. Butterfly lily, gladiolus, and society garlic bulbs can be planted during the middle of summer.

Continue planting palms while the rainy season is in full swing. Support large palms with braces for 6–8 months after planting. Nails should not be driven directly into a palm trunk. Start your tomato and Halloween pumpkin seeds!

Cucumbers, peppers, and southern peas, can also be planted now. Watch for insects and disease symptoms. See *Vegetable Gardening in Florida*: http://edis.ifas.ufl.edu/topic_vegetable_gardening



Marigold planted with coleus

In the Garden: What to Do in July

Determine the cause of any lawn problems before taking action. If an insect is the culprit, treat only the affected area. Rule out disease or sprinkler malfunction. Use summer heat to solarize garden soil for fall planting. It takes 4–6 weeks to kill weeds, disease, and nematodes, so start now.

Install an inexpensive rain shutoff device to conserve water and save money. Prepare for hurricane season by checking trees for damaged or weak branches and pruning if needed. Hire an ISA-certified arborist. Inspect for caterpillars on trees and shrubs. Large trees can normally withstand caterpillar feeding, but specimen shrubs may need treatment if damage is extensive.

Source: http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/



Soil solarizing

Wildlife Calendar July

- Shorebird migration starts in mid-July, peaking in August.
- Swallow-tailed kites begin gathering as do purple martins and tree swallows in preparation for migrating south for the winter.
- Look out for nesting shorebirds, and keep your vehicles and dogs from disturbing them.
- Later this month, young alligators and crocodiles will begin to hatch.
- Mosquitoes and chiggers are abundant, so watch out while you're camping.
- Baby raccoons, foxes, armadillos, possums, and bobcats leave dens and begin following parents
- Deer mating season in the everglades



Florida Bog Frog

Did You Know? July 22, 1982 First Florida bog frog discovered in a panhandle wetland. Bog frogs are uncommon in Florida, found only in a few acidic streams in Walton, Santa Rosa, and Okaloosa counties in the panhandle.

They are fully protected in Florida. They will call from spring to summer with a call which sounds like a chuckle -- a series of low-pitched single clucking calls, noticeably slower at the end of the call.

Source: http://www.wec.ufl.edu/extension/wildlife_info/frogstoads/rana_okaloosae.php

In the Garden: What to Plant in August

Annuals: The hottest days of summer limit planting now to heat-tolerant vinca, gaillardia, bulbine, and coleus. *See Annuals:* http://edis.ifas.ufl.edu/topic_annual_landscape_plants

Bulbs: Aztec lily, butterfly lily, walking iris, and spider lily can be planted any time of the year, even late summer. *See Bulbs for Florida:* http://edis.ifas.ufl.edu/topic_bulbous_flowers

Herbs: Herbs that can be planted from plants (not seeds) include bay laurel, ginger, Mexican tarragon, and rosemary. *See Herbs:* http://edis.ifas.ufl.edu/topic_herbs

Vegetables: Many cool-season crops can be started now as well as a final crop of warm-season vegetables such as lima beans, cucumbers, eggplant, and peppers. Tomatoes can also be planted for a fall garden.



Vinca (credit Tyler Jones)

In the Garden: What to Do in August

Lawns: Determine the cause of any damage to the lawn so the proper remedy is used. Damage from insects, disease, or irrigation failure can produce similar symptoms. Use a sharp mower blade and only remove a third of the grass blade to reduce stress on the lawn.

Palms: Check older palm fronds for yellowing as it may indicate a magnesium or potassium deficiency. Apply an appropriate palm fertilizer.

Poinsettias: Pinch back poinsettias and mums before the end of the month to allow time for buds to form for winter bloom.

Ornamental plants: Rapid growth and leaching rains may result in nutrient deficiencies in some plants.

Annuals and Perennials: Remove spent blooms, cut back, and fertilize flowering annuals and perennials to extend the season into the fall months. http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/



**Magnesium deficient
Phoenix palm**

Wildlife Calendar August

- Blue-winged and green-winged teal arrive to winter on Florida lakes and wetlands.
- Yellow warbler migration begins.
- Two-year old black bear cubs will wean from their mothers.
- Short-tailed shrews will begin a second round of breeding for the year.
- Sea turtles are hatching so watch where you're walking on the beach.
- Thousands of great southern white butterflies can be seen migrating through coastal areas.
- Corals along the Keys spawn at the full moon



Blue winged teal

Source: http://www.wec.ufl.edu/extension/wildlife_info/happenings/august.php

In the Garden: What to Plant in September

Bedding plants to try include ageratum, celosia, zinnia, and wax begonia for color into fall. Bulbs add color, texture, and pattern to the garden with the many varieties of elephant's ear (*Alocasia* spp.), calla, narcissus, and zephyr lily. *See Bulbs for Florida:*

http://edis.ifas.ufl.edu/topic_bulbous_flowers

Herbs: Plant Mexican tarragon, mint, rosemary, and basil. *See Herbs:*

http://edis.ifas.ufl.edu/topic_herbs

Vegetables: It is time to establish strawberry plants. Other veggies to plant now are broccoli, carrot, cabbage, collards, and many others. *See Vegetable Gardening in Florida:* *http://edis.ifas.ufl.edu/topic_vegetable_gardening*



Zephyr or rain lily
source:
http://nassau.ifas.ufl.edu/horticulture/gardentalk/flowers.html

In the Garden: What to Do in September

Continue to monitor the lawn for signs of insect damage. Fall armyworms, chinch bugs, mole crickets, and sod webworms are still active this month. Divide and replant perennials and bulbs that have grown too large or need rejuvenation. Add organic matter to new planting areas and monitor water needs during establishment. The last fertilizer application should be around the middle or end of September in north

Florida. Choose a fertilizer with no or very little phosphorus unless a soil test indicates a need for it. Garden for hummingbirds: Plant firebush, firespike, russelia, and other plants to supply nectar for visiting hummingbirds. Vegetable garden: Prepare the fall vegetable garden if not done in August. Using transplants from your local garden center will get the garden off to a fast start, but seeds offer more varieties to choose from.

Source: http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/



Fall Army Worm

Wildlife Calendar September

- Get feeders ready for returning birds
- Hawk migration begins at St. Joseph Peninsula in Gulf County.
- Bald eagles return to nest sites and begin courtship.
- Manatees start to gather in freshwater springs near power plants
- Start listening for Spadefoot toads after heavy rains.
- Atlantic sturgeon begin fall migration from the Suwannee and Apalachicola Rivers to the Gulf of Mexico.
- Blue crabs migrate from the shallow panhandle coast to deeper water for the winter.

Source: http://www.wec.ufl.edu/extension/wildlife_info/happenings/september.php



Bald Eagles

Frogs In Your Future?

If you go outside at night near a wetland this time of year in Florida you are sure to hear grunting, chirping or barking sounds. Some are quite loud! Almost scary! What make those sounds? Is it an alligator? Quite possibly, it is one of the 33 species of frogs and toads that live in Florida. If you are interested in the sounds frogs make, go to the webpage listed near the descriptions of different kinds of frogs featured in this article where you can find links to listen to their recorded calls.

The most numerous (more than 4000 species) and widely distributed order of amphibians, frogs and toads, are also known as anurans. Typically, toads have warty skin and short legs for hopping, and frogs have relatively smooth skin and long legs for leaping. Many species advertise their presence by vocalizations throughout the year, while others are rarely heard at times other than their breeding season. While some toads are adapted to dry environments most anurans have moist skin, making them prone to desiccation and generally confines them to wet or moist habitats.

Varying greatly in size, one of the smallest frogs, *Eleutherodactylus iberia*, is only 10 mm long, while one of the largest frogs, the goliath frog (*Conraua goliath*), can reach up to a foot in length. Some anurans produce toxins known as bufotoxins or alkaloids. Most members of the family Bufonidae (toads) produce bufotoxins which are released through paratoid glands located at the back of the head. These bufotoxins may help the animal escape from predators if released when the toad is caught.

The most common method of reproduction is via aquatic larvae known as tadpoles. Tadpoles hatch from eggs laid in, near, or above water, and most are herbivorous, feeding on plants. After a period of time the tadpole metamorphoses into an small frog or toad.

Anurans are declining globally due to many different factors. The number one factor of anuran decline is habitat loss. The skin of an anuran is extremely permeable and absorbent in order to efficiently exchange gases and water. Due to this, it readily takes up pollutants or chemicals present in the water and soil.

A non-native species, Cuban treefrogs eat other frogs such as the native squirrel treefrogs.

Anurans play a very important role in the ecosystem. They feed on insects and invertebrates, including those that may damage crops. Mosquitoes and ants are common food sources. Anurans also provide a valuable food source for wading birds, snakes, hawks, fish, and other aquatic organisms. They are also an indicator of ecosystem health due to their sensitivity to pollutions in their environment.

Examples of frogs and toads found in Bradford County:

The Oak toad is tan to reddish brown, dark brown, or gray; back is marked with dark spots and usually with an obvious, light center line. Skin is warty.. The undersides of the feet are often bright orange. Call is a high pitched bird-like chirp. Oak toads eat ants, beetles, centipedes, spiders, and other invertebrates. They are found throughout Florida, except the lower Keys, usually burrowed in the soil or under cover objects in areas with sandy soils, including sandhills, pine-oak forests, pine flatwoods, and scrubs.



Oak toad

Sources: <http://edis.ifas.ufl.edu/uw210> and http://www.wec.ufl.edu/extension/wildlife_info/frogstoads/



Green treefrog

© Barry Manser - Photo

Tree frogs are well adapted to life in trees. Their toes have adhesive disks that allow them to climb easily on bark or twigs. The green treefrog is usually bright green, but its color may vary to yellow, dull green, or slate grey when it is hidden or inactive. A yellow or white stripe that varies in length, may extend farther along the body on one side than on the other, or may be lacking entirely. Because they often appear or are heard during rain storms, folklore and legends regard these frogs to be "weather prophets". They live in wet prairies, cypress swamps, lakes and stream edges, near floating vegetation, and occasionally in brackish waters. Green treefrogs are often found on window sills of houses or buildings at night, where they seek insects attracted by lights.

The Southern leopard frog is greenish-tan to brown, with raised ridges down each side of the body that extend to the groin. Back is marked with plentiful, dark spots. Upper lip is light-colored; lower lip is marked with dark spots. Eardrum is marked with a distinctive light dot in the center. Snout is distinctly pointed. Like all "true frogs," they have large eardrums and webbed hind feet. Its length is 2–3½ inches but can reach 5 inches. This frog is commonly found in shallow, freshwater habitats and sometimes in slightly brackish marshes. Its voice is a short, chuckle-like, guttural trill.



Southern leopard frog



Cuban treefrog

© Sharon Rotacco

The largest treefrog in North America is the Cuban treefrog, however **it is not native to North America**. It was introduced to south Florida from the Caribbean and has continued to spread throughout Florida. Adults can grow to 5 inches length. They have enormous toe pads and bumpy skin on the back. Skin on top of head is fused to skull. Cuban treefrogs can be highly variable in color -- from pale tan/pale green without any markings to dark green or brown with an even darker color pattern on the back and legs. Sometimes they almost look white when they are inactive or cold.

Many people have reported that after they first noticed a Cuban treefrog in their yard, they noticed the gradual disappearance of the other frogs, toads and even lizards. That's because Cuban treefrogs are voracious eaters -- and unfortunately they eat Florida's native frogs, toads, and lizards, in addition to insects and spiders. In fact, Cuban treefrogs are SO successful at taking over habitat and eating Florida's native species that they are considered an invasive exotic (non-native) species -- they are a threat to the biodiversity of Florida's native ecosystems and wildlife.

Due to the destructive effects Cuban treefrogs have on native species of amphibians and reptiles, many biologists recommend that Cuban treefrogs be euthanized/killed. That's harsh, but true. We recommend a humane method of euthanasia for amphibians. Just make SURE the frog you have is a Cuban treefrog before euthanizing it. Read more before taking action at: http://www.wec.ufl.edu/extension/wildlife_info/frogtoads/osteopilus_septentrionalis.php

The Marine toad (a.k.a. Giant Toad or Cane Toad) is the largest of the toads found in Florida. The Marine Toad is not native to the United States. It was originally released in the U.S. in sugar cane fields to help control “white grubs,” larvae of pest Scarabaeidae. *Rhinella marina* (formerly *Bufo marinus*) became established in southern Florida after they were introduced to south Florida in the 50s and 60s. They are a highly predacious exotic species that will eat all types of native frogs and toads. This species is skilled at locating all types of food, they have even been known to eat pet food. CAUTION: When this non-native species is threatened or handled, it secretes a highly toxic milky substance from its large parotoid glands at the back of its head, behind the ears. This secretion can burn your eyes, may irritate your skin, and can kill cats and dogs if they ingest the secretion.



Marine toad



Squirrel treefrog

The squirrel treefrog is highly variable in color and pattern, and may be colored green, brown, or green and brown, and may be spotted or plain. Sometimes a dark spot or bar may appear between its eyes. A light stripe might also occur on the sides of its body. Its common name, "Squirrel Treefrog," comes from its scolding, squirrel-like raspy call, often emitted during rain storms.

The squirrel treefrog prefers habitats that are moist, shady, and where insects are abundant. Squirrel treefrogs are well adapted to life in an arboreal environment. Their toes have adhesive disks that allow them to climb easily on bark or twigs. Squirrel treefrogs are usually found in wet

hammocks, marshes, mixed hardwood swamps, and cypress swamps.

The Bullfrog is distinguished from other frogs by the large external eardrum under each eye and the fully webbed hind feet except for the last joint of the longest toe. The Bullfrog is the largest native frog in North America, reaching a maximum of 8 inches in body length. The Bullfrog is found down through central Florida in ponds, lakes and slow-moving streams. This nocturnal species swallows young birds, snakes, crayfish and other frogs.



Bullfrog



Greenhouse frog

The greenhouse frog was introduced from the Caribbean Islands. The brilliant scarlet eyes are set apart from the bronzy brown back. Either spots or two prominent clear brown stripes are located on the back. It feeds on small invertebrates. The Greenhouse Frog received its name because it prefers to live in moist areas like greenhouses and gardens. It prefers terrestrial habitats in northern Florida where it can burrow in damp leaf litter in hardwood hammocks and turkey oak-long leaf pine sandhills. The call is a repetitive musical chirp.

http://www.wec.ufl.edu/extension/wildlife_info/frogstoads/

We Are Accepting Applications for the 2017 Master Gardener Course

The 2017 class is a Bradford, Clay, St. Johns County Extension team effort.

Classes, except the orientation and graduation, will be held at the in St. Johns County or Clay County Extension Offices with many Extension educator instructors.

APPLICATIONS MUST BE SUBMITTED BY JULY 12

Pick up a brochure for more information or call 904-966-6299 to apply.

What is the Master Gardener Program?

Since 1979, the Master Gardener Program has provided gardeners with extensive education in home horticultural principles. Participants who complete the program are certified as a Master Gardener by the UF/IFAS Extension. Master Gardeners are required to volunteer 75 hours within the first year following the training.

Working with the Extension Agent, Master Gardeners provide volunteer service through gardening activities. This service could include answering gardening questions, conducting plant clinics, working with school gardens, & other activities that promote environmentally friendly horticulture practices.

Program for 2017

Classes are on Wednesdays 9:30 to 3:30

7/12: Application Deadline

7/26: Orientation - Bradford County Extension Office

Classes in St Johns County Extension

8/2: Plant Propagation, Ecosystems & Plant Communities, Florida Friendly Landscaping

8/9: Right Plant, Right Place, Florida Friendly Landscape Design, Botany

8/16: Vegetable Gardening, Fruit in Home Landscape, Vegetable. Pest ID

8/23: Plant Pathology, Trees, Tree Pruning

9/6: Invasive Species, Entomology, Integrated Pest Management, Mosquitoes, Scavenger Hunt

Classes in Clay County Extension

9/13: Soil Science & Fertilizer, Nematodes, Compost

9/20: Turf, Turf Pests, Irrigation, Weeds

9/27: Household Pests, Landscape for Wildlife, Information Searching, Nuisance Wildlife, Firewise Landscaping

10/4: Pesticide & Exam, Customer Service

10/11: Graduation Field Trip- UF/IFAS Horticulture, Fifiel Hall, Gainesville

Master Gardeners are required to volunteer 75 hours within the first year following their training, and 35 hours per year thereafter to remain an active Master Gardener.

Cost for the 10 week course is \$100.00 per person.

Enrollment is limited so call 904-966-6299 today and learn how you can become a Bradford County Master Gardener

The University of Florida and the Board of Bradford County Commissioners are Equal Opportunity Institutions