



ISSUE XLIV

January-March, 2014

## Inside this Issue

<b>Announcements</b> Upcoming Events	2
<b>The Good</b> New Plants for 2014	3
<b>The Bad</b> Cuban Tree Frog	5
<b>The Bugglies</b> Bed Bugs	7
<b>Fresh from Florida</b> Citrus	9
<b>The Urban Forest</b> Underutilized trees	12
<b>Garden Calendar</b> January - March	13
<b>Discover Natural Florida</b> Restoring Coastal Plants	16
<b>Master Gardener Spotlight</b> Agricultural Museum	18

*The Foundation for The Gator Nation*  
An Equal Opportunity Institution

## From the MG Desk...

*Ruth Micieli, Master Gardener  
Coordinator*



Wow! It's 2014 already! Where does the time go?? We would like to thank all our Master Gardener Volunteers for all their help and dedication to our office, programs and projects. It was a challenging year in 2013 with several volunteers being ill, traveling, and our part-timers dealing with Hurricane Sandy up north!

We hope 2014 will find everyone happy, healthy, safe and sound throughout the year!

**Q**• My plants froze during the last cold spell and look awful! Can I cut them back now to make them look better?

**A**• It is better for the plant if you leave the damaged parts on it. If you cut back now and we get another freeze, the remaining portions of the plant will become damaged as well. That can result in a dead plant. The time to remove dead plant parts is when new buds begin to sprout, then remove dead plant parts above the bud.

**Q**• I am new to the area and would like to know the best type of grass to plant in my yard. I live in near by Palm Coast. When I moved in the lawn was not in very good shape. Had an insect problem and weeds. I will be looking to plant seed in a month or so and want some ideas of when to

*(Continued on page 19)*



FLAGLER COUNTY EXTENSION SERVICE &  
UF/IFAS FLORIDA MASTER GARDENERS

Flagler County Master Gardeners  
Flagler County Extension Service  
150 Sawgrass Road

Phone: (386) 437-7464

Fax: (386) 586-2102

E-mail:

[mgardener@flaglercounty.org](mailto:mgardener@flaglercounty.org)

BE SURE TO VISIT THE FLAGLER COUNTY  
EXTENSION WEBSITE AT

[WWW.FLAGLERCOUNTY.ORG](http://WWW.FLAGLERCOUNTY.ORG)

OR

[WWW.SOLUTIONSFORYOURLIFE.COM](http://WWW.SOLUTIONSFORYOURLIFE.COM)

**UF/IFAS Florida Master Gardener Newsletter Writers:**

David Tibbetts, Florida Master Gardener,  
UF/IFAS Flagler County

**Newsletter Advisors:**

Ruth Micieli, Horticulture Program Assistant and  
Master Gardener Coordinator,  
UF/IFAS Flagler County

Sharon A. Treen, County Extension Director and  
Family & Consumer Sciences Agent  
UF/IFAS Flagler County

## **Upcoming Programs at the Flagler County Extension Service and Around the County:**

### **Joy of Bonsai– January 17-19, 2014 Sponsored by Kawa Bonsai Society**

Contact Louise Leister at [mysecretbonsai@me.com](mailto:mysecretbonsai@me.com) or call 386-569-1639 for program fee information and pre-registration.

### **STAYING HEALTHY IN THE GARDENS- TALK AND WALK/RUN**

Washington Oaks Gardens State Park **Date:** Saturday, January 25, 2014 1pm-4pm

**Description:** Join us for unique health and fitness activity at the park! The program begins with a talk by Wendy Lynch, Family & Consumer Sciences Agent for the Putnam County Extension. She will explain the ins and outs of staying fit and maintaining a healthy lifestyle through your everyday eating choices. Learn how to eat foods that are good for you and also delicious!

Reservations are not required, but registration will take place the day of the event. Participants should consult with a medical professional before beginning an exercise routine. **Fees:** Regular park entry fees apply **Contact:** Contact park for more information.

### **Citrus Harvest Festival at Washington Oaks State Park– February 8, 2014 10am-3pm**

**Description:** The historical Gardens within the Park contain a citrus grove with several varieties of oranges, grapefruit, tangerines, lemons and limes, providing the perfect environment for you to enhance your knowledge about citrus. Programs throughout the day on growing and caring for citrus, cooking with citrus demonstration at 12pm and Park Ranger guided tour of the historic groves at 11am and 2pm! “Home-made” baked goods featuring citrus themed items, and hot and cold beverages will be on sale. And the popular Second Saturday Sweetheart Plant Sale will feature citrus plants for your patio/lanai.



# The Good...

<http://www.fngla.org/community-programs/florida-garden-select/new.aspx>

## New Plants

**Introduction.** The Florida Nursery, Growers and Landscape Association (FNGLA, [www.fngla.org](http://www.fngla.org)) each year introduces new plants that are recommended for inclusion in Florida gardens. For 2013, the following plants were selected: Center Stripe Agave (*Agave lophantha* 'Splendida'), Giant Elephant Ear (*Alocasia x portidora*), Orange Marmalade Crossandra (*Crossandra infundibuliformis* 'Orange Marmalade'), Yellow Trumpet Tree (*Handroanthus umbellatus*), Wendy's Wish Salvia (*Salvia* 'Wendy's Wish') and Dwarf Fakahatchee Grass (*Tripsacum floridanum*). A short description and photo of each follows.

**Center Strip Agave** (*Agave lophantha* 'Splendida'). Hardiness Zone: 7-10. Height and spread: 1' tall X 18"-24" wide. Classification: Cactus. Landscape use: low-maintenance gardens, cactus and succulent gardens, specimen, container, low ground cover. Characteristics: This hardy agave has proven to be slow and easy to grow and is ideal for temperate climates. The dark green rosettes are highlighted with a creamy-gold center stripe down each leaf; brightest in spring and early summer. In loose soils, *Agave lophantha* spreads vigorously via underground rhizomes. The sword-like green leaves are stiff, glossy and most varieties sport a prominent bright green stripe. The Century Plant grows solitary or as a clumping succulent rosette which will flower only once, then die-off leaving other rosettes to take its place. An unbranched flower spike with small greenish-yellow flowers is typical for late Spring or early summer and will reach 12' tall. It's native to South Texas and into Mexico. It prefers well-drained soil and full sun to part shade and needs little water once established in the landscape.



Center Strip Agave

**Giant Elephant Ear** (*Alocasia x portidora*). Hardiness zone: 7b-8-9-10. Height and spread: 8' tall, tapers at base. Classification: tropical plant. Landscape use: specimen, container, architectural element. Characteristics: Impressive in a large pot, or as a focal point in the garden, this *Alocasia* is a hybrid variety cross and has broad, heavily scalloped leaves that are held high on strong muscular stems. It is also known as *Alocasia* 'Portora' and grows quickly into a 5-6' tall plant during the first season alone and gives a strong, tropical presence. The stems are upright so it makes an ideal "thriller" in a mixed container.



Giant Elephant Ear



Orange Marmalade Crossandra

Plant in rich, moist soil and place in full sun for optimum growth.

**Orange Marmalade Crossandra** (*Crossandra infundibuliformis* 'Orange Marmalade'), Hardiness zone: 9-10-11. Height and spread: 1'-3' tall X 1'-2' wide. Landscape use: borders, mass

# The Good...(cont.)

planting, edging as a “filler,” color splash. Characteristics: A great recent introduction to the Florida landscape, Orange Marmalade is a reliable perennial in sunny or partially-shaded Florida gardens. When other annuals have tired, Orange Marmalade is still going strong! It produces clusters of frilly orange flowers all season and shiny, dark green leaves. It blooms in all warm months of the year. For best year-to-year performance, protect from hard frost and freeze. A sterile hybrid, it holds its flower petals longer than the older seed-produced varieties.

**Yellow Trumpet Tree** (*Handroanthus umbellatus*). Hardiness zone: 8b-9-10-11. Height and spread: 15’ tall, up to 40’. Classification: tropical, flowering tree. Landscape use: specimen, buffer strip, container, street tree. Characteristics: An ideal patio, specimen, or lawn tree, this small-stature, flowering, ever-green trees has silvery foliage and deeply furrowed, silvery bark. The Yellow Trumpet/Tabebuia Tree thrives in dry weather, exhibits a profuse and breathtaking display of blooms which emerge in late Spring and sometimes again in the fall. The leaves often drop just before the flowers appear, adding to the visual intensity of the tree’s color: brilliant two to three-inch-long, golden yellow, trumpet-shaped blooms.



Yellow Trumpet Tree

**Wendy’s Wish Salvia** (*Salvia ‘Wendy’s Wish’*). Hardiness zone: 8a-9-10-11. Height and spread: 3’-4’ tall X 2’-3’ wide.

Classification: herbaceous perennial. Landscape use: massed beds, patio plants, containers. Characteristics: Wendy’s Wish has show-stopping flaming magenta tubular blooms accented by its dusky, mauve calyx which gives this salvia extreme depth of character. Its incredible blooms appear Spring through Fall making it an ideal addition to most Florida landscapes. Mid-dark green colored leaves have serrated margins along dark maroon stems. Wendy’s Wish is more than just one of the most colorful salvia on the market. Proceeds from the sale of this spectacular plant are donated to the Make-A-Wish Foundation Australia as directed by its Australian developer, Wendy Smith.



Wendy’s Wish Salvia

**Dwarf Fakahatchee Grass** (*Tripsacum floridanum*). Hardiness zone: 8-9-10-11. Height and spread: 2’-3’ tall and wide. Classification: herbaceous perennial grass. Landscape use: mass, ground cover, low maintenance garden, ideal for stabilizing slopes and banks. Characteristics: This small, dense, clump-forming ground cover has long, glossy light green leaves. Its light-weight blades catch the breeze providing movement to the garden. Also known as Florida gamagrass, it has inconspicuous yellow flowers which appear spring to fall. It is perfect for a sunny to part sun location, ;prefers damp rich soils, but is tolerant of most planting sites. A South Florida native plant, it can be found along roadsides and pine wood areas of the state.



Dwarf Fakahatchee Grass



# The Bad...

[http://www.wec.ufl.edu/extension/wildlife\\_info/frogstoads/osteopilus\\_septentrionalis.php](http://www.wec.ufl.edu/extension/wildlife_info/frogstoads/osteopilus_septentrionalis.php)

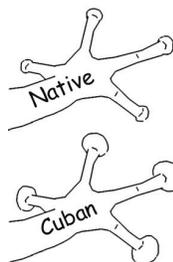
## Cuban Tree Frog (*Osteopilus septentrionalis*)

**Distribution/Size:** The largest treefrog in North America is the Cuban treefrog (1.5 to 5 inches in body length), however it is not native to North America. This species was introduced to southern Florida from the Caribbean and has continued to spread in Florida. Cuban treefrogs have been documented as far north as Cedar Key on the Gulf Coast, Jacksonville on the Atlantic Coast, and the Orlando area in mid-Florida, and they are expanding their range.



**Description:** 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.

### The distinguishing characteristics of the Cuban treefrog are:



- Size of the adults (up to 5 inches in body length, much larger than native Florida treefrogs);
- Enormous toe pads (larger than toepads of native treefrogs in Florida);
- Bumpy skin on the back, like skin of a toad; and 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.

**Habitat:** Native to Cuba, the Cayman Islands, and the Bahamas. Introduced throughout the Caribbean, in Hawaii, and in Florida. Possible isolated population in southeastern Texas.

Found throughout peninsular Florida, the Keys, and isolated areas of the panhandle, on buildings and in trees in urbanized and natural areas near breeding sites. Breeds in any shallow, fish-free water, including bottomland and floodplain forests and swamps, cypress domes, marshes, wet flatwoods, manmade ponds, ditches, birdbaths, buckets, and swimming pools. Often moves to breeding sites in large numbers after early-season rains.

**Diet:** Beetles, roaches, spiders, other small invertebrates; also small frogs, lizards, and snakes.



Cuban treefrogs can change color.

# The Bad...(cont.)

**Reproduction:** March to October; lays eggs in a surface film (100-1,000 eggs at a time). Call is a hoarse *mraaaak!* Cuban treefrogs will lay eggs in any body of standing water -- from a small bucket to a fish pond, even in a chlorinated swimming pool.



© Leanna Powers

**Call:** If you are bothered by the calling of frogs during breeding season, first buy ear plugs. Then turn out all outdoor lights around your house. Lights attract insects, and insects attract frogs. If the frogs don't move elsewhere after several nights, then try erecting a light as far as possible from your house -- hopefully the frogs will go over to that light to feed on insects, etc. There is no frog repellent or chemical to use to keep them away from your house. If the above methods don't work, buy better ear plugs and run a fan in your bedroom to create "white noise" to help drown out the calling of frogs.

## What You Can Do for Florida

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.



### A humane method for euthanizing amphibians:

To euthanize a Cuban Treefrog, hold the frog firmly in your hand and apply a 1 inch bead of benzocaine ointment along the back of the frog. Benzocaine ointment is a topical anesthetic (a numbing agent) used to treat skin pain (e.g., from sunburn) and itching as well as toothaches and sore throats. There are a variety of name brand and generic versions that are available over-the-counter in a tube or spray. If you are able to, using a gloved finger spread the ointment out on the frog's back. Alternatively, you could use a benzocaine spray. Once the ointment or spray is applied, place the frog in a plastic grocery bag or a sealable sandwich bag for 15-20 minutes so that the benzocaine has a chance to render the frog unconscious (be sure to seal the bag or tie it closed). After the benzocaine has anesthetized the frog, place the bag in a freezer overnight to ensure that the frog is dead and then throw it out in your trash. If you are unable to apply benzocaine to the frog, you can simply put it in a plastic bag, seal or tie the bag shut, then place it in the freezer overnight--dispose of the bag and the frog in the trash the next day. Do not throw a bagged frog into the trash without euthanizing it first. Remember, Cuban Treefrogs have a noxious skin secretion so be sure to wash your hands thoroughly after you handle the frog, even if you wear gloves or use a plastic bag.

Be sure to wash your hands after handling any frog or toad. They all secrete a slimy film to protect their skin, but the secretions of some species, like the Cuban treefrog, can irritate the skin and eyes of some people.

For additional photos and identifying tips, please visit Dr. Steve Johnson's Cuban Treefrog site: [http://ufwildlife.ifas.ufl.edu/cuban\\_treefrog\\_inFL.shtml](http://ufwildlife.ifas.ufl.edu/cuban_treefrog_inFL.shtml)



# and the Bugglies

## Bed Bugs

by: Ruth Micieli, UF/IFAS Flagler  
County Master Gardener Coordinator

Bed bugs are blood feeding insects that feed on humans, usually during night hours when people are sleeping. Since we do not often observe bed bugs biting, it is easy to mistake the itchy, swollen areas on the skin for other insect bites. While the bites can become infected from scratching, bed bugs are not known to transmit any diseases; however, they are still a nuisance and serious pest problem.

Despite their name, bed bugs can infest areas other than beds. They tend to locate in cracks and crevices, such as behind baseboards, wall outlets, and wallpaper; between bed joints, slats, and dresser drawers; and along mattress seams and in linens and clothes. Most bed bug infestations occur in the home, along with hotels, dormitories, and cruise ships.

Bed bugs easily transfer from one site to another through infested belongings like clothes, suitcases, second-hand furniture, beds, and bedding.

Adult bed bugs can survive 6-7 months without feeding, and have been known to live in abandoned houses for 1 year. This, combined with the fact that females lay 2-5 eggs a day (and 200-500 eggs in her lifetime), means that bed bug infestations will not go away without proper treatment.



Bed bug *Cimex lectularius*  
Gary Alpert

### Detection

Bed bugs are difficult to detect because of their elusive behavior, but here are some key things to look for:

The bugs themselves, as well as light-brown, molted skins.

Itchy welts (can be mistaken for flea or insect bites).

Small spots of blood on sheets and mattress covers.

Dark spotting and staining with a sweetish foul odor around sites where they are located.



Bed bug *Cimex lectularius*  
Gary Alpert

### Control

There are several ways to get rid of bed bugs, though combining methods usually gives the best result. Since the bugs often hide in small cracks, treatment can be difficult, making it worth hiring a pest control specialist. Even if you hire a professional to inspect and treat your home, there are important steps for you to take as well.

### Removal

Physically remove as many bed bugs as possible:

Vacuum all carpets and visible bed bugs on furniture. Seal the vacuum bag in a ziploc and throw away. Steam clean carpets to kill eggs and bugs that have been missed.

Place bed posts in glass dishes. Bed bugs cannot climb smooth surfaces and this will prevent further infestation in the mattress, as long as the bed or bedding doesn't touch the walls or floor.

Wash all bedding and clothes with soap and borax additive, dry at a high temperature. Dry clean pillows and drapery.



Bed bug *Cimex lectularius*  
Gary Alpert

"Bugs are not going to inherit the earth. They own it now. So we might as well make peace with the landlord." ~ Thomas Eisner

## and the Bugglies (cont.)

Reduce clutter, and empty out contents of drawers in preparation for treatment.

### Treatment

Sometimes treatment will require the use of insecticides. Dusts are preferred over sprays for bed bug treatments because dusts transfer from surfaces easier, are lighter, and penetrate further than sprays. Insecticides are used and classified according to four categories: Mattress, Crack, and Crevice; Indoor Surface; Indoor Space; and Fumigation. Methods for non-chemical treatment involve physical removal and heat. In addition to the removal guidelines outlined above, mattresses, pillows, and box springs can be put in bed bug proof encasements. Make sure the labels say “bite proof” as well as “escape proof.”

Bed bugs begin to die at temperatures above 113°F, so using high temperature when laundering or steaming infested items is another way for non-chemical control. Pest control companies also offer heat treatment for bed bugs. Methods can involve using polystyrene board insulation around items to be treated and heating these boxes to the appropriate temperatures with space heaters, or using commercial heaters to heat the entire room and its contents.

Bed bugs are not often removed with one treatment, and continued inspections and treatment follow ups are key for eliminating an infestation.

### Prevention

Awareness of bed bugs and their habits is the most important way to avoid infestations. When traveling or exchanging belongings, know what to look for to assure bed bugs are not present.

Be wary of second hand beds, bedding, and furniture, and examine closely before bringing them into the home.

Examine sheets, bed, and headboard in hotels and travel accommodations.

Inspect your luggage when you return from a trip. Leave belongings in a hot car for 24 hours and run clothing through the dryer.

Visit the Florida Bed Bug Workgroup website ([http://solutionsforyourlife.ufl.edu/bed\\_bugs/index.shtml](http://solutionsforyourlife.ufl.edu/bed_bugs/index.shtml)) to view articles, videos, and links about bed bugs and their prevention and treatment.

Adapted and excerpted from:

P. Koehler, R.M. Pereira, et al, Bed Bugs and Blood-Sucking Conenose (ENY-227), Entomology and Nematology Department (rev. 11/2008).

M. Potter, "Your Guide to Bed Bugs: Understanding and Control" (pdf), Pest Control Technology (08/2004).

Images from: <http://www.invasive.org/browse/subthumb.cfm?sub=7979>



Bed bug *Cimex lectularius*  
Whitney Cranshaw



Bed bug *Cimex lectularius*  
Whitney Cranshaw

"Bugs are not going to inherit the earth. They own it now. So we might as well make peace with the landlord." ~ Thomas Eisner



# Fresh from Florida

Adapted from :  
 Citrus Culture in the Home  
 Landscape  
<http://edis.ifas.ufl.edu/hs132>

## • Florida Citrus

- One of the satisfactions that nearly all homeowners in Florida can have is to pick citrus fruits from their own trees. The varieties that may be grown vary with the size of the home grounds and with the climatic conditions of each location. Citrus is a subtropical fruit tree and is limited to areas that do not regularly experience freezing temperatures. Like most plants in the landscape, regular maintenance of irrigation, fertilization, weed control, and pest management procedures must be followed to obtain good growth and fruit production. Many types of citrus can be grown by the home gardener in Florida. Careful consideration should be given to site selection, choice of variety, nutrition, and cold protection.
- Citrus fruits are classified into different groups by the citrus industry according to their characteristics and use. Sweet oranges and grapefruits are distinctive types that are accepted as a regular part of the diet and consumed as juice or eaten in some form practically every day by many people. Specialty fruits (tangerines and tangerine hybrids) are excellent for holiday or dessert uses. Acid fruits (lemons, limes, and others with high citric acid content) are used as thirst-quenching drinks, garnishes on the dinner table, and ingredients for refreshing pies and delicious cakes.
- Selection. Selecting a variety should involve both personal and practical considerations. Consider varieties you prefer to eat. Rootstocks are important since they vary in soil adaptation and can influence fruit quality. However, rootstocks are not usually a choice at retail nurseries and garden centers since they are grafted to industry standard rootstocks. Other factors to consider include differences among varieties for freeze sensitivity, demand for cross-pollination, and pest-protection needs.
- Freeze sensitivity. Frequency of freezing temperatures should be important in historically cold areas. If freezes are expected every few years, more cold-tender citrus types should be avoided and only the most hardy should be chosen. In these situations, late season variety fruit would be frozen before maturing.

<b><u>Citrus Varieties for North/Central Florida</u></b>	
<i>Variety</i>	<i>Harvest Season</i>
<u>Orange</u>	
Navel	Early (Oct-Jan)
Hamlin Orange	Early (Oct-Jan)
Parson Brown Orange	Early Mid (Oct-Jan)
Pineapple Orange	Midseason (Dec-Feb)
Midsweet Orange	Midseason (Jan-Mar)
<u>Grapefruit</u>	
Marsh (White flesh)	Midseason (Nov-May)
Duncan (White flesh)	Midseason (Dec-May)
Ruby Red (Red flesh)	Midseason (Nov-May)
Thompson (Pink flesh)	Midseason (Dec-May)
Pink Marsh (Pink flesh)	Midseason (Dec-May)
Star Ruby (Red flesh)	Midseason (Dec-May)
Rio Red (Red flesh)	Midseason (Nov-May)
Flame (Red flesh)	Midseason (Nov-May)
<u>Specialty</u>	
Satsuma	Very early (Sept-Nov)
Robinson	Very early (Oct-Dec)
Fallglo	Very early (Oct-Nov)
Sunburst Tangerine	Early (Nov-Dec)
Orlando Tangelo	Midseason (Nov-Jan)
Minneola Tangelo (Honeybell)	Midseason (Dec-Feb)
Temple Tangor	Late Mid (Jan-Mar)
Ponkan	Midseason (Dec-Jan)
Dancy	Midseason (Dec-Jan)
Murcott	Late Mid (Jan-Mar)
<u>Acid</u>	
Persian Lime	June-Sept
Lemon	July-Dec
Calamondin	Nov-Apr
Kumquat	Nov-Apr
Limequat	Nov-Mar

- Cross-pollination. Some varieties (mandarins) produce very little fruit unless a compatible tree is planted nearby to provide cross-pollination.
- Pest protection. Some varieties are susceptible to certain insects and diseases requiring frequent spraying.
- Citrus trees tolerate light shade but will be more productive if grown in full sunlight. They should not be planted so close together that they cut off light to the lower branches of neighboring trees. For home plantings, the spacing recommended should be a minimum of 15 feet between trees. Consider proximity to buildings, as citrus will grow rapidly into large trees when receiving proper care. Septic tanks and drain fields should be avoided, due to possible clogging of drains.
- Planting. Vigorous container grown nursery trees should be planted. Container trees can be planted any time of year and they will be more likely to live and thrive. They should be set at the same soil line as they grew in the nursery row or container and be provided with a basin to hold water around each tree. This basin should hold five to ten gallons of water and should be filled to soak the root area of the young tree as described below. Some of the soil should be removed from the root mass when the tree is planted. This will expose many of the outer roots and allow them to grow quickly into the sand/soil new planting area provided.
- Watering. Water is the first requirement of the young tree, and it will be used up rapidly by trees with a good head of foliage, which container-grown trees should have. If a garden hose reaches the trees easily, let it run in each basin for ten or fifteen minutes twice each week, long enough to fill the basin, for the first month. Thereafter, watering can be less frequent, but whenever new growth is observed to wilt in mid-afternoon, fill the basins again. If a hose cannot be used, supply about eight to ten gallons at each watering. Need for irrigation will be less as the trees increase their root systems each year, but some occasions for watering may be expected through the life of the tree.
- Fertilizer. Fertilization should start when swelling buds indicate that growth is beginning or three weeks after planting. During the first year, apply fertilizer about every six weeks from February through October. An 8-8-8 analysis with other macro and micronutrients is a good general fertilizer for citrus trees and may be used at rates from a half cupful for the first application to one-and-one-half pints in September, increasing the quantity steadily all season. In succeeding years, a good rule of thumb is to spread the fertilizer as many feet beyond the dripline of the canopy as the age of the tree in years (up to ten). Fertilizer near or in contact with the trunk should be avoided. For the home landscape, it is convenient to remember that one pint of mixed fertilizer weighs about one pound. As a precaution against the possible development of micronutrient deficiencies, a routine application of nutritional foliar spray of manganese and zinc on an annual basis will not harm trees, and while it may be helpful, is not necessary for reasonable health and production in most cases. An annual nutritional spray may be beneficial on alkaline (high pH) soils.
- Weed control. Often, citrus trees are planted in the midst of an expansive green lawn. Complete weed control is not essential, but weeds and sod grass should be removed from the area under the tree canopy. Above all, make sure all weeds are removed from the area adjacent to the trunk of the tree. Such weeds could promote injury due to a soil-borne fungus known as foot rot, which can seriously debilitate or even kill the tree. Mulches are not recommended around citrus trees, but if trees are located in a cultivated plant bed where mulch is used, it should be kept at least a foot away from tree trunks.

<http://floridajuice.com/florida-citrus>

## Arugula Salad with Tangerines, Almonds and Shaved Parmesan

For Dressing:

- 1/4 cup 100 % tangerine juice
- 3 tablespoons vegetable oil
- 1 tablespoon honey
- 1 tablespoon rice vinegar
- 1/2 teaspoon finely grated tangerine zest
- 1/2 teaspoon Dijon mustard

For Salad:

- 1/4 cup golden raisins
- 3 tablespoons tangerine juice
- 4 tangerines, peeled and sliced into rounds 1/8-inch thick
- 2 tablespoons honey
- 4 cups loosely packed baby arugula
- 1/4 small red onion, sliced into wedges 1/8-inch thick
- 2 ounces shaved Parmesan
- 2 tablespoon toasted sliced almonds



For the dressing, in a small bowl whisk together 1/4 cup tangerine juice, vegetable oil, 1 tablespoon honey, vinegar, tangerine zest and mustard. Season with salt and pepper to taste; set aside.

For the salad, in a small microwave-safe bowl combine raisins and 3 tablespoons tangerine juice. Microwave on HIGH 20 to 30 seconds or until the mixture begins to bubble. Let stand 10 minutes; drain.

Arrange 1 sliced tangerine around each of 4 salad plates; drizzle the slices with 2 tablespoons honey. Set aside. In a large bowl combine arugula, onion and raisins. Drizzle with 1/4 cup of the dressing; toss to coat. Divide salad evenly in the center of each plate. Top with shaved Parmesan and sprinkle with almonds. Serve with remaining dressing.

## Florida Grapefruit and Smoked Salmon Tower with Pickled Red Onions

Ingredients:

- 2 cups Florida orange juice
- 1 cup water
- 1 cup champagne vinegar
- 3 tablespoons sugar
- 3 tablespoons pickling spice
- 1 red onion, sliced, separated into rings
- 1 bunch frisée, cleaned
- 2 Florida grapefruit, peeled, cut into 1/4-inch slices
- 12 ounces smoked salmon
- 1/4 cup extra virgin olive oil
- Salt to taste
- Pepper to taste



Combine orange juice, water, vinegar, sugar and pickling spice in small saucepan; bring to a boil. Turn off heat and add onion rings; remove from stove and cool to room temperature. Remove onion rings; reserve pickling liquid.

Place bed of frisée on serving plates; top with one grapefruit slice. Place layer of onion rings on top of grapefruit slice, then layer of salmon.

Repeat layers with grapefruit slices, onion rings and salmon. Garnish with frisée, if desired.

Remove 1/3 cup reserved pickling liquid; whisk in olive oil. Drizzle mixture over grapefruit towers. Season with salt and pepper to taste.



## Underutilized and New Disease-Resistant Trees for Florida: Devil's Walkingstick

**Introduction.** There are many candidate trees for providing diversity in the urban forest. In addition to replacing some of our more over-utilized trees, these trees can provide other benefits, such as reducing the impact of pests and disease, minimizing maintenance, improving aesthetics and increasing the wildlife value of urban forests.

Devil's Walkingstick, (*Aralia spinosa*): Anyone who has accidentally brushed against a Devil's Walkingstick does not soon forget the experience, for this tall, spindly native shrub or small tree is armed up and down its thin trunk with extremely sharp, treacherous spines. Even the huge, much-divided leaves, which can reach four feet long and three feet wide, are armed with pointed prickles, ready to scratch anyone who comes within range. But when placed in an area where they can do no harm, Devil's Walkingstick adds a tropical effect to a mixed shrubbery border or other naturalized setting, where the large leaves can easily spread out to their full length atop the slender, 10 to 15-foot-tall trunks. Under ideal conditions, these small trees can even reach 25 to 30 feet tall.



© 2003 Floridata.com

**Use and Management**. The young leaves of Devil's Walkingstick are bronze-colored, green in summer but return to a bronze/red mottled with some yellow before dropping in fall.

As striking as the thorns are the large, summertime panicles of bloom, 12 to 18 inches in diameter and up to three feet long, held above the crown of leaves for about 10 days and gently draping outward under the weight of the flower head. Following these blooms is the production of a great quantity of dark, purple-black, juicy berries which are toxic to humans but exceptionally popular with birds.

Devil's Walkingstick is quite easy to grow and literally thrives on neglect. Plants should be grown in full sun or partial shade on any almost any kind of soil, acid or alkaline, moist or dry, as long as it is well-drained, and it is frequently found along stream banks and road sides.

Devil's Walkingstick grows rapidly and usually spreads by sprouts produced from its base, eventually creating an impenetrable thicket if left to its own devices. While the temptation would be to use this plant as a barrier planting, the effect of the thorned, naked trunks during wintertime is quite harsh and perhaps unattractive to some people.

The plant can be trained into a small, single or multi-stemmed tree and used in a shrubbery border to add height and interest, or left to create a thicket. It is not normally available in nurseries. It can be transplanted during winter and used as a specimen in an out-of-the-way place where it is sure to capture the curiosity of many visitors, particularly when it is in flower. Propagation is by seed, sucker-division, or root cuttings, and plants are easily transplanted.



**Pests and Diseases**. No pests or diseases are of major concern.

# Garden Calendar

*Taken from Survival Guide to Gardening in Florida's Zone 9A*

## January

### General

If it does not rain, irrigate landscape/lawn areas that need watering every ten to fourteen days. Put down approximately one quarter to one half inch of water each time.

### Lawn

Apply a weed control, if weeds are present. Refer to the lawn section of the Survival Guide to Gardening in Flagler County or contact the local extension office for specific recommendations and reference on weed control.

The grass is usually looking a little brown now from the lack of nutrients and the freezing weather. Do not be in a big hurry to fertilize. Lawn grasses are dormant and the fertilizer will help the weeds more than the grass. It is better to wait for the warmer weather in March to begin fertilizing, usually after you start mowing.

### Food Garden

Cold hardy vegetables to plant now include beets, broccoli, Brussels sprouts, cabbage, carrots, cauliflower, celery, Chinese cabbage, mustard, onions, English peas, potatoes, radishes, and turnips.



Paperwhites

### Fruit

This is a good time to spray deciduous fruit trees with horticultural oil to smother scale and other insects that might be over-wintering on the bark and twigs.

### Landscape

Cover sensitive plants during nights when the temperature is expected to drop below 35°. Be sure to take off coverings in the morning to ensure plants are exposed to sunlight.

Do not prune off dead branches that are frost damaged. This dead matter acts as insulation during later freezes. Wait until early March or when new growth emerges to determine where to prune back.

This is a good time to transplant deciduous and evergreen plants in the landscape (not palms). Keep transplants out of the ground for as short a time as possible. Keep the roots moist, not soaking wet. Do not fertilize plants now—wait until March. Do not prune except to remove diseased or dead material.

Annuals to plant now include calendula, pansies, petunias, snapdragons, delphiniums, larkspur, dianthus, viola, and foxgloves.

Check your trees for mistletoe, a parasitic plant that will harm them. If you see mistletoe, cut off the entire affected branch.

Narcissus (Paperwhites) and Jonquils should be blooming now. Enjoy the winter colors!

## February

### General

If it doesn't rain, water dry areas every 10 - 14 days. Put down approximately one half inch of water each time. Calibrate water sprinkler distribution system with cans or other suitable containers to ensure that one half inch is distributed evenly over the whole lawn.

### Lawn

If weeds are present and you have not applied a weed control within the previous 12 months, you may do so at the beginning of this month. This is also a good time to apply crabgrass preventative. Make sure you reapply in 10 -12 weeks. Refer to the lawn section of the [Survival Guide to Gardening in Flagler County](#) or the local extension office for specific information regarding proper weed control methods.

### Food Garden

Prepare spring garden area by turning over soil and adding organic matter. Have a pH test done before planting.

Plant warm season vegetables indoors in flats so they are ready to plant outdoors in late March.

Vegetables that can be planted this month: beets, broccoli, Brussels sprouts, cabbage, carrots, cauliflower, celery, Chinese cabbage, collards, lettuce, mustard, green onions, and potatoes.

### Fruit

Prune grape plants and leafless vines this month.

Fertilize deciduous fruit trees and bushes including citrus, peaches, nectarines, plums, figs, blackberries, grapes, persimmons, blueberries, and pears. Use slow-release fertilizer on all of these except blueberries. For blueberries, use azalea/camellia fertilizer; apply at half the rate and repeat next month. Blueberries respond best to frequent, light fertilization.

Start checking lemon/lime trees for ripeness.

### Landscape

Spring flower seeds can be started in flats to ready for a late March planting outdoors.

Do not prune winter damaged plants yet. Wait until March when the chance of frost is essentially over.

Prune back roses this month. Roses can be cut back to the main canes. Refer to the section in Survival Guide... or your local extension office for more information on care and maintenance. Be sure to pull back mulch from the bases of each plant to prevent disease.

Crape Myrtle can be pruned this month. *Do not* "top" them. Prune off old seed heads and remove any crossing branches.

You can still transplant shrubs through the middle of the month.

Annuals to plant this month include baby's breath, calendulas, carnations, dianthus, dusty miller, Mar-



Camelia

## March

### General

If no rain, water areas that need it approximately every 7 - 10 days, putting down one quarter to one half inch of water each time. Do you have a rain monitor on your irrigation system? Check system for broken, misdirected, blocked, and plugged heads. Our driest months, April and May, are ahead.

### Lawn

Apply fertilizer (15-0-15) with approximately 40% of the nitrogen in slow release form.

### Food Garden

Most gardens will produce better if the soil is amended with compost (organic matter). Have your soil pH tested at the Flagler County Extension Service to determine acid/alkaline level before you plant.

Warm season vegetables can be planted: snap beans, pole beans, cantaloupe, sweet corn, cucumbers, eggplant, peppers, squash, tomatoes, and watermelons.

### Fruit

Most West Indian and Guatemalan avocado varieties should be checked for ripeness through June.

Valencia oranges should be checked for ripeness starting this month.

### Landscape

Annuals and perennials to be planted: ageratum, alyssum, amaranthus, balsam, begonia, browallia, celosia, cosmos, coreopsis, dusty miller, gaillardia, gazania, geranium, impatiens, Marguerite daisies, marigold, pentas, Persian violet, phlox, rudbeckia, salvia, sweet William, thunbergia, torenia, verbena, vinca, and zinnia.

Fertilize palm trees with slow release palm fertilizer with 4% magnesium.

Fertilize hibiscus, azaleas, and poinsettias with complete fertilizer for acid-loving plants.

Many plants can be pruned back this month. After danger of frost is over, generally mid- to end of March, prune off any dead areas, old seedheads and spent flowers. As a general rule of thumb, trees and shrubs should not be trimmed more than one-third the total size of the plant to maintain desired size and shape.

Poinsettias can be pruned once colored bracts begin to wilt. Cut back to approximately 12 - 18 inches above the soil.

Azaleas can be pruned after blooming.



Azalea



# Discover Natural Florida

## Restoring Coastal Plains

Dr. Maia McGuire, UF/IFAS Extension Agent, Sea Grant/Marine Science

### Sea oats

Sea oats is a grass that grows on southern coastal dunes throughout the Gulf and Atlantic coastal region of the southeastern US. It is named for and recognized by its seed head, which resembles that of terrestrial oats. Sea oats flower in the spring and summer; seed heads mature in the fall and persist on the plant. The leaves are narrow and pale green and can be up to 24 inches in length; the plants can reach heights of up to 6 feet.

Sea oats plants can reproduce by producing seeds, but under natural conditions seed germination is not high, and seedling survival is low. Sea oats can also reproduce using underground stems, or rhizomes, which allow the plant to create “daughter plants” and spread locally. Once established, sea oats can grow laterally up to four feet per year, and can produce seeds in the second or third year after planting.



Sea oats are considered to be important dune plants for sand stabilization; they also act as a food source and cover for birds and some small mammals, including the endangered Anastasia beach mouse. Once established, sea oats resist wind erosion, and the leaves act to trap blowing sand, resulting in accumulation of sand in the dunes. However, waves are capable of washing away sea oats plants, especially during storm events. Sea oats are adapted for life in the dunes—they have high drought and soil salt tolerance and grow well in full sun. The plants produce massive root systems, but do not survive in fine sediments or wet soils.



Sea oats are protected by Florida law. State statute 161.242 states that “it is unlawful for any purpose to cut, harvest, remove, or eradicate any of the grass commonly known as sea oats or *Uniola paniculata*... from any public land or from any private land without consent of the owner of such land or person having lawful possession thereof.”

Dr. Michael Kane, environmental horticulture professor at the University of Florida, has been studying sea oats for many years. Because sea oats are so difficult to grow from seeds, he and his co-workers have been working on growing the plants by using a technique called micropropagation. Essentially, they are growing the plants from small samples of shoot buds. Because sea oats from different parts of the state are genetically different, part of the re-

*(Continued on page 17)*

search involves determining what factors affect the survival of the different genotypes.

In November, 2011, Dr. Kane brought about 1000 plants from his lab in Gainesville to Matanzas High School. Students in Wendy Vidor's agriculture class maintained the plants and collected growth data from them. In March 2012, the students planted their sea oats in the dunes at Beverly Beach as part of an effort to help accumulate sand at the base of the dunes.

DEP permits are required for large-scale dune restoration/planting efforts, but small projects with no irrigation may not require a permit. Dune plantings should be done between November 1 and April 30 in order to avoid sea turtle nesting season. Sea oats plugs should be planted about 18" apart in a hole that is at least 6-8" deep. A spoonful of 10:10:10 fertilizer (or other balanced fertilizer) can be added at the time of planting. It is critical that new sea oats plants receive adequate water during the first month following planting. This can be accomplished by using hydrated absorbent gel in the hole prior to planting the sea oats, or by watering every 2-3 days (unless it rains).





# Master Gardener Spotlight

## Florida Agricultural Museum

*Liz Rourke, Flagler County Master Gardener*

Florida Agriculture Museum is a “Living History” museum, established in 1997 to preserve Florida’s agricultural heritage. The museum consists of historical buildings gathered for various part of Florida and relocated to a 450 acre location in what was then “rural” Flagler County.

The museums buildings include the Whidden-Clark homestead, which was originally built in 1880 as a cattle camp by the Whidden family. It was sold to the Clark family who used it as a home from 1900 until 1997 when it was moved to the museum. In addition to the Homestead, there are five structures from the 1885-1889 Strawn Citrus complex in DeLeon Springs. Two of these are workers duplexes, they are furnished as they would have been in the old days with dry sinks and wood stoves and oil lamps, the each have an “out house” in the backyard.

Our Master Gardener project began in 2008. We were asked to develop kitchen gardens with vegetables planted and used by the rural farm families. Meals in those days were most one pot stews. These were cooked over open fires or on iron potbelly stoves.

Our challenge was to find seeds for vegetables that were available in this part of the country in 1880. The Baker Creek Heirloom Seed catalog was a great resource. The catalog gives descriptions of the vegetables, when and where it was developed and the seasons or climate where it does the best.



Some of the vegetables we grow in the kitchen gardens are pumpkins, cabbage, collard and mustard greens, okra, pole beans, hot peppers, cow peas, sweet potatoes and corn. Corn was mostly used as corn meal. Summer vegetables also included crook-neck squash, tomatoes, and watermelons. The seasonal gardens behind the Clark house and the Strawn farm worker duplex are similar, however the Strawn buildings reflect a more modern era, we have been able to expand the vegetable list to include broccoli, carrots, beets, cucumbers, and eggplant. Preserving vegetables for the winter was important. Field peas and pole beans were dried; pumpkins and cabbage were carefully stored in cool spring houses

or root cellars.

The ladies of the 1800’s used herbs in a variety of ways. Lavender was used to “sweeten” the beds. Chamomile and Lemon Balm were used for tea, Feverfew was used for tooth aches or headaches, Bergamot (bee Balm) was used for tea and as flavoring in stew. Others included Thyme, Rosemary, and Peppermint. All of these were valued by the women of this time period and often traded among themselves or obtained from traveling peddlers. We have planted many of these in the herb section of our kitchen garden at the Clark house.

The demonstration gardens enhance the visitor’s experience at each of these locations. Many of our visitors are fascinated with the gardens and often relate them gardens maintained by their grandparents. School groups are equally intrigued; many of them have never seen food growing. Historical interpreters talk about the vegetables and how they were used. In the summer the museum runs a camp for young people where they spend the day taking care of the animals, helping in the garden and often enjoying a lunch that contains something currently growing and ready for harvest. This past fall a school group was visiting when we were digging peanuts at the duplex garden. The children were fascinated and peanuts were soon washed and being sampled by all.

(Continued from page 1)

plant and type of grass to use.

**A:** Lawns are a challenge around here if you are unfamiliar with our environment and grass types. The University of Florida/IFAS has 2 fact sheets that will better explain what we are able to grow here (ENH-979 BMP's for the Home Lawn and ENH-04 Selecting a Turfgrass for Florida Lawns). We are in USDA hardiness zone 9A and follow the recommendations for north Florida region.

The only seed you will be able to apply at this time of year is Ryegrass. It is an annual, cool season grass that will die off in late spring. At that point the warm season turfgrasses will start to grow and fill in (with proper maintenance).

**Q:** There are lots of Robins in my yard. Is that a problem?

**A:** Not at all! Robins are migratory birds that come to visit Florida every winter, along with several other species. They are eating earthworms and insects, causing no harm. Enjoy them while they are here!

**American Robin**  
*Turdus migratorius*



Map by Cornell Lab of Ornithology  
Range data by NatureServe



## Bird Foods

With a little planning, your landscape can include some favorite foods for our feathered friends.

Sunflower and safflower seeds are a big favorite for many birds. Offer them in traditional tube-style feeders to attract small birds like chickadees, titmice, and finches, or use a hopper-style feeder for larger birds like blue jays and grosbeaks.



You can also add a suet feeder to help feed woodpeckers, nuthatches, and wrens.

Many birds feed on the berries and fruits of native plants like holly, American beautyberry, and red mulberry, so try planting a few of these.

To keep hummingbirds happy, also include nectar-producing plants like firebush and shrimp plant.

### UF Resources For Gardeners

- Solutions For Your Life  
<http://solutionsforyourlife.com>
- UF/IFAS Publications (EDIS)  
<http://edis.ifas.ufl.edu/>
- Florida Yards & Neighborhoods  
<http://fyn.ifas.ufl.edu>
- UF Environmental Horticulture Dept.  
<http://hort.ufl.edu/>
- Florida Master Gardener Program  
<http://mastergardener.ifas.ufl.edu>
- Florida-friendly Landscaping  
<http://www.floridayards.org/>

For more information, contact your county Extension office or visit [GardeninginaMinute.com](http://GardeninginaMinute.com).

*Gardening in a Minute is a production of the University of Florida's Environmental Horticulture Department, IFAS Extension, and WUFT-FM.*