



# Commercial Clippings

FOR THE NORTHEAST FLORIDA GREEN INDUSTRY  
*Serving Clay, Duval, and Nassau County*

February 2014/March 2014

Issue 30, Page 1



## In this Issue:

Herbicides	pg 1
Upcoming Classes	pg 2-3
Landscape Pests	pg 4
Termites	pg 5
Rose Virus	pg 6
Landscape Pests	pg 7
Correct Planting	pg 8
Tree Diseases	pg 9
Contact Us	pg 8



## Planning for Pre-emergence Herbicide Applications

By Erin Harlow

When is the best time to start putting down pre-emergence herbicide is a question we often get asked as Extension Agents. It is helpful to understand how a pre-emergence herbicide works to answer this question. Pre-emergence herbicides will only affect weeds that are germinating and not weeds that have already emerged. Many are root inhibitors and affect root development of new weeds. Often because turf is coming out of dormancy at the same time that pre-emergence herbicides are applied it can stunt root development of turf as well. If you pull up turf that had a pre-emergence herbicide applied the roots may appear stubby on the ends. This is where the root encountered the herbicide. It doesn't normally hurt the turf just slows down the spring green up.

I like to monitor the soil temperatures, which is easy to do if you visit the Florida Automated Weather Network (FAWN) at <http://fawn.ifas.ufl.edu/>. Once soil temperatures reach a consistent 65°F then turf will begin spring green-up. This is normally the time that weeds begin to grow as well. When applying a pre-emergence herbicide if the day temperatures reach 65°F-70°F for several consecutive days then this is another good indication that weeds will begin to germinate soon and you should apply your pre-emergence herbicide. In North Florida this normally falls around March 1st. You don't have to wait to apply your material until the temperatures reach these optimal degrees because you may miss the window if you have several accounts. Pre-emergence herbicide is a wonderful tool and one that is worth the extra cost whether you are managing beds or turf. You can more effectively manage summer annual weeds such as crabgrass, chamberbitter, and old world diamond flower with one or two applications of pre-emergence herbicide and have some very happy customers. For more information on pre-emergence herbicide use in ornamentals please visit <http://edis.ifas.ufl.edu/wg058> or in turf visit <http://edis.ifas.ufl.edu/ep141>.



Clubbed turf roots from pre-emergent herbicide. Photo credit: UGA

**All classes require pre-registration** and will be held at the Duval County Extension Office, 1010 N McDuff Ave, Jacksonville, FL 32254 unless otherwise stated. To register visit us at <http://duval.ifas.ufl.edu> and click Commercial Horticulture/Calendar or call Becky Davidson at 904-255-7450. You can now pay online with a credit card.

<p><b>February 13, 2014 and February 14, 2014</b>  <b>Thursday and Friday</b>  <b>(Duval Fairgrounds)</b></p>	<p><b>Jacksonville Landscape Show</b>          More information or pre-registration visit <a href="http://nefn gla.org/">http://nefn gla.org/</a>. On-site registration will be allowed. Located at the Jacksonville Fairgrounds.           Seminar topics will include ornamental galls, getting the most out of your products, landscape CSI, herbicides, and grades and standards.           CEUs will include ISA, FL and GA pesticide, FNGLA, and GCSAA</p>
<p><b>February 18, 2014</b>  <b>Tuesday</b>  <b>(Clay)</b>  <b>(904-284-6355 to register)</b></p>	<p><b>Best Management Practices for the Protection of Water Resources by the Green Industries (GI-BMPs)</b>           8:30 am – 3:30 pm          \$25.00          4 CEUS: 2 CORE &amp; 2 L&amp;O, 2 LCLM, 2 LL&amp;O, 2 O&amp;T or 2 Pvt, 4 LA CEUs, Technician Training hours also available.</p>
<p><b>February 25, 2014</b>  <b>Tuesday</b>  <b>(Duval)</b></p>	<p>To register, download the brochure, or for more information about the workshop, please visit: <a href="http://duval.ifas.ufl.edu/GI-BMPs.shtml">http://duval.ifas.ufl.edu/GI-BMPs.shtml</a>.</p>
<p><b>June 6, 2014</b>  <b>Friday</b>  <b>(Duval)</b></p>	<p>This is the pre-requisite class for the Urban Fertilizer License. Everyone who works with fertilizers for-hire is required to have this license by Jan 1, 2014, even if you are licensed in another category including pest control operators. You will complete your GI-BMP test the day of the class, if you pass, you can then apply to get your Limited Urban Fertilizer License through the State of Florida.</p>
<p><b>February 19, 2014</b>  <b>Wednesday</b>  <b>(Duval)</b></p>	<p><b>Florida Turfgrass Association Regional Seminar</b>           More information at <a href="http://www.ftga.org/">http://www.ftga.org/</a> or call 800-882-6721 to register. GCSAA and FL Pesticide CEUs available</p>
<p><b>February 28, 2014</b>  <b>Friday</b>  <b>(Duval)</b></p>	<p><b>Branching Out Professional Landscape Series: Florida's Champion Tree Program &amp; Winter Landscape Recovery</b>           8:30 am - 9:30 am          FREE           1 ISA, 1 FNGLA, 1 L&amp;O, 1 LCLM, 1 LL&amp;O, 1 O&amp;T, 1 PVT, 1 ROW, 1 Natl Areas applied for</p>
<p><b>March 4, 2014</b>  <b>Tuesday</b>  <b>(Duval)</b></p>	<p><b>Aquatic Pesticide Exam Review</b>          8:30 am - 11:30 am, optional Aquatic and CORE exam to follow          \$5.00           To register to take the exams after the class please visit <a href="https://pesticideexam.ifas.ufl.edu/">https://pesticideexam.ifas.ufl.edu/</a> and register for a voucher. You must bring a voucher number with you to take your exams.</p>
<p><b>March 15, 2014</b>  <b>Saturday</b>  <b>(Duval)</b></p>	<p><b>ISA Certified Arborist Exam</b>          8:00am - 12:00 pm, Exam          To register for the exam go to: <a href="http://www.isa-arbor.com/certification/becomeCertified/index.aspx">http://www.isa-arbor.com/certification/becomeCertified/index.aspx</a> Registration deadline February 27th.</p>

**All classes require pre-registration** and will be held at the Duval County Extension Office, 1010 N McDuff Ave, Jacksonville, FL 32254 unless otherwise stated. To register visit us at <http://duval.ifas.ufl.edu> and click Commercial Horticulture/Calendar or call Becky Davidson at 904-255-7450. You can now pay online with a credit card.

<p><b>March 28, 2014</b>  <b>Friday</b>  <b>(Duval)</b></p>	<p><b>Branching Out Professional Landscape Series: Tree Risk Assessment</b></p> <p>8:30 am - 9:30 am          FREE</p> <p>1 ISA, 1 FNGLA, 1 L&amp;O, 1 LCLM, 1 LL&amp;O, 1 O&amp;T, 1 PVT, 1 ROW, 1 Natl Areas applied for</p>
<p><b>March 7, 2014</b>  <b>Friday</b>  <b>(Duval)</b></p> <p><b>May 21, 2014</b>  <b>Wednesday</b>  <b>(Clay)</b></p> <p><b>May 29, 2014</b>  <b>Thursday</b>  <b>(Yulee)</b></p> <p><b>August 19, 2014</b>  <b>Tuesday</b>  <b>(Duval)</b></p>	<p><b>Limited Commercial Landscape Maintenance Workshop</b></p> <p>8:15 am - 3:00 pm - Full Day; 8:15 am – 12:00 pm - Half Day          \$30.00 for either full or half day</p> <p>6 CEUs Total: 3 CORE &amp; 3 LCLM, 3 LL&amp;O, or 3 L&amp;O          Lunch included, textbooks not included          Optional LCLM or LL&amp;O Exam at 3:00 pm          You must have all required paperwork to take the exam.</p> <p>To register, download the brochure, or for more information about the exam or books, please visit: <a href="http://duval.ifas.ufl.edu/LCLM2012.shtml">http://duval.ifas.ufl.edu/LCLM2012.shtml</a>.</p> <p>This class is designed for people who do not have their license yet. If you are re-certifying your LCLM or LL&amp;O you should consider attending a different class that offers those CEUs. There are many to choose from throughout the year.</p>
<p><b>April 10, 2014</b>  <b>Thursday</b>  <b>(Duval)</b></p>	<p><b>Right-of-Way Pesticide Exam Review</b></p> <p>8:30 am - 11:30 am, optional right-of-way and CORE exam to follow          \$5.00</p> <p>To register to take the exams after the class please visit <a href="https://pesticideexam.ifas.ufl.edu/">https://pesticideexam.ifas.ufl.edu/</a> and register for a voucher. You must bring a voucher number with you to take your exams.</p>
<p><b>April 25, 2014</b>  <b>Friday</b>  <b>(Duval)</b></p>	<p><b>Branching Out Professional Landscape Series: Large Tree Pruning</b></p> <p>8:30 am - 9:30 am          FREE</p> <p>1 ISA, 1 FNGLA, 1 L&amp;O, 1 LCLM, 1 LL&amp;O, 1 O&amp;T, 1 PVT, 1 ROW, 1 Natl Areas applied for</p>
<p><b>May 15, 2014</b>  <b>Thursday</b>  <b>(Yulee)</b></p>	<p><b>Advanced Landscape Training</b></p> <p>8:00 am - 12:00 pm          \$20.00</p> <p>4 CEUs will be provided. L&amp;O, LCLM, LL&amp;O, O&amp;T, ROW, Natl Areas CEUs have been applied for.          Topics will include Invasive plant identification and removal techniques.</p>

## Early Spring Snow?

By Amy Morie

With cold weather soon to be behind us, the insect world will be waking up to tender spring growth. One foe fond of leafy green growth may be among the first to arrive – so get to know the signs of this spring ‘snow’ in the landscape.

The pest in question has piercing-sucking mouthparts to zap plants vigor. It is best known for dining on certain flowering plants like Magnolia and Oleander and prefers to feed on leaves. It typically hides out on the underside

of leaves, so it takes good scouting skills to spot it before it gets out of hand. Feeding can eventually cause chlorotic spotting on the upper surface of the leaf. Left untreated, yellowing and premature leaf drop can occur.

This pest is not really picky about its meal and will feed on a large range of ornamental plants. Further south, mangos are a favorite food. In the northeast and central areas, keep your scouting routines up for Acuba, Bird-of-Paradise, Camellia, Dogwood, Gardenia, English Ivy, Magnolia (and relatives), Palmettos / Palms, Silverthorns, Yews, and more than 100 other varieties are potential feeding grounds.

Can you guess the pest? Scout ahead for the answer (pg 7) – then scout in the field for signs of spring pests emerging.



Females are easier to spot than smaller males and crawlers.  
Image: Doug Caldwell, UF/IFAS Extension Collier County

## Don't Miss the Show!

Pre-register at [www.nefngla.org](http://www.nefngla.org)

\$8 pre-registered; \$10 at the door; \$10 per seminar

Approved CEUs include:

- GA (6 cat 24)
- FL (5 LCLM, 5 L&O, 5 O&T, 5 LL&O, 5 LUF, 1 AGT, 1 FOR, 1 Natl Areas, 3 ROW, 5 PVT, 2 CORE, 2 D&R)
- ISA (3 on 2/13 & 2 on 2/14)
- FNGLA (7)

Check the website for what CEUs are assigned to which topic.

Jacksonville  
Landscape  
SHOW

February 13 & 14, 2014  
at the Jacksonville Fairgrounds

UF IFAS Extension  
UNIVERSITY OF FLORIDA

FNGLA  
FLORIDA NURSERY, GROWERS  
AND LANDSCAPE ASSOCIATION  
Leading Florida's Green Industry  
Northeast Chapter FNGLA  
904.292.1117 • nefngla.org

## Termite Swarming Times

By Erin Harlow

Termite swarms are adult winged termites (alates) that leave their nest when environmental conditions are right with the goal to find a mate and begin a new colony. Alates, particularly the wings are helpful for identifying the termite. As is the timing of the swarm. To help you narrow down what kind of termite you might be dealing with, we have included the most common for North Florida and their swarming times.

### Subterranean Termites

**Eastern Subterranean Termite** (*Reticulitermes flavipes*) - Typically swarm January to May. They may have smaller swarms in the fall. Normally they will swarm during the daytime, many times following a rain on a warm day.

**Dark Southeastern Subterranean Termite** (*Reticulitermes virginicus*) - Usually swarm March to June. These termites can be distinguished by others because of their black body color.

**Light Southeastern Subterranean Termite** (*Reticulitermes hageni*) - These termites swarm December to April and are of less economic importance than other *Reticulitermes* species.

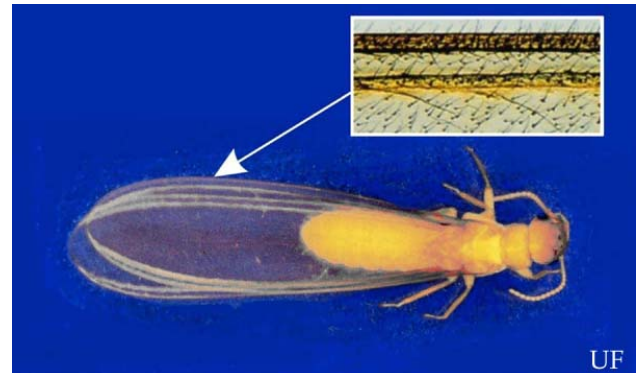
**Formosan Subterranean Termite** (*Copoterme formosanus*) - Formosans swarm at dusk on calm and humid evenings from April to July. They are attracted to lights. Nests can be aerial built in cartons or have soil contact.

### Drywood Termites

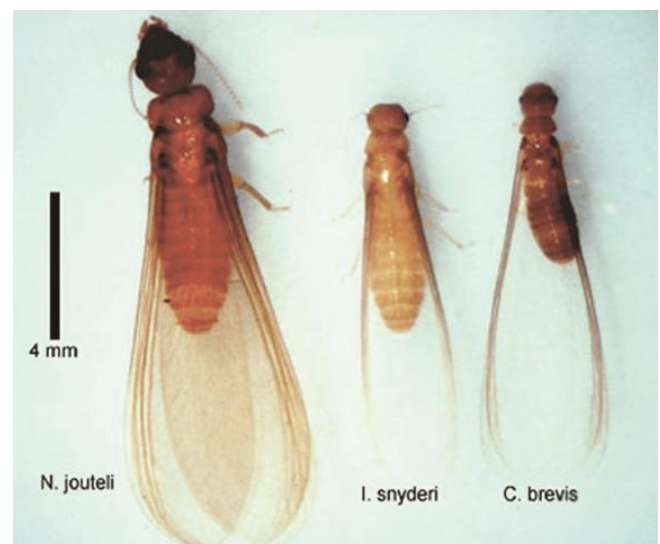
**Southeastern Drywood Termite** (*Incisitermes snyderi*) - This termite swarms at night from May to November.

**West Indian Drywood Termite** (Powderpost Termite) (*Cryptotermes brevis*) - Swarm dusk to dawn from April to July. This species is smaller than most drywood termites and attacks both hard and softwoods.

Information is from Malis, *Handbook of Pest Control*, 10th edition



Formosan Termite Alate. Wings are covered with dense hairs. Photo Credit: UF



Left: Dampwood Termite, *Neoterme jouteli*; Middle: Southeastern Drywood Termite, *Incisitermes snyderi*; Right: West Indian Drywood Termite, *Cryptotermes brevis* Photo Credit: UF

## PEST ALERT: Rose Rosette Virus Confirmed in Florida

By Erin Harlow

Rose Rosette Virus (RRV) has been present in California since 1941, however was not confirmed in Florida until November 2013. As of mid-January 2014, three counties have confirmed cases including Alachua, Levy, and Gadsden. The disease prefers *Rose multiflora* (multiflora rose), but will affect other roses such as the knock-out series as well.

Leaves of affected plants tend to be an unusual red in color that doesn't change as the leaf gets older, plus there may be branch dieback, unusual leaf shape, elongated branches, twisted branches, and/or a proliferation of thorns. Plants will usually die within one to two years after being infected. There is no cure for the disease and plants should be removed.



Thorn proliferation from RRV. Photo credit: UF



Eriophyid mite that transmits RRV.  
Photo credit: USDA, Agricultural Research Service

The virus is spread by *Phyllocoptes fructiphilus* Keifer, which is a small tiny eriophyid mite. This mite is extremely small and cannot be seen without a microscope. If you suspect that you have this disease please send up-close photos to Dr. Paret at [paret@ufl.edu](mailto:paret@ufl.edu). You will then be given instructions on submitting a sample if needed. At this time, this mite is not known to be in Florida. The mite and disease will most likely be spread by the invasive multiflora rose, which tends to be in natural areas and along roads or the plants will be purchased unknowingly with the disease. Proper scouting is important to identify this disease and pest. At

this time, protective measures are recommended and early spring applications of insecticides may be warranted if you have roses. You need to be diligent in monitoring and scouting whether in a nursery or the landscape.

Information for this article is from the *UF/IFAS Pest Alert: Rose Rosette Virus* by Paret, .et.al at:

[http://entomology.ifas.ufl.edu/news/2013-2014/RRV\\_PestAlert\\_Paret\\_2014.pdf](http://entomology.ifas.ufl.edu/news/2013-2014/RRV_PestAlert_Paret_2014.pdf)



Leaf proliferation and distorted leaves from RRV.  
Photo credit: UF

## Early Spring Snow – revealed!

By Amy Morie

Did you guess the pest? This issue features *Pseudaulacaspis cockerelli* – aka False Oleander Scale or Magnolia Scale. This armored scale insect has a protective waxy outer coating that protects both males and females. The larger, pear-shaped females may be scattered along the plant, while rod-shaped males are usually found clustered together. Females lay eggs beneath the protective scale. First instar nymphs – crawlers – will emerge and disperse along the plant, but once they latch on to feed they will stay put through the rest of their development. A new generation can mature in as little as five weeks.



Yellow females and their white protective cover. Image: Chazz Hesselein, Alabama Cooperative Extension System

When scouting, check to see if scales are alive or not – dead scales will remain on the plant but, will be dry and flake away, while live scales will be squishy. If scouting reveals dead pests or the presence of beneficial insects such as ladybugs and green lacewings, continue to monitor the problem. When treatment is required, use methods that cause the least harm to non-target organisms. Three successive treatments with horticultural oils can be effective if applied correctly. Good coverage is critical – spray to the point of drip or “run off” from leaves, twigs, and stems, including the underside of leaves. Follow all label directions including temperature, application rate, timing, and re-treatment intervals. As all stages of the insect may be found year-round, other options such as contact products that only work on crawlers may meet with limited success. Scout it out, and keep this ‘snow’ from falling on your ornamentals this season.

### References

“Featured Creatures: False Oleander Scale” [http://entnemdept.ufl.edu/creatures/orn/scales/false\\_oleander\\_scale.htm](http://entnemdept.ufl.edu/creatures/orn/scales/false_oleander_scale.htm)

“False Oleander Scale, *Pseudaulacaspis cockerelli*” <http://edis.ifas.ufl.edu/pdffiles/IN/IN30600.pdf>

“Two Common Oleander Insect Pests - Early detection can help protect the plant” <http://collier.ifas.ufl.edu/CommHort/CommHortPubs/Oleander%20Insect%20Pests.pdf>

## Springtime Showers bring ...Pestilence and Disease

By Larry Figart

While I may have overdramatized it a little to make a point, the wetter and cooler our spring weather is, the more leaf and needle disease we will see later. We need to pay attention to the weather this spring so we can accurately diagnose problems with our trees later.

Most tree leaf spots and blights are caused by fungi. A few are caused by bacteria. The typical springtime scenario that cultivates leaf diseases are as follows. The fungi that cause leaf spots survive the winter in fallen infected leaves and twigs. Small dead twigs in the tree also provide overwintering shelter for disease causing organisms. Leaves are the most susceptible to leaf diseases when they have just emerged and are light green and tender. Cool wet weather stimulates spore production. If new leaves are emerging while the weather is cool and wet, spores are released which may splash or be windblown onto newly emerging tender leaves. The spores germinate in the moisture and infect the young tender leaf. Overhead watering in the afternoon, or during the night, heavy dews and close spacing of plants delay leaf drying and provide more opportunities for fungal or bacterial infections. The following diseases are almost always seen every spring, but seem to be more prevalent if we have a cool wet spring.



Image 1: Oak Anthracnose  
Photo By Joseph O'Brien,  
USDA Forest Service, Bugwood.org

### Anthracnose

Anthracnose is a name given to a group of leaf fungi that can infect several different hardwood trees. It occurs most commonly and severely on sycamore, oak, and maple. While the fungi may be different, the conditions and symptoms are very similar. The most noticeable symptom is the leaves prematurely fall in the late spring/early summer. The leaves will have spotty brown areas that form along the veins or larger, irregular, light to dark brown

spots that form along or between veins extending out to the leaf margin. Typically, trees recover from anthracnose by growing more leaves. This can be a problem in some trees if they are defoliated year after year. This may weaken the tree and predispose it to insects and other diseases.

Anthracnose on sycamore can be a little more problematic because the fungus can spread to other parts of the tree. A severely infected tree may lose all of its leaves many times throughout the growing season. When a small twig or branch is affected, cankers may girdle and eventually kill the branch. The death of a branch will often result in the production of many small shoots in the area just below the girdled portion of the branch. Spores from the fungus are spread by rain and wind to healthy leaves, buds and twigs. The fungus survives the winter on fallen leaves and twigs, as well as, on cankers present on twigs that remain on the tree.

### Oak Leaf Blister

Oak leaf blister is caused by the fungus *Taphrina caerulescens*. It is a very common disease in the humid climate of the south. It can affect many species of oaks. Members of the red oak group such as water oak (*Quercus nigra*) and laurel oak (*Quercus laurifolia*) are particularly susceptible to infection. As the fungus develops within the leaf, the infected tissues appear swollen or blister-like. Severe infections can cause the leaf to become curled or twisted. Over time the infected tissues die, leaving gray-brown areas scattered within the given leaf. If large areas of the leaf

*Continued on pg 9*



Continued from pg 8

are infected, the leaf may prematurely fall. When a lot of oak leaves begin falling in the late spring is when the homeowner usually becomes aware of the disease.

### Spot Anthracnose on Dogwood

Spot anthracnose on dogwood is found on the native flowering dogwood. It is caused by the fungus *Elsinoe corni*. The severity depends on the timing of rainfall and leaf emergence in the spring. It should not be confused with Dogwood Anthracnose or “Dogwood Blight”. At this time, we do not have Dogwood Anthracnose in Florida. Although the occurrence of spot anthracnose may disfigure flowers and leaves of dogwood, this disease rarely reduces tree vigor.



Image 2: Oak Leaf Blister on Laurel Oak  
Photo: Larry Figart



Image 3: Spot Anthracnose on Dogwood  
Image by: Florida Division of Plant Industry Archive,  
Florida Department of Agriculture and Consumer  
Services, Bugwood.org

### Fire Blight

Fire Blight unlike the previous diseases is caused by bacteria instead of a fungus. It is most commonly associated with ‘Bradford’ pear in the landscape, but it can affect most shrubs and trees in the rose family. The symptoms are first noticed when the new growth suddenly wilts and dies. The dead leaves remain on the dead twigs and almost look burned, hence the name fire blight. If you look closely, the dead twig is encircled by a sunken canker. Fire blight is spread by bees going from flower to flower taking the bacteria with them, splashing water that moves the bacteria, or **pruning tools**. Fire blight can be removed by pruning well below the canker. Be sure to sterilize the pruning tools between trees.

### Management of leaf spot diseases of trees and shrubs

For the most part leaf spots are just an aesthetic problem that does not seriously harm your tree, but your clients may not see it that way. There are many things that can be done in the landscape to reduce the disease on the tree in following years. Rake up and remove fallen leaves to eliminate sources where the disease can re-infect the plant the following growing season. Space plants and trees appropriately when planting so airflow can aid in drying out foliage. Prune trees or shrubs to increase light penetration and improve air circulation throughout the canopy. Avoid or redirect irrigation that wets the canopy of the tree especially in the late afternoon or evening. Fungicides are not necessary unless a tree has been completely defoliated several years in a row.



Image 4: Fire Blight  
Photo: <http://ipm.ifas.ufl.edu>

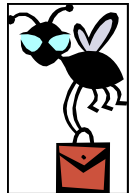
Duval County Extension  
1010 N. McDuff Avenue  
Jacksonville, FL 32254  
(904) 255-7450  
Fax: (904) 387-8902  
Website: <http://duval.ifas.ufl.edu>

Non-Profit Org.  
U.S. Postage Paid  
Jacksonville, FL  
Permit No. 1482

ADDRESS SERVICE REQUESTED



## **Local EXTENSION Offices**



Duval County  
1010 N. McDuff Avenue  
Jacksonville FL 32254  
(904) 255-7450  
FAX 387-8902  
<http://duval.ifas.ufl.edu>

Erin Harlow - Commercial Horticulture/Urban IPM  
[erine@coj.net](mailto:erine@coj.net)

Larry Figart - Urban and Community Forestry  
[lfigart@coj.net](mailto:lfigart@coj.net)

Rebecca Jordi - Co. Extension Director  
Nassau County  
543350 US Highway 1  
Callahan, FL 32011-6486  
(904) 491-7340  
<http://nassau.ifas.ufl.edu/>  
[rljordi@ufl.edu](mailto:rljordi@ufl.edu)

Amy Morie - Horticulture  
Clay County  
2463 SR 16 West  
Green Cove Springs, FL 32043  
(904) 284-6355  
<http://clay.ifas.ufl.edu/>  
[amorie@ufl.edu](mailto:amorie@ufl.edu)

For individuals requiring special accommodations, please contact our office (904/255-7450) within a minimum of 5 working days of the program. For persons with hearing or speech impairments, when contacting our office, please use the Florida Relay Service at 1-800-955-8771 (TDD). Your comments and input are necessary for this to be a useful tool for all of us.

Extension Programs are open to all regardless of race, creed, color, sex, sexual orientation, marital status, age, disability, religion, national origin, political opinions or affiliations.