

Commercial Clippings

July-August 2016



Pest Control Operator vs. Public Health License

With the continued rise of Zika cases in Northeast Florida, you may be considering adding mosquito control as part of your services. Here are some reminders from the Florida Department of Agriculture and Consumer Services about licensing. If you are interested in getting your public health license, don't forget about our exam review class August 8th, details on page 2.

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- Pest Control companies operating in the categories of either General Household Pest (GHP) or Lawn and Ornamental (L&O) may perform mosquito control when the applications are made as a part of the normal pest control business practice. Whether the homeowner or the private homeowner association purchases this pest control service, if it is mosquito control in, on or under a structure, lawn, or ornamental then the Pest Control Operator's certificate will suffice. Area-wide mosquito control such as truck ULV (ultra-low volume) and thermal fogging, as well as larviciding, done within and for a private community is also allowed under the GHP and L&O categories.
- Pest Control companies contracted to perform mosquito control activities for a government agency or mosquito control district must have a Public Health (PH) license or be operating under the direct supervision of a PH license holder.

Public Health Direct Supervision Requirements

5E-13.039 (2) Applicators licensed in public health pest control may directly supervise no more than 10 unlicensed employees.

5E-13.040 (1) It is a violation of these rules for a person to apply a pesticide intended to control arthropods on property other than his own individual residential or agricultural property unless he is licensed to do so or is working under the direct supervision of a licensed applicator, as allowed under subsection 5E-13.039(2), F.A.C.

5E-13.021 (28) "Direct supervision"—supervision by licensed applicators, who are responsible for the pesticide use activities and actions of unlicensed individuals. The licensed direct supervisor must be in immediate contact, either directly (on location) or by electronic means, including, but not limited to, cell phones, radios and computers.

SUMMER WORKSHOPS

2016

<p>August 3 September 7 October 5 Wednesday (Duval)</p>	<p>Pesticide Testing - Restricted-Use, Limited, Certified Pest Operator and Public Health Exams</p> <p>9:15 am Please pre-register at https://aesecomm.freshfromflorida.com for all exams. For public health exams please call 904-255-7450 or email Erin Harlow at erine@coj.net.</p>
<p>July 26 Tuesday (Duval)</p> <p>For NEW applicators</p>	<p>Limited Commercial Landscape Maintenance Workshop - for <u>NEW Applicators ONLY</u> please</p> <p>8:15 am - 2:30 pm \$30.00 pre-registered; \$40 at the door</p> <p>Lunch included, textbooks not included The exam is provided at 3:00 pm. Please register for the exam at https://aesecomm.freshfromflorida.com prior to coming to class.</p> <p>To register for the class, download the brochure, or for more information about the exam or books, please visit: http://duval.ifas.ufl.edu/LCLM2012.shtml.</p> <p>This class is designed for people who do not have their license yet. If you are re-certifying your LCLM or LL&O you should consider attending a different class that offers those CEUs. There are many to choose from throughout the year.</p>
<p>July 27 Wednesday (Duval)</p> <p>1 CORE 1 LUF 5 LCLM 5 LL&O 5 L&O 5 Pvt 5 Aerial 2 Ag Row 2 Ag Tree 4 Aquatic 5 D&R 2 Forestry 4 Natural Areas 5 O&T 5 Regulatory 5 ROW</p>	<p>Great CEU RoundUp - Video Conference</p> <p>AGENDA 8:30 Registration 9:00 Pesticides, Pollinators & Politics in Turf & Ornamentals 10:00 Integrating Biological Controls & Herbicides 11:00 When Upland Invasive Plant Control Meets Water 12:00 Lunch 1:00 Pesticide Spill Management & Cleanup 2:00 Aquatic Weed Identification 3:00 Herbicide Injury from Off-Target Application</p> <p>Municipal Employees: \$30.00 pre-registration \$45.00 on-site Industry Professionals: \$50.00 pre-registration \$75.00 on-site</p> <p>Lunch provided</p>
<p>August 8 Monday (Duval)</p> <p>3 PH</p>	<p>Public Health Mosquito Exam Review and Exam</p> <p>9:00 am - 12:30 pm \$20 pre-registration prior to 8/8/16; \$30 after 8/8/16 or at the door This is a review class for the public health exam. Please study prior to coming to the workshop. The manual can be downloaded for free at our website http://duval.ifas.ufl.edu/pesticide.licensing.shtml.</p>

All classes require pre-registration

Unless stated will be held at the
Duval County Extension Office, 1010 N McDuff Ave,
Jacksonville, FL 32254

**August 10
Wednesday
(Duval)**

1.5 ISA
1 L&O

Termites in Trees: Identification, Protection and Treatment Options

8:00 am - 9:30 am
\$5.00; free for municipal/county employees
ISA and FL pesticide CEUs have been applied for

**August 22
Monday
(Duval)**

3 Aquatic

Aquatic Herbicide Pesticide Review and Exam

9:00 am - 12:30 pm
\$20 pre-registration prior to 8/17/16; \$30 after 8/17 or at the door

Aquatic CEUs have been applied for.
This is a review class and attendees are expected to study prior to coming to class if they will be taking the exam. Study material can be purchased at www.ifasbooks.com.

**September 15
Thursday
(Duval)**

5 O&T
5 LL&O

Ornamental and Turf Herbicide and Limited Lawn CEU and Exam Review Workshop

9:00 am - 2:30 pm, Lunch provided
\$30 pre-registration prior to 9/12/16; \$40 after 9/12 or at the door
\$15 pre-registration for municipal/county; \$25 at the door

O&T and LLO CEUs have been applied for.
This is a review class and attendees are expected to study prior to coming to class if they will be taking the exam. Study material can be purchased at www.ifasbooks.com.

**September 20
Tuesday
(Duval)**

4 LA
4 FNGLA
2 LCLM
2 CORE
2 L&O
2 LL&O
2 Pvt

Green Industries Best Management Practices for the Protection of Water Resources

8:15 am - 3:30 pm, Lunch provided
\$25 pre-registration prior to 9/16/16; \$35 after 9/16 or at the door

This class is the pre-requisite for the State of Florida's Urban Fertilizer License. It is also a great class for people who are entering the industry.

Register for Workshops at
<http://www.duvalextension.eventbrite.com>

The **ART** of Pruning: Reduction Cuts

Larry Figart



1) In working with trees you may find a need to shorten the height or the length of a branch. This type of pruning cut is called a reduction cut. This type of cut allows you to make the smallest wound while still meeting the objectives of the pruning cut.

2) A reduction cut shortens a branch by removing a stem back to a lateral branch that is large enough to supply carbohydrates to the rest of the branch. This is generally interpreted as cutting back to a lateral branch that is at least one-third the diameter of the cut stem. As you can see to the right, the remaining branch is at least 1/3 the diameter of the cut branch.





3) An improper cut would be called a “Heading Cut”. This type of cut is reserved for restoring trees after storm damage. Unfortunately this type of pruning cut is routinely used when someone is trying to reduce the height of a crape myrtle. Reduction cuts should be used instead.

4) Proper reduction cuts reduce the length of the branch while maintaining form. Improper heading cuts compromise good tree and branch structure, as well as, promoting defects and decay.



Proper Reduction Cut



5) When it is performed properly, reduction cuts are made so that lateral branch tips remain intact on the outer edge of the new, smaller crown.

A framework for sustainable urban plant selection and landscape design

In the previous issue of *Commercial Clippings*, Clay County extension agent, Amy Morie, highlighted some important aspects of designing landscapes. Here, I would like to add to that from an insect pest management perspective.

The Issue

Insect pests are often more abundant and damaging on plants in urban than natural landscapes. I'm sure this is no surprise, as many of you are tasked with managing these pests on a daily basis. The factors that cause pest outbreaks are probably no surprise either. Features of urban landscapes like parking lots, roads, and buildings alter the environments that insects and plants live in. As a result, plants are more stressed, insects do better, and chaos ensues.



Scale-infested branch.

Photo credit: Dr. Adam Dale, UF/IFAS

One way to address this problem is by designing urban landscapes to minimize plant stress. Stress reduces plant defenses and benefits herbivorous pests. Therefore, one approach to sustainably managing pests is designing urban landscapes where plants do well and live longer without constant management inputs.

The Evidence

Maple trees are the most commonly planted landscape tree in the eastern U.S. and they are often infested with a native scale insect found throughout the Southeast called the [gloomy scale](#) (*Melanaspis tenebricosa*). This is an armored scale insect that is drastically more abundant on urban than rural red maples and can cause quite a bit of damage.

These insects are a couple hundred times more abundant on trees in the hottest parts of town where there is more impervious surfaces (e.g. parking lots, roads) and trees are more drought stressed. Heat and drought make scale insects produce more offspring and build up their populations faster. The combination of heat, drought, and scale insects reduces the condition of red maples, which means more management, ugly trees, and fewer services provided them.

A Solution

Average temperature, drought stress, and insect pest abundance that reduce tree condition are dynamic and difficult to measure. However, the amount of impervious surface surrounding a tree or planting site does not change and is easy to measure. In [integrated pest management](#) (IPM), thresholds are often used as a decision-making tool to justify or reduce management. Why not figure out how much impervious surface around a planting site it takes to increase pest abundance and reduce tree condition? In other words, an impervious surface threshold.



In a recent [study](#), my colleagues and I determined thresholds of impervious surface to guide urban tree selection and landscape design. For example, if 32% or less of the ground around a planting site is impervious to water, a red maple will do well there. However, anything above that percentage becomes less suitable and once a 62% [impervious surface threshold](#) is hit, we recommend not planting a red maple. This is because the heat, drought, and scale insect stress associated with impervious surfaces becomes too great for the tree to handle.

We also came up with a quick and accurate way for landscape professionals to estimate the amount of impervious surface around a planting site by simply taking 100 steps around it. We are calling it the 'Pace to Plant' technique and you can learn more about it [here](#). Using this method and the impervious surface thresholds, individuals can begin to make more informed landscape planting decisions.

Summary

As Florida's population grows and land is developed, landscapes must be designed to maximize plant survival and services. Trees that live longer grow larger and harbor fewer damaging pests, which costs less to maintain and provides more benefits to people and the environment. Impervious surface thresholds and the 'Pace to Plant' technique are one approach to this informed decision-making. Although these thresholds are specific to red maple trees, they can be expanded to other tree species to provide a more comprehensive landscape design and planting guide for urban plants.

References

Dale, A. G., Youngsteadt, E., Frank, S. D. 2016. Forecasting the effects of heat and pests on urban trees: Impervious surface thresholds and the 'Pace to Plant' technique. *Arboriculture & Urban Forestry* 42(3) 181-191.

Buss, E., Dale, A. G. 2016. Landscape Integrated Pest Management. UF/IFAS EDIS publication ENY-298. <http://edis.ifas.ufl.edu/in109>

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UF/IFAS Evidence-based Turf Management Short Course

August 24-25, 2016, 7:45 am - 5:00 pm daily

UF/IFAS F. Lauderdale Research and Education Center, - 3205 College Ave, Ft Lauderdale, FL

\$500, Register at <http://turfschool.eventbrite.com>

Topics will include: anatomy and growth, light requirements, water requirements, water/surfactants, soil analysis, soil fertility, fertilizer formulations, nutrition. Includes field trips and hands-on activities.

Instructors: Dr. Travis Shaddox, Turfgrass Nutrition; Dr. Jason Kruse, Sports Turf management; Dr. Bryan Unruh, Turfgrass Culture & Management.



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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.

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