



Commercial Clippings

APRIL - MAY 2023

INSIDE THIS
ISSUE:

Irrigation	1-2
Chinch bugs	2-3
Programs	4-5
Caterpillars	6-7
Contact us!	8
Website: CLICK HERE!	
Find us on: Facebook	

Time For An Irrigation Check-up

By: **George Richardson UF/IFAS**

Our landscape plants require water to grow. Sometimes we do not receive enough water from rainfall. The rain that we do get can disappear into our sandy soils. In Jacksonville we tend to run in to drought conditions every spring. It becomes easy to tell that there may be an issue with a customer's irrigation system from the signs of drought stress. It is important to remind them to perform an inspection and maintenance on their system. If you have repeat offenders, I would recommend documenting this interaction and having them sign an agreement to fix the issue. Most lawns are mowed by heavy riding lawn mowers that have potential to cause damage to sprinkler heads. There is also the poten-



UF/IFAS Photo by Tyler Jones

tial that an unwanted vehicle parked on the spot or that the system was damaged by utility workers. It is important that customers test the system to avoid having a geyser. Sometimes the solution does not require digging and parts of the head can just be replaced. In addition to illustrating damage to the system, drought may also demonstrate that the irrigation system is not calibrated or designed to deliver the ½ - ¾ inch of water per

event. [Click here](#) for a great video to share with clients on how to properly calibrate an irrigation system. Correcting irrigation calibration and design can also help prevent issues from overwatering such as fungal infections. Some systems may have been designed properly at the initial installation, but over time plants have grown to obstruct the correct dispersal of water. **More on pg. 2**



Time For An Irrigation Check-up Continued...

This can happen when irrigation zones meant for turf also include shrubs. Mature shrubs do not have the same irrigation requirement as turf. You may see this on properties where shrubs have issues with downy mildew or cercospora leaf spot and the leaves are staying wet from poor irrigation timing or design. Timing is also an important factor to decrease the incidence of fungal diseases. The irrigation cycle should only occur from 2-8 am when the dew is already present. We don't want to extend the dew period after 8 am and have water on the leaves longer than necessary. For more information to share with customers, [click here!](#)

Managing Southern Chinch Bugs

By: George Richardson UF/IFAS

The southern chinch bug, *Blissus insularis*, is the most damaging insect pest of St. Augustinegrass. They tend to strike when turf is stressed by drought conditions in spring to summer. However, I have found them active in the winter months when we get heat waves, so don't assume a damaged spot is fungus. To scout and monitor for the insect there are a few options. The most common is the visual inspection of leaf blades, stolons, or thatch to look for the active adults or the tiny red nymphs as shown in figure 1. There is also the option to use a handheld vacuum cleaner or leaf blower with airflow reversed and a mesh bag. Dump the contents of the containers onto a light-colored surface to search for moving insects. You can also use the flotation technique. In the flotation technique you take an impermeable cylinder that is open on both ends and push it 2-3 inches into the soil on the edge of healthy turf. Then slowly fill the cylinder with water and count the number of chinch bugs that float to the surface within 5 minutes. You may have to continue to pour in water to keep the waterline above the turf. If no chinch bugs appear on the first run, try 3 or 4 other areas on the damage edge. One thing to keep in mind while performing this scouting is that you want to properly identify the chinch bugs. In figure 2. (on pg. 3) you can see how similar a beneficial insect, the minute pirate bug, looks like an adult chinch bug (Fig. 3). The easiest way to identify chinch bugs is if you have an adult and the red nymphs (Fig 1.)



Figure 1. *Blissus insularis* nymph. Credit: Lyle Buss, UF/IFAS

More on Pg. 3



Figure 2. *Calliodis* sp. Minute pirate bug

Credit: Lyle Buss, UF/IFAS



Figure 3. *Blissus insularis* adult. Credit: Lyle Buss, UF/IFAS

After determining that there is an active infestation and that the damage is not caused by a fungal infection or some other factor, it is now time for treatment. Most pest management professionals rely on seasonal, preventative, cover spray applications with pyrethroids. This can lead to issues with pesticide resistance in chinch bugs. Pesticide resistance occurs when an insecticide kills a portion of the population, but some are able to survive and reproduce. Those that were able to survive have now passed on whatever genes made them resistant to that class of insecticide resulting in a higher population of resistant individuals that will survive the next application of the same insecticide. Chinch bugs have developed resistance to pyrethroids, neonicotinoids, organochlorines, and organophosphates from repeated exposure to these classes of insecticides. This is why it is so important to rotate insecticides with different modes of action. (For more, please consult, [Managing Insecticide and Miticide Resistance in Florida Landscapes](#)).

Currently UF/IFAS recommends the use of a thorough application of systemic insecticides for control of southern chinch bugs. This is due to non-target organism effects of contact sprays, the need for direct contact with contact sprays, and longer lasting control. Systemic insecticides are taken up by the plant and ingested upon feeding. This allows for biological control from predators in between applications. Systemics also have longer residual activity. One concern is that systemic insecticides like neonicotinoids are harmful to pollinators. However, if the label is followed properly, this is not a concern. Always follow the label. If you feel that you are running into issues with resistance and need help with an insecticide rotation feel free to reach out at wrgator@ufl.edu. For cultural control recommendations to customers in St. Augustinegrass [click here!](#)



2023 Landscape Professional Classes

Need a certification or continuing education credits?

Plan to join us at one of the classes we have available for you in 2023. Classes are \$30 and include lunch and materials.

For more information check the registration link or contact the hosting county.

Date	Event	Hosting County	Registration link
Feb 14	LCLM	Alachua	https://tinyurl.com/2hvrnyxx
Mar 7	GI BMP	Duval	https://tinyurl.com/2p82dtx4
Mar 31	GI BMP	Columbia	https://tinyurl.com/mpvhxyyv
Apr 4	LCLM	Duval	https://tinyurl.com/kuk4kshy
Apr 26	GI BMP	Putnam	https://tinyurl.com/2p8r7c2r
May 30	GI BMP	Bradford	https://tinyurl.com/mfbsyy25
Jun 22	LCLM	Alachua	https://tinyurl.com/3azme3cy
Aug 8	GI BMP	Duval	https://tinyurl.com/2p8v7rna
Sep 12	LCLM	Columbia	https://tinyurl.com/4a6p2uyu
Sep 22	LCLM	Putnam	https://tinyurl.com/y9xewhyy
Oct 17	LCLM	Duval	https://tinyurl.com/5bj3affp
Oct 19	GI BMP	Alachua	https://tinyurl.com/chfsp2p7
Nov 1	LCLM	Alachua	https://tinyurl.com/axx5zpsp



Register now for the Southeast Pest Management Conference May 9-11.

[Click here to register!](#)

/// SCHEDULE		/// SCHEDULE	
Monday 5/8	Physics Bldg. Lobby	 <p>Southeast Pest Management Conference The University of Florida 25th Annual Southeast Pest Management Conference</p>	
04:00 PM - 06:00 PM	Exhibitor Registration and Set-up		
TUESDAY 5/9	Physics Bldg. Lobby		
07:00 AM - 08:30 AM	Exhibitor Registration and Set-up		
TUESDAY 5/9	Physics Bldg. Rm. 1002 ACE Training and Exam		
09:00 AM - 12:00 PM	ACE Training Review Rebecca Baldwin, PhD & Crew, University of Florida		
01:30 AM - 03:30 PM	ACE Exam Rebecca Baldwin, PhD, University of Florida		
TUESDAY 5/9	Physics Bldg. Rm. 1001 General Household Pests - GHP		
08:30 AM - 09:20 AM	GHP: Mosquito Control by the MCD's and How the Pest Control Operator Can Help Whitney Qualls, PhD, Anastasia Mosquito Control District		
09:20 AM - 09:40 AM	Break		
09:40 AM - 10:30 AM	GHP: Effective Perimeter Pest Control Techniques Larry Stretz, MS, MBA, BCE		
10:30 AM - 10:50 AM	Break		
10:50 AM - 11:40 AM	GHP: Small Files, Big Problems! Bennett Jordan, PhD, BCE, Ecolab		
11:40 AM - 11:50 PM	SEPMC, Urban Entomology Lab, and FPMA Partners in PCO Education		
11:50 AM - 1:00 PM	Lunch		
01:00 PM - 01:50 PM	GHP: The Joro Spider: Lessons on Invasive Species Dan Sulter, PhD, University of Georgia		
02:00 PM - 02:50 PM	GHP: Pest Ants David Oi, PhD, USDA-ARS		
02:50 PM - 03:10 PM	Break		
03:10 PM - 04:00 PM	CORE: Pesticide Safety for Employees and Businesses Paul Mitola, Environmental Consultant, FDAACS		
04:00 PM - 04:50 PM	CORE: Bee Safety Jon Simkins, Insect IQ		
05:00 PM - 08:30 PM	Sapp - Walkup Tailgator Steak Dinner Parking garage on Gale Lemerand Drive		
<p>SAPP-WALKUP TAILGATE TICKET REQUIRED. TICKETS ARE REQUIRED. Free tickets available with paid registrations. Extra tickets are \$20 while supply lasts.</p> <p>Fish and chili provided by:</p>  		Physics Bldg. Rm. 1001 Wood Destroying Organism (WDO)	
WEDNESDAY 5/10	Physics Bldg. Rm. 1001 Wood Destroying Organism (WDO)	Physics Bldg. Rm. 1002 Fumigation - FUM	
07:00 AM - 08:30 AM	Exhibitor Registration and Set-up	FUM: Fumigation Update Eric Habelmann & Colleagues, Douglas Products	
08:30 AM - 09:20 AM	WDO Calculations for WDO treatment Cory Goeltzenleuchter B.C.E., P.H.E., CP-FS, McCall Service		
09:20 AM - 09:40 AM	Break		
09:40 AM - 10:30 AM	WDO Situational Termite Treatments - Overcoming the Good, the Bad, and the Just Plain Ugly Michael Bentley, PhD, BCE, NPMA		
10:30 AM - 10:50 AM	Break		
10:50 AM - 11:40 AM	WDO Formosan Termite Update Johanna Welch, Environmental Specialist III, FDAACS		
11:40 AM - 01:00 PM	Lunch		
01:00 PM - 01:50 PM	WDO The Perils of Colony Foundation in Subterranean Termites Thomas Chouvenec, PhD, University of Florida.		
01:50 PM - 02:40 PM	WDO Wood-Destroying Beetles, Bees and Ants Danny Dye, A.C.E., Emeritus		
02:50 PM - 03:10 PM	Break		
03:10 PM - 04:00 PM	CORE: Pesticides and their Toxicity Roberto Pereira, PhD, University of Florida		
04:00 PM - 04:50 PM	CORE: What Makes a Bug a Pest Dini Miller, PhD, Virginia Tech University		

[Click here for Thursday 5/11/2023](#)

[Speaker Schedule](#)

It's Raining Caterpillars!

BY: LARRY FIGART AND GEORGE RICHARDSON UF/IFAS

It is bad enough that spring in NE Florida brings us tons of irritating pollen, shedding live oaks, and very little rain; we also deal with pesky caterpillars. While this is not unusual, the Tussock Moth has been seen this spring in droves climbing trees and the sides of houses. The tussock moth *Orgyia detrita* is the most common tussock moth that we see. It can be identified by its red head, two black "hair pencils" projecting forward like antennae, four dense tufts of hair its back, and a single hair pencil projecting to the rear like a tail. They will also have orange spots along the back and sides. Tussock moths can be found around oak trees, their primary food. They rarely cause any problem on the trees though. What makes them a pest is the fact that the urticating hairs on their body can be an irritant to many folks. Touching the caterpillars, for people that are sensitive, can bring about localized swelling, itching, burning and redness. Special concerns tend to surround daycares where the caterpillars may drop from the trees on small children and playground equipment. The best advice is to suspend outdoor time for a few weeks until the caterpillars pupate. When the caterpillars are ready to pupate, the larvae will leave the tree and spin their cocoons on outdoor furniture, stored boats and the walls and soffits of our houses. The cocoons are fuzzy, tan, football-shaped masses about an inch long. Removing the cocoons may be a preferred form of control. The female moths that emerge are wingless and will mate soon after emergence, lay eggs on the surface of the cocoon and die. Removing the cocoons will reduce the next population by removing larvae and eggs if the female moths have already emerged. When removing cocoons or larvae, wear long sleeve shirts, a mask (may want a face mask or goggles too), and gloves because the cocoons also contain the irritating hairs. Use a stick or some other scraping object to reduce exposure to the cocoons. If the caterpillars are still feeding chemical control options are available. **See next page for more details!**



Figure 1. Fir tussock moth (*Orgyia detrita*) caterpillar (dorsal view). Photograph by [Donald W. Hall](#), University of Florida



Figure 2. *Orgyia* sp. cocoons under eaves of building. Photograph by [Donald W. Hall](#), University of Florida.

Products containing *Bacillus thuringiensis* (Bt) can be safe and effective. Keep in mind that dead caterpillars can still hurt you.

In addition to the tussock moth caterpillar there are a few other caterpillars that have urticating spines or hairs.



Figure 3. Puss caterpillar, *Megalopyge opercularis* (middle instar). Credit: Donald W. Hall, University of Florida.

Clicking on the name of the insect will lead you to more information.

[Puss Caterpillar/Southern Flannel](#) Moth *Megalopyge opercularis*

[Saddleback](#) -*Acharia stimulea*

[Io moth caterpillar](#) - *Automeris io*

[Buck moth caterpillar](#)- *Hemileuca maia*

[Hag caterpillar](#)- *Phobetron pithecium*

[Tussock Moth](#)- *Orgyia detrita*

For more information on stinging caterpillars [click here!](#)



Figure 4. Mature larvae of the saddleback caterpillar, *Acharia stimulea* (Clemens). Credit: Lyle J. Buss, University of Florida



Figure 5. Buck moth caterpillar, *Hemileuca maia*. Credit: James Castner, UF/IFAS



Figure 6. Hag caterpillar, *Phobetron pithecium*. Credit: Lyle Buss, UF/IFAS



Contact me with any questions or information you would like to see in new issues!



Local Extension Offices

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