PMU Focus – Stinging Insects
By Mike Bentley

Stinging insects are most active in Florida during the summer and fall months. This time of year is also when stings are most likely to occur. To prepare you for stinging insect season, we started a three-part newsletter series last month on stinging pests. This month’s newsletter will focus on identifying bumblebees and carpenter bees.

Pest ID: Bumble Bees and Carpenter Bees

Bumble bees and carpenter bees are important native pollinators that aren’t typically considered a major health threat to humans. It is the carpenter bee’s wood-boring habits that can become a concern for homeowners and pest management professionals. Because these bees can be similar in size and color, telling them apart can be a challenge. Here are some tips on differentiating bumble bees from carpenter bees, as well as some general information on their biology.

Bumble Bees

- Similar in appearance to carpenter bees, but can be distinguished by their large abdomen that is densely covered with hairs (Fig. 2)
- Social bees with colonies containing up to 400 bees
- Nest underground in pre-existing cavities such as abandoned rodent burrows or under logs or other debris
Fig 2. Bumble bee with dense hairs completely covering its abdomen. Photo: UF, J. Castner.

**Carpenter Bees**

- Closely resemble bumble bees, but with a shiny black abdomen instead of dense hairs (Fig. 3)
- Non-social bees that do not live in colonies
- Commonly construct nests in trees or in the trim of buildings
- Damage caused by a single nest is minimal. Significant structural damage is not common in Florida, but carpenter bee activity should be monitored.

For more information on carpenter bees, click [here](#).

Fig 3. Carpenter bee lacking dense hairs to completely cover its abdomen. Photo: UF, J. Castner.

The best way to deter carpenter bees from boring into wood is to paint the wood surface. Carpenter bees that are causing significant damage can be controlled with dusts appropriately labeled.

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**EPA Bee Advisory Box**

As a reminder, most bees are considered beneficial because they serve as essential pollinators for agriculture worldwide. Therefore, bees should be preserved if they do not pose a direct hazard to humans. When the application of pest control products on or near bee-frequented habitats is necessary, be sure to select products that meet the EPA’s “pollinator risk assessment” guidelines. Look for the bee icon within the “application restrictions” section of the product label to ensure your products meet these guidelines (Fig. 4).
Upcoming Training Opportunities:

September Offerings
Foundations of Termite Management (FULL, CLOSED. Next class: January 2015, see website for details.)

Date: September 17-19, 2014; Wed-Fri
Time: 8 AM-5 PM (W, TH); 8 AM-12 PM (F)
Place: UF/IFAS Apopka MREC, 2725 S. Binion Rd, Apopka, FL 32703-8504
Registration fee: $375

Learn how termites exploit over 50 building construction elements and how to treat them in a hands-on environment in 2-days instead of 2 years.

- Practice doing a DACS vehicle inspection and spill drill with Paul Mitola from DACS before a crisis occurs.
- Hear about the top 10 reasons technicians get in trouble and how to avoid them from Mark Ruff, industry attorney.
- Get more in-depth information on termite biology and behavior as well as product label navigation.
Foundations of Turf Management
Date: September 24-26, 2014; Wed-Fri
Time: 8 AM-5 PM (W, TH); 8 AM-12 PM (F)
Place: UF/IFAS Apopka MREC, 2725 S. Binion Rd, Apopka, FL 32703-8504
Registration fee: $375
Learn about common turf varieties, turf diseases, IPM of turf pests, methods of sampling, equipment calibration, turf maintenance requirements and more!
Register here

October Offerings
Foundations of General Household Pest Management
Date: October 1-3, 2014; Wed-Fri
Time: 8 AM-5 PM (W, TH); 8 AM-12 PM (F)
Place: UF/IFAS Apopka MREC, 2725 S. Binion Rd, Apopka, FL 32703-8504
Registration fee: $375
Pest control matters. Cockroach allergen mitigation can be achieved with IPM.
- Study domestic and peridomestic cockroach species and how to control them as well as rodent, small fly, filth fly, fire ant and nuisance ant management.
- Review the labels of commonly used GHP products, practice pest inspections at PMU’s house and develop treatment strategies focused on IPM.
- Do a vehicle inspection and spill drill with Paul Mitola from DACS.
Register here

Foundations of Ornamental Plant Pest Management 101
Date: October 8-10, 2014; Wed-Fri
Time: 8 AM-5 PM (W, TH); 8 AM-12 PM (F)
Place: UF/IFAS Apopka MREC, 2725 S. Binion Rd, Apopka, FL 32703-8504
Registration fee: $375
Learn how to properly ID common southern trees and shrubs, monitor and diagnose pest and maintenance problems, ID beneficials, calibrate and operate different pesticide application equipment, and impress your instructors with your landscape IPM expertise.
Master of Termite Management (Only 4 seats left!)

**Date:** October 15-17, 2014; Wed-Fri  
**Time:** 8 AM-5 PM (W, TH); 8 AM-12 PM (F)  
**Place:** UF/IFAS Apopka MREC, 2725 S. Binion Rd, Apopka, FL 32703-8504

**Registration fee:** $375

This fast-paced class is only offered once a year. **Must have completed Foundations in order to advance.**

- Review termite identification, biology and control and learn about wood-destroying beetles and wood-decaying fungi.
- Learn how to do a proper borate application
- Do baits work?
- Use foam and application techniques to optimize the distribution of liquid termiticides in soil with the Bayer University toys
- Hear about the top 10 reasons that certified operators get in trouble and how to avoid them from Mark Ruff, industry attorney.
- Do an inspection for WDOs at PMU’s house designed to challenge even experienced inspectors.
- Practice a licensee inspection with a DACS inspector and learn about the duties of a certified operator.

November Offering

**Foundations of General Household Pest Management**

**Date:** November 4-6, 2014; Wed-Fri  
**Time:** 8 AM-5 PM (W, TH); 8 AM-12 PM (F)  
**Place:** UF/IFAS Apopka MREC, 2725 S. Binion Rd, Apopka, FL 32703-8504

**Registration fee:** $375

This fast-paced class is only offered once a year. **Must have completed Foundations in order to advance.** State Exam offered on the afternoon of Nov 7 for those who have approved applications.

- Learn about biting and stinging insects, stored product pests, and occasional invaders as well as how to recognize delusory parasitosis.
• Play with the tools of the trade, vacuums, steamers, foamers and practice spray patterns.
• Prepare for an introduction to vertebrate pests that carry disease causing organisms.
• Learn about the legal liabilities of GHP work.
• Practice affidavit writing and working with DACS on licensee inspections.

Register here

ADDITIONAL COURSES

PMU Courses
WDO Category
Dec 3-5, 2014, Termite Expert, must have taken Foundations and Masters

GHP Category
Nov 5-7, 2014, GHP Masters, must have taken Foundations

L&O Category
Please contact Dr. Eileen Buss (eabuss@ufl.edu, (352) 273-3976) directly with questions concerning these courses.
Dec 10-12, 2014, Ornamental and Turfgrass Masters

Click on links for course descriptions or go to http://pmu.ifas.ufl.edu/courses for more information

Learn more from IFAS

• UF/IFAS has Extension Offices in each Florida’s sixty-seven counties. We also have twelve Research and Education Centers and Research and Demonstration Sites (RDSs).

• If you need help a great place to start is your local County Extension Office. With an office located in every county it has never been easier to partner with the University and your local County Government. To find an office near you please visit:
http://solutionsforyourlife.ufl.edu/map/