

CLEMSON UNIVERSITY

~ URBAN ENTOMOLOGY EXTENSION & RESEARCH ~

Palmetto Pestalk November 2005 Newsletter¹

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In general, I think rising early in the morning is a great way to get a good start on the day. However, rising at 3:30 AM is a bit too early, but that is what I did at the last Apprentice Termite Technician class. I woke to the phone ringing in my hotel room. I had to ask the front desk clerk to repeat herself when she asked if I owned a red 1998 Isuzu Trooper. When I responded that I did, she said a county sheriff's deputy was in the lobby and he wanted to talk to me. Apparently, my truck had been broken into during the night.

When I got to my truck, a back window was smashed out and the back door was opened and damaged. As the deputy started to fill out his report, he asked me to see what may have been stolen from my vehicle. A pair of shoes and a tool bag containing most of my termite inspection gear was missing. Though some of the items were fairly expensive such as my moisture meter and rechargeable flashlight, it was all easily replaceable. But by far, the most devastating loss was two insect collections.

Earlier in the week, Cam Lay and I had done a presentation and collecting hike with a Sumter high school class. I brought two of my collections

that I often use to discuss insects with school groups. One collection was of insects from around the world. The other collection was insects of South Carolina. While the insects from around the world was my own collection, the insects of South Carolina was a Clemson display I "inherited," to be used for Extension presentations. Both collections were in large wooden frames with a glass top known as a Cornell drawer. Interestingly, the teacher took several pictures of us talking to the class, including one of us holding a collection (web site: www.sumter17.k12.sc.us/enviroctr/Experts.html).

While a bunch of dead bugs in box is almost worthless to many folks (including insurance adjustors), they were almost priceless to me. It was like losing original artwork. Gone were scores of beautiful insects, carefully prepared and professionally displayed. Gone was the history on each label identifying the collector, date and location where each insect was captured. Gone was the ability to use the displays for the next school group or organization that asks for a presentation.

With my early start on the day, I spent several hours that morning dumpster diving around the hotels, gas stations and fast food establishments near my hotel with the hope that the thief (or thieves) would toss the collections after deciding that a bunch of dead bugs would not sell well at a pawn shop. Later in the day, after the ATT

program was concluded, I returned to the area with Cam. We searched the wooded areas around the hotel and stopped by the two closest pawn shops where the theft occurred. I had never been in a pawn shop before, but Cam assured me it would be an experience to remember, especially when I asked the proprietors if anyone had brought in a box of dead bugs. After a good chuckle, both pawn shop owners said they would never buy or sell a box of dead bugs.

Occasionally, I go on-line to eBay to see if the display cases are there. Unfortunately, Cam probably had the right theory: crooks probably grabbed the displays because they looked cool, opened them, fooled around with the big scary bugs for a while, and then trashed them.

My truck has been repaired and most of my termite inspection tools have been replaced. The insect displays will probably take at least a year, or more, to replace. I can buy some insects from around the world from collectors, even though it will take time and money to find quality specimens. The insects of South Carolina will only be replaced through labor-intensive, time-consuming collecting and mounting. While I enjoy collecting, I do not spend my average day at Clemson wearing a pith helmet, holding a butterfly net and searching for interesting insects.

Each year, many of you send insects or give me insects

when you see me at meetings. Most of the time, your specimens are related to a pest control problem and you are seeking my help in identification and control ideas. However, in the future, if you happen to find some interesting insects, especially large or showy specimens and it is not too much trouble, I would appreciate receiving them to help rebuild the lost collections. In general, most insects should be preserved immediately after collection. Most specimens can be killed in a freezer. After killing hard insects such as beetles, they can be temporarily stored in mouthwash, which will preserve the specimens as well as alcohol without the hazards of shipping containers containing alcohol. Do not send insects in water. Do send insects in crush proof containers. Pill bottles or small shampoo bottles can work well. Large, fragile insects such as butterflies and moths should be killed in a freezer and stored in a crush proof container without mouthwash. Tissue paper gently placed around the specimens will keep them from being damaged in the mail. The following information should be included for each sample submitted: your name, phone number, county and nearest town where the insect was collected, date collected and where it was found, such as host plant, animal, or location in a building.

Insect displays have educational, research and historical value. Many displays are tucked away in museums, never to be seen by the general public. My job is to bring the world of entomology to the public. With your help, I will be able to rebuild our

collections for our Extension presentations. With luck, the displays and their positive impact on South Carolinians will be around a lot longer than any of us. That, in a small way, is a legacy.

Pest Control Partnering With Public Health

The 47th Annual South Carolina Pest Control Association Winter Meeting is only a few months away. It will be held at the same hotel in downtown Columbia, but it is now a Marriott hotel. The dates are February 14 - 16, 2006. The theme is Pest Control Partnering With Public Health. Bed bugs, West Nile virus, Lyme disease, cockroach allergens and other health-related issues continue to make headlines, raising concern by the clients you serve. We have an excellent line-up of speakers ready to address health-related issues as well as other general pests and wood destroying insect control problems.

Our keynote speaker will be Austin Frishman. Dr. Frishman will present "The Importance of Your Job in Public Health." Dr. Frishman will also give a talk to technicians entitled, "The Cockroach is Back." We will have Dr. Jerome Goddard visiting from the Mississippi Department of Public Health. Dr. Goddard is the author of the Physician's Guide to Arthropods of Medical Importance. Dr. Goddard will talk about environmental health and safety concerns facing PMPs and delusions of parasitosis. Dr. William Simpson from the Medical University of South Carolina will also present a talk on understanding the potential

impact of bird flu. Dr. Frank Guillot from the USDA lab in New Orleans will present information on Formosan termite control before and after Hurricane Katrina. Dr. Karen Vail from the University of Tennessee will also join our program to share her expertise on wood boring beetle control and odorous house ants. Dr. Ed Vargo from North Carolina State University will help us all keep up to date with current techniques used in termite research by sharing his work on using genetic markers to identify and follow termite colonies in the field. Dr. George Rambo will share his expertise on general termite control and issues with structure infesting molds and fungi. Jim Wright from the Department of Pesticide Regulation will conduct a special Wednesday afternoon discussion session on how wood-destroying organisms relate to wood infestation reports. Also on Wednesday afternoon, Cam Lay will lead a discussion session concerning issues in general pest control.

In addition to our invited speakers, we will have a host of Clemson and industry experts from SC to round out our program. Back by popular demand will be our insect and wood identification laboratory. Our outstanding graduate students, Donny Oswalt and Eric Paysen will be on-hand with microscopes to help you identify pests and damage. You can also bring your own damage or insects and see if you can "stump the stars".

The 47th SCPCA Annual Winter Meeting is shaping up to be one of our best programs ever. Please take a moment to

look at the entire program and details for registration enclosed in this issue of Pestalk or on our web site: <http://entweb.clemson.edu/urban/pcoschl.htm>. Plan to register no later than Friday, January 27, 2006! You can contact Jackie Ellis at 864/656-5048 or by email at jells@clemson.edu if you have any questions about registration or the program. See you in Columbia!

2005 ATT/MTT Programs Conclude

The two Apprentice Termite Technician and two Master Termite Technician programs for 2005 were recently concluded. We had great participants at all of the programs. Due to renovations at our usual place, the Sandhills Lakehouse, we had to meet in slightly cramped quarters in the basement of the main building at the Sandhills Research and Education Center. This required us to hold enrollment to 20 participants for each class. As in past years, we had a waiting list for the classes and, unfortunately, had to turn some folks that didn't pre-register away at the door. While we don't like to turn folks away, we need to keep each class at a manageable number of participants for quality teaching. Next year, we should be back in the new and improved Lakehouse, with the room to accept more participants. Look for our announcements for the programs this coming spring and enroll early to assure a seat in one of our classes. Thanks again to all of the 2005 participants who made conducting the programs a pleasure.

Gut Gas?

While you spend much of your time trying to kill termites, a Nobel Prize Laureate in physics is trying to generate funding and research to study how we can take advantage of the way wood is digested in termites' guts. Dr. Steven Chu, who shared the 1997 Nobel Peace Prize in Physics, is studying in detail how termites turn indigestible cellulose into ethanol. To a certain extent, Chu sees the incredibly efficient way termites turn cellulose, the most abundant plant substance on earth, into ethanol as the holy grail for our future energy needs. At a recent Physics conference, Chu remarked that if we can understand and learn to exploit how termites make ethanol so efficiently, we can use biology as a solution for the pressing global needs for energy-efficient fuel sources. Chu is hoping that other researchers will heed his call and also start investigating termites as a model for alternative fuel source production. So the next time you fill-up your truck to go do a termite job, take a minute to think about where your gas comes from. Some day you may be pumping termite gas to go "gas" the termites! Source: physorg.com at www.physorg.com/news3700.html.

Oswalt Wins National Award

Donny Oswalt, a Ph.D. graduate student in our lab, has won many awards over the years. One of his most significant achievements was recently winning the Jeffrey P. LaFage Graduate Student Research Award from the Entomological Foundation. This

is a national award and Donny is the only recipient. In addition to his recognition at our annual national entomology meeting this December, Donny will receive a grant to aid his innovative research on black carpenter ants. Clemson and the pest control industry in South Carolina are fortunate to have Donny in our urban entomology program as an active participant in many of our research and Extension activities. Look for Donny at the SCPCA Winter Meeting this February and give him a pat on the back while you pick his brain for information.

¹Note: This newsletter is a regular submission to Palmetto Pestalk.

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