

URBAN ENTOMOLOGY EXTENSION & RESEARCH
Palmetto Pestalk June 2007 Newsletter

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Ten years ago, in 1997, Strom Thurmond became the longest serving member in the history of the U.S. Senate (41 years and 10 months). Timothy McVeigh was sentenced to death for the 1995 Oklahoma City Bombing; a gallon of regular gas was approximately \$1.30; and in June of 1997, I wrote my first newsletter for *Pestalk*. Ten years can sure go by quickly!

In that first newsletter, I loosely figured that my family increased the SC population by about 0.00011%. In 1997, the SC population was well under 4 million residents. The state is now approaching 5 million residents. When I arrived, my appointment at Clemson was 75% Extension work and 25% research. This has changed slightly as I now have a little less Extension and research time, having been given 10% classroom teaching time for a four-credit Entomology course per year (General Entomology 301). One big change in the last ten years has been in the cutbacks of state financial support and a corresponding decrease in the number of entomologists at Clemson. When I started we had 21 Entomology faculty members. Since 1997 we've lost, due to

reassignments, new jobs or retirement, 12 faculty members and hired 4 new ones. This net decrease in manpower has definitely impacted our programs and is one of the reasons my responsibilities have been expanded to classroom instruction.

My main Extension duties in 1997 included working with the SCPCA and the Department of Pesticide Regulation to conduct the Apprentice and Master Termite Technician courses and the SCPCA Winter Meeting. Those are still primary functions and we've also added the Master Pest Control Technician Course and the Wood Infestation Report Training. Another major enhancement to our urban entomology research was the construction of our Urban Entomology Insectary via SCPCA and other industry financial contributions. The insectary is now used daily for our research on ants, termites and cockroaches.

In the first newsletter, I wrote about multiple topics. The pests I highlighted that first issue were scorpions. Bed bugs or West Nile Virus hadn't even crossed my mind, yet.

A hot topic ten years ago was rigid foam board insulation. In June of 1997, Pat Zungoli gave a summary of the Southern Building Code changes to stop putting rigid board insulation below grade on foundation walls in areas of the country where the hazard of termite damage was high. This change was largely accomplished

by Pat's research and joint lobbying efforts by a South Carolina Building Code Official, Wayne Shirley (now deceased), Neil Ogg, Jim Wright and Greg Baumann at the NPMA.

Well, I guess that's enough reminiscing. Anyone want to guess what I'll be writing about in 2017?

**Register Now For
ATT & MTT**

Registration materials for the August Apprentice Termite Technician (ATT) Schools and the October Master Termite Technician (MTT) Schools were mailed out last month. The ATT programs are being offered August 6-7 and August 9-10. The MTT programs are being offered October 16-17 and October 18-19. All of the programs will be held at the Clemson University Sandhill Research and Education Center in Columbia, SC. Already the classes are starting to fill up. Every year our enrollment exceeds the number of spaces we have available for each class, so if you are interested, please enroll soon! If you have questions, please contact Jackie Ellis by phone at 864/656-5048 or via email at jells@clemson.edu.

**WIR Training
August 8**

The next Wood Infestation Report (WIR) Training program will be offer August 8 at the Sandhill Research and Education Center in Columbia, SC. This one

day program will be on the Wednesday between the two August ATT programs. While you can also attend an ATT program right before or right after August 8th, the WIR training class is a separate class. Registration materials for the WIR program are in this issue of *Pestalk*. Space is limited to the first 40 paid applicants and only four individuals from any single company can register for a class. The cost is \$75.00.

The WIR class is one day in length, with registration starting at 7:30 AM and the program starting at 8:00 AM. The goal of the training is to provide pest control professionals information that will allow them to issue official South Carolina Wood Infestation Reports that adhere to state rules and regulations. The session will end with a written exam and lunch will be provided. All participants achieving a 75% grade on the exam will receive a certificate of completion from the Clemson Extension Service. In addition, participants will receive five recertification credit hours. If you are interested, please register early. If you have questions, contact Jackie Ellis.

Bed Bug Help Still Needed

In the last issue of *Pestalk*, I asked for your help documenting bed bug infestations and the control methods you are using. I'm in the process of developing information for a special presentation to the Entomological Society of American Annual Meeting this coming December. I appreciate those of you who have given me some excellent information and the opportunity to

visit bed bug infestations you are servicing.

I still can use more help to see additional infestations and get other view points on the problem and determine the most effective control strategies. Between now and October, I would like to work with technicians in SC doing bed bug control. If your company is doing treatments for bed bugs, I would like to visit and work with your technicians. As I have stated earlier, I realize that I may be contacted on short notice, and I will do my best to work with your schedule. I also understand that I must be discreet with the information and undistruptive to the control process. I will not highlight specific problems or accounts, but rather highlight broad challenges and procedures for controlling bed bugs. If you have "opportunities" for me, or questions, please let me know. Thanks!

Red Mites Are Not Red Bugs

Over the last few months, we've received many calls and some specimens of red mites found in large numbers around homes, especially on patios, brick walls, porches and exterior walls. If a creature is a small mite and red, people naturally assume they are chiggers that will bite people or pets. Not true! The mites we have received have either been velvet mite species (Family: Trombididae) or other red mites without a common name sometimes called *Balaustium* (genus name) mites.

Velvet mites are parasites and predators on small insects and other arthropods and important in the micro-ecosystem. Under a microscope or hand-lens, their

velvety bodies are quite beautiful. They do not bite people or pets.

The red mites in the genus *Balaustrium* are also common arthropods. There have been a few reports of some of the species in this group biting people, but the vast majority are pests of plants. The ones found around homes and other structures in South Carolina are usually only plant pests.

At times, especially in the spring, large numbers of velvet mites or *Balaustium* mites may occur under favorable conditions. Let your clients know that the red color of these mites is their natural color. They are not red from drinking blood. Even chiggers don't drink blood. Chiggers drink cellular fluids. However, crushing red mites can cause staining on fabric or walls. If red mites are occasionally in large numbers indoors, use a vacuum with a soft brush to remove them. In most cases, velvet and *Balaustium* mites will be in outdoor locations. Use exclusion to ultimately keep them out and consider insecticidal dust in wall voids where they are entering. Any of the outdoor sprays you are using around structures for crawling pests should be effective. If treating for *Balaustium* mites, look at the vegetation near the home. If they are found in large numbers on adjacent plants, use an insecticide treatment labeled for the plants. For velvet mites, remember that they are generally a beneficial addition to your clients' outdoor environments. You may want to educate (your clients) not eradicate (the velvet mites).

Chiggers, also called red bugs (*Trombicula alfredugesi*), refers to the larval stage of mites in a group of over 3,000 species. The larvae are parasitic on a wide range of

animal hosts including people. Chiggers do not burrow into the skin as is commonly believed. Instead, they attach to the skin, often near hairs, and drink fluids from the skin cells. Most people have a reaction to chiggers which include itching and small, red, raised areas on the skin.

The most practical solution to reduce bites is to wear protective clothing such as long-sleeved shirts and long pants. People doing yard work where chiggers are present should consider tucking their pant legs into socks for protection around ankles. If not skin sensitive, your clients should use repellents labeled for skin application or clothing application. For skin application, products containing DEET or Picaridin are usually the most effective and available. There are also repellents for clothing containing permethrin. Your customers should consult with a physician if there are any health concerns. Taking a shower as soon as possible after being in a chigger infested area will also help reduce bites.

Chiggers will harbor on high grass, weeds and shrubbery. Mowing grass and keeping weeds to a minimum will help reduce chigger habitats. Chiggers are not resistant to insecticides. Thus most insecticide sprays labeled for turf and ornamental areas should

be effective in controlling chiggers if they are applied to the areas where chiggers are living (grass, shrubs, garden areas). Any sprays applied around water, such as pools, should be done with great caution to avoid any contamination of the water. If you want to learn more about chiggers, view our fact sheet at our web site: <http://entweb.clemson.edu/>.

Biting Termites?

I get a lot of calls from individuals who claim all types of insects attack and bite them. On more than one occasion, I've had homeowners tell me that swarming subterranean termites flew at them and bit them. At times I've tried to argue that termites don't bite people, but if someone is convinced an insect bit them, it is very hard to change his or her mind.

A few days ago I was riding my bicycle on a warm Saturday morning on back roads around Clemson. I had been out about an hour and had worked up a pretty good sweat when I biked right through a cloud of swarming subterranean termites. The poor little guys stuck all over my legs and arms. Being an entomologist (which means I'm a bit odd) I thought this was a very cool, though perhaps unattractive, way to collect termites. I slowed my

pace hoping not too many would blow off my body before I could get home to collect them in alcohol. An Urban Entomologist cannot have too many termite specimens.

During my ride, it did feel as if some of the termites were biting me. I looked as closely as I could at the "biting" individuals. Though my eye sight isn't the best anymore, I did not see any with their mandible open, trying to pinch a hunk of my skin. Rather, the termites were squirming trying to dislodge themselves from the large moist animal they had encountered. During their struggles, I think their claw-like feet (tarsi) and other hardened (sclerotized) parts of their bodies were poking me just enough to feel like a slight nip.

The cliché that perception is reality holds true. If someone feels an insect is attacking them, it is hard to convince them otherwise even though that may not be what is happening. Yet, I guess in the pest control business we need to listen to our clients, educate them when we can and know when we can't; and in the end, always provide the service they need. By the way, if I hit a swarm of fire ants on my next bike ride, I'm sure I'll be stopping and doing "the fire ant dance". Being dedicated is one thing, being crazy is another.