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Pests and Pesticides in Child-serving Facilities: An IPM Newsletter

The Last 2011 Regional School IPM Workshops to be Held at John Sevier Elementary School 10/10 at 10 am

Ms. Becky Bradford, Waverly Elementary, Humphreys County, receives a certificate of appreciation from UT Extension.

The University of Tennessee Extension is encouraging all schools in Tennessee to adopt an integrated pest management (IPM) program in accordance with the National PMSP's (Pest Management Strategic Plan) call for all the nation's schools to be using IPM by 2015. IPM is a common sense approach to pest management that emphasizes the use of low risk but effective means to suppress pests. Children are more vulnerable to pesticides because their organ systems have not reached developmental maturity. Because they spend considerable time at school, they increase their risk of pesticide exposure if pesticides have been applied in a manner inconsistent with IPM. Pests pose risks from venomous bites, disease transmission, and allergic responses and may disrupt the learning environment. School IPM programs aim to reduce and balance risks from pests and pesticides to school occupants and the environment.

We would like to invite representatives (director of schools, custodial staff, facilities supervisor, grounds staff, kitchen staff, maintenance supervisors, and the pest management professional) from your school system (from those areas indicated in brown or blue on the map below) to attend the following workshops:

John Sevier Elementary, 2001 Sequoyah Ave., Maryville, TN 37804
on Oct. 10, 2011 at 10:00 am.

The purpose of the workshop will be to showcase these pilot schools as model IPM systems for surrounding counties and to view IPM in action. We will have a short lecture on IPM and demonstrate how to inspect the building and its perimeter. We will provide lunch for all attendees and mileage reimbursement for one vehicle from each school system. Please encourage your school system's pest management professional to attend too.

Save the date to talk to the staff at a pilot school and learn about simple things that you can do to improve pest management. All employees have an effect on their school's IPM program. Even staff with no formal responsibility for pest control can determine the degree of success of an IPM program; every employee has some influence on the school environment. We look forward to seeing you. More information can be found at schoolipm.utk.edu .

Please RSVP to Pat Barnwell at pbarnwel@utk.edu or 865-974-2711 if you plan to attend to ensure an accurate count for lunch.

Special points of interest:

- Training Opportunities
- New School IPM Demonstrations in Henderson and Crockett Counties
- Spotlights: American and Spadefoot Toads

"…toads are beneficial because they eat pest insects around homes, farms and others structures, and thus are not considered a pest species themselves."

This issue

Want IPM training but don't want to travel to East TN?

We have several other training options for you this fall.

- Caywood Elementary in Lexington (Henderson County) and Maury City Elementary (Crockett County) have volunteered to participate in this year's school IPM demonstrations. We will be training school personnel on Sept. 27 in Lexington and 28th in Maury City. For more information, contact Pat Barnwell at 865-974-2711 or checkout our web site at schoolipm.utk.edu.
- The Tennessee School Plant Management Association (TSPMA) Mini-Conference West (http://www.tspma.com/tspma-mini-conference-west-november-4-2011) will be held November 4, 2011 at Paris Landing State Park. We plan to present a lecture on school IPM at 9 am. Hope to see you there!

Do You Recognize These Feces?

It just didn't make sense. Relatively large feces (3/4 - 1 inch long and 3/8 inch wide) were found near two entrances at a school, but not near the dumpsters or trash cans which were poorly sealed. Occupants did not report any indoor sightings of large rodents or their feces. Damaged or consumed stored food was not reported. The feces consisted of insect parts and it was obvious to us that the animal was eating insects that had been attracted to the lights at the entrances. So Pat Barnwell and I started looking through our scat references. The closest animal we could find that would produce similar feces was a Norway rat, although their feces tended to be slightly smaller, about 3/4 inch in length. Realizing the animal scat was not our area of expertise, we sought help from the UT Forestry, Wildlife and Fisheries Department. Billy Minser, Wildlife Instructor, came to the rescue. Although we aren't sure which species is responsible, we have come to the conclusion that these feces were produced by a toad(s). Toads should not be considered pests and most would consider them beneficial as they consume insects. While toads aren't very likely to enter a school, if children see the toads and pick them up, they should wash their hands to prevent *Salmonella* transmission.

Large numbers of feces were seen around the perimeter of a school and were especially common near lighted entrances. Credit: UT E&PP

Feces (1 inch by 3/8 inch) were larger than that produced by Norway rats. Credit: UT E&PP

Spotlight

American Toad, *Bufo americanus*

Description: The American toad is one of the most common of the *Bufo* family and can be found easily in both wild and suburban areas. They have a stout body with short stocky legs. The key difference between American toads and other species is the dark spots on their back with one or two warts in each spot.

Life Cycle: Egg, tadpole and adult

Where to Look: Although these animals can live nearly anywhere, they prefer moist spots or an area with vegetative cover.

Management: American toads are beneficial because they eat pest insects around homes, farms and others structures, and thus are not considered a pest species themselves. Their skin secretions are mildly toxic and could be harmful if swallowed, but this is a rare occurrence. Like many amphibians, toads are known to carry *Salmonella*, so thorough hand washing is strongly recommended if these animals are handled.

American Toad. Credit: J.D. Willson

Text modified and excerpted from Vigil, S. and M. T. Mengak. 2006. American Toad, *Bufo americanus*, D. B. Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA, 30602, Natural History Series No. 7, October 2006. http://warnell.forestry.uga.edu/service/library/wildlife/nathis/americantoad.pdf

Spotlight

Eastern Spadefoot Toad, *Scaphiopus holbrooki holbrooki*

Description: This is the only species of spadefoot toad found east of the Mississippi River. It is distinguished by the spade-shaped hind feet, the absence of warts, and vertical shaped pupils. The toads' call is short and low-pitched, some say it sounds like a crow's call.

Life Cycle: Egg, tadpole and adult

Where to Look: The spadefoot toad's primary habitats include marshes and hardwood swamps. If an outdoor light attracts insects, the toads may investigate the area for an easy meal.

Management: These animals are not considered a pest. They aid in reducing pest numbers around crops and gardens. Some people have an allergic reaction to the paratoid gland secretions from the toads, which can be similar or more threatening than the more common American toad's.

Eastern Spadefoot. Credit: J.D. Willson

Text modified and excerpted from "The University of Florida Wildlife Extension" Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, FL, 32611-0430. http://www.wec.ufl.edu/extension/wildlife_info/frogstoads/scaphiopus_holbrooki_holbrooki.php

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Comments or questions on this newsletter? Contact kvail@utk.edu

For more information about IPM in Tennessee schools and other facilities, or to view past issues of *Pests and Pesticides in Child-serving Facilities*, please visit schoolipm.utk.edu or utyeah.utk.edu

NATIONAL IPM INFORMATION

eXtension's Pest Management In and Around Structures: Urban Integrated Pest Management
http://www.extension.org/Urban%20Integrated%20Pest%20Management

National School IPM
schoolipm.ifas.ufl.edu/

IPM in Schools Texas
schoolipm.tamu.edu/resources.htm

IPM Institute of North America
www.ipminstitute.org/

School IPM PMSP—all schools IPM by 2015
http://www.ipminstitute.org/school_ipm_2015.htm

National Pest Management Association IPM
www.whatisipm.org/

EPA schools
www.epa.gov/pesticides/ipm/schoolipm/index.html

For further information about the IPM program at your school or in your county, contact your county Extension Agent or the school IPM Coordinator. For county agent contact information, please visit www.agriculture.utk.edu/personnel/districts_counties/default.asp

Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label.

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others that may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. The author(s), the University of Tennessee Institute of Agriculture and University of Tennessee Extension assume no liability resulting from the use of these recommendations.