



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

What You Don't Know About Pests, Can it Hurt You? *Dr. Thomas Green*

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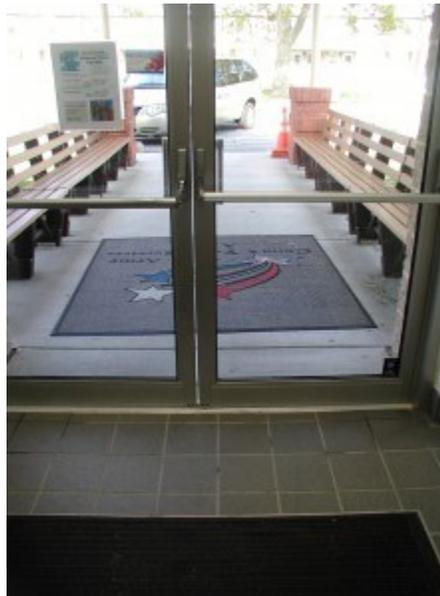
One of my most satisfying experiences as a professional, and as a parent, is to visit schools to do IPM inspections. IPM stands for Integrated Pest Management, a common sense approach where the focus is denying pests food, water and shelter, rather than relying on pesticides as a first line of defense. The U.S. Environmental Protection Agency (EPA) recommends that schools use IPM a Smart, Sensible, and Sustainable approach to pest control.

Smart because IPM creates a safer and healthier learning environment by managing pests and reducing children's exposure to pests and pesticides.

Sensible since practical strategies are used to reduce sources of food, water, and shelter for pests in school buildings and grounds.

Sustainable because the emphasis is on prevention that makes it an economically advantageous approach. Research at the University of Florida showed that pest complaints in schools can be reduced by as much as 65%, just by having well-sealed exterior doors! That's how IPM works.

I typically start the inspection by visiting with the facility manager. I ask a lot of questions and look at records for pest complaints and pesticide use. Most often the picture is fairly rosy! Management is happy with the program, pest complaints appear to be few and far between, and pesticide use looks to be minimal. Then we head out to the schools. Most times, it's a whole different world out there!



Missing or damaged door sweeps and seals are public enemy number one! Mice can enter a gap the size of a nickel.

Special Points of Interest

Research at the University of Florida showed that pest complaints in schools can be reduced by as much as 65%, just by having well-sealed exterior doors!

Webinar: Basics of School Integrated Pest Management

Tuesday, October 21, 2014

2:00 to 3:30 pm EDT



Sugarcane beetle Photo courtesy of Tara Smith, LSU-AgCenter

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I find unauthorized pesticides in teachers' desks, kitchen shelves, coaches' offices and elsewhere. I see mouse and cockroach droppings, and flies in teachers' lounges, stockrooms and locker rooms. I spy food debris in hard-to-reach places like under and behind equipment in kitchens and cafeterias.

I hear things like, "Well, we stopped complaining about the mice because nothing changed when we did complain. They'd send someone out who would put some bait here and there, but the mice preferred the French fries under the counter in the kitchen!" Or, "I know I'm not supposed to use pesticides, but it's not healthy to have these flies in here either!"

Not healthy is right! Flies, cockroaches and other insects can carry pathogens which can cause food-borne illnesses. Mice, cockroaches and dust mites generate allergens that can trigger asthma attacks. How is your children's school doing? Are you, your kids or your kids' teachers unhappy with the pest control at your school? Do you see pests, or signs of pests such as mouse droppings? Do you see poorly sealed exterior doors, doors propped open, overflowing trash bins or



Dirty floor drains in food service areas are public enemy number two! They feed flies, ants and cockroaches, and can harbor harmful bacteria and fungi.

dumpsters, plumbing leaks, or holes in walls or ceilings? Are pesticides applied frequently, or on a regular schedule? Are pesticides sprayed indoors?



Public enemy number three is food debris in hard to reach places. Out of sight, out of mind, but plenty here to feed families of mice and insects!

If your answer is yes to one or more of these questions^[1], help is available! In 2012, the US EPA rolled out its Strategic and Implementation Plan for School IPM. The initiative is being led by EPA professionals at EPA headquarters in Washington DC, and implemented by a team housed at the new EPA Center of Expertise for School IPM in Dallas, Texas, and at regional offices throughout the US. These professionals are connected with experts at Land-Grant Universities and elsewhere, all around the country.

As a parent, you want your child to be educated in a safe, nurturing environment that's free of pests and allergens. Talk with your school administration about their pest management policy and whether it's IPM-based. If it's not, have them contact EPA's Center of Expertise

for School IPM at school.ipm@epa.gov.

^[1], The questions above have been adapted from those developed by Dr. Albert Greene, US General Services Administration

Source

One Voice National PTA, August 20, 2014 <http://onevoice.pta.org/?cat=15>

If you'd like a local source of school IPM information you can always contact Pat Barnwell, pbarnwel@vols.utk.edu or Karen Vail, kvail@utk.edu at the UT school IPM program, your local county Extension agent, <https://extension.tennessee.edu/Pages/Office-Locations.aspx>, or visit our web site <http://schoolipm.utk.edu/>.

Bed Bugs Found in Your School? Here's What You Should Do!

Karen Vail

Several schools were in the news recently because of bed bug finds on their premises. To help administrators, other school personnel and parents deal with bed bugs under this situation we developed the publication "Bed Bugs: What Schools Need to Know" which can be found at <http://schoolipm.utk.edu/documents/PB1807.pdf>.

In this publication we note the actions school personnel need to take to prevent infestations and stop the bugs from spreading in the school setting. Examples of letters, including Spanish translations, to be sent home are provided in the publication and can also be downloaded at http://schoolipm.utk.edu/success_results.html).

It's important to stay calm and not overreact to finding a few bed bugs in a school. Read the publication and become empowered. In a recent TV segment, a parent criticized the school for not providing information on how the parent could tell if they had bed bugs at home and what they should do if bed bugs were found. The sample letter we provide in this publication contains a link to our bed bug web site, bedbugs.utk.edu, where information on bed bug identification, biology and management should help allay parents' concerns.

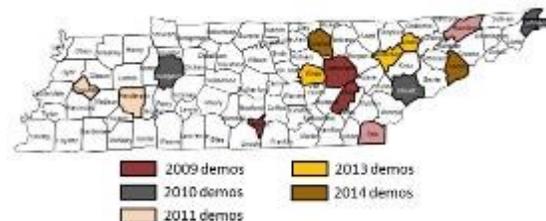


Two School Systems to Participate in 2014 IPM Demonstrations

Karen Vail and Pat Barnwell

Overton County and Cocke County Schools will be learning a bit more about school IPM this year. Both school systems have volunteered to participate in an IPM demonstration. Here's what the demonstration will entail. Initially we [inspect](#) the pilot school and make suggestions for repairs that would help with pest prevention and control. Pest prevention repairs often result in energy savings and thus provide an additional bonus for the school. Some funding is available to help with the repairs that we suggest. In the past we have paid for supplies such as door sweeps, caulk, drain cleaning solution and brushes, paint, plastic storage boxes for kitchens and classrooms, glue boards, mouse bait stations, and fire ant bait.

We are currently planning a meeting with the pest management professional, the maintenance supervisor, the cafeteria manager, the custodial staff, the school principal, the director of schools, and the county Extension agent to make them aware of the tools and resources that are available for the integrated pest management program to be successful. The school IPM logbook facilitates communication between the school community and the pest management professional. We ask someone in the school office, usually the secretary, to oversee the school IPM logbook; this involves recording any pest sightings reported by the school community. We ask the pest management professional to review the logbook when visiting the school to see where problems have occurred and indicate his/ her response by leaving the service tickets in the logbook. The logbook can be reviewed periodically to evaluate how well the program is working and to spot trends or hotspots.



During the school year we will ask for records from the logbook to evaluate how well the program is progressing and determine where we can assist if help is needed. We try to visit at least twice more before the school year ends when we invite maintenance supervisors from surrounding counties to observe school IPM in action.

Sugarcane Beetles: Occasional Fall Invaders

Pat Barnwell

Sugarcane beetles (*Euethola humilis*) are scarab beetles that are occasionally found on the exteriors of buildings where they can damage caulk or sealant in expansion joints at the building—pavement interface or around windows and doors and the coverings of flat roofs. Adults are active at night and are strongly attracted to lights. Damage occurs when adults land and instinctively dig with strong, coarsely-spined forelegs. Leaks around windows and on roofs may result.

Adult beetles are about ½” long, stout, and dull black. Forewings are embellished with rows of punctures. In April through June adults emerge from overwintering sites in the soil. After feeding in the spring, adults mate, deposit eggs in earthen cells in the soil and die. Development from egg to adult takes about 90 days. Adults emerge from spring-laid eggs in August and September and feed through October when they return to the soil to overwinter. Crops such as sugarcane, corn, rice, sweet potatoes, tobacco, as well as turfgrass suffer damage from adult feeding.



Sugarcane beetles congregating in a corner of a school building, UT EPP

Typically sugarcane beetle populations are low but reports of sporadic outbreaks exist. Insects are least attracted to lights that emit wavelengths in the yellow to orange to red range. Choose bulbs such as yellow fluorescent or sodium vapor bulbs to illuminate school buildings. Fixtures that shield bulbs and direct light downward also help to reduce the numbers of insects that are attracted to an area. Applications of pesticides to the structure do little to protect against these beetles; it is best to sweep up or vacuum the beetles and dispose of them in a bucket of soapy water.

Inspect and repair any damage to caulking, sealant and roofs.

Reference

Layton, Blake. Bug- Wise No. 2. Feb. 2, 1999. <http://msucares.com/newsletters/pests/bugwise/2009/bw0209.pdf>



Sugarcane beetle Photo courtesy of Tara Smith, LSU-AgCenter

Four Upcoming Webinars: Ticks, Ants, Occasional Invaders and IPM

EPA Webinar September 30 (2:00 to 3:30 pm EDT) : *Creating Tick-Safe Schools Using Integrated Pest Management*

A webinar, *Creating Tick-Safe Schools Using IPM*, is one in a series of EPA webinars to help school districts adopt a proactive approach to pest control by offering information on plans for implementing Integrated Pest Management. Integrated Pest Management is a smart, sensible, and sustainable approach to managing pests. IPM takes action to address the underlying causes that enable pests to thrive.

Register for the Creating Tick-Safe Schools webinar: <https://www1.gotomeeting.com/register/211517777>; Cost: free

UGA Webinars October 15 (8:00 to 10:00 am EDT)

Dr. Karen Vail: *An Integrated Approach to Managing Odorous House Ants*

Dr. Eric Benson: *Stopping the Occasion of the Occasional Invaders*

Managing pest ants is easier when you understand the “why” of it. Ask yourself, why are ants present in this account? What food, water and harborage are present that allowed this ant to successfully establish and proliferate in this environment and how can I deny the ants’ access to these conducive conditions? By eliminating or denying the ants’ access to these needed resources, the carrying capacity of this environment is dropped. A combination of pesticidal baits and sprays can greatly reduce ant populations for a period of time, but if combined with resource reduction, this combination should provide more long-term control.

Occasional invaders can be some of the most frustrating pest problems facing pest management professionals (PMPs). By only invading occasionally, many PMPs do not have the experience to deal with invasions when they do occur. Misidentification of the insects and lack of understanding of their biology can make control a challenge. This fifty-minute presentation on Occasional Invaders will cover common and uncommon pests encountered by PMPs. Some of the pests covered will include millipedes, springtails, sowbugs, crickets, plaster beetles, rodent fleas, bird mites, earwigs, stink bugs, and multicolored Asian ladybird beetles. For each species covered, identification, biology and control strategies will be reviewed

Register here: <https://www.surveymonkey.com/s/X89YV58>, Cost: \$30

EPA Webinar October 21 (2:00 to 3:30 pm EDT): *Basics of School Integrated Pest Management*

School experts from around the country have been brought together to explain and demonstrate the Basics of School IPM. The webinar will begin with what school IPM is, why it is important, how to implement IPM and where and when to utilize IPM practices. A discussion of how to monitor for pests and its importance, pest exclusionary practices, and details regarding sanitation and maintenance of waste and recycling areas will ensue. This will be followed by a discussion of the most pest challenging area in schools – the kitchens/cafeterias. Then you will be lead through a virtual walk-through of a school, pointing out other potential pest prone areas. Q & A will follow.

Register here: <https://www1.gotomeeting.com/register/543684937>; Cost: free

Future EPA webinars will address the following topics:

- The Basics of School IPM: October 21 at 2 p.m. Eastern time
- Managing Outdoor Pests at Schools Using IPM: November 18 at 2 p.m. Eastern time
- Bed Bugs in Schools: December 16 at 2 p.m. Eastern time
- Keeping Rodents out of Your School: January 27 at 2 p.m. Eastern time
- Dealing with Nuisance Birds around Schools: February 24 at 2 p.m. Eastern time

Find information about future EPA webinars: <http://www.epa.gov/pestwise/events/sipm-webinars.html>

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 on this newsletter?
 Contact kvail@utk.edu**

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<http://tinyurl.com/schoolipmFB>

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.

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.

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