



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

New Orleans Principal Describes His Battle with a Rat-Infested School and How IPM Solved the Problem!!!

Karen M. Vail

Many of you have dealt with rodents attempting to make their way into schools. Harsh outdoor temperatures, heat, and kitchen aromas leaking from poorly sealed doors lure these rodents to the structure. You are aware of rodent management strategies (school IPM action plans, <http://www.extension.org/pages/63911/school-ipm-action-plan-for-rodents#.UqiFSuLWRxU>) and luckily so were the folks managing city properties in New Orleans. Claudia Riegel, director of the New Orleans Mosquito, Termite and Rodent Control Board, was called to action when a new principal noticed he was welcomed by a rodent to his office on move in day. Claudia is promoting IPM in New Orleans and knew that it was important to figure out why the rats were found in the school. Over a dozen were found on the school property. To say the structure was in poor repair was an understatement. Built in 1898, window panes were missing, leaks were prevalent and roofs sagging. Needless to say, the students were not performing very well academically. So how did Claudia's group solve this problem? Inspection revealed the rats were harboring in a locked, abandoned room with a toilet that was located behind the kitchen. They removed the water source, sealed potential entry points and then baited and trapped. Voila, months have passed since the principal has seen a rat.

So as you go about your day and think things aren't going your way, be grateful you don't have the same pest pressure as New Orleans. But understand that if you do, there is a solution and its IPM. For more information about the New Orleans rat problem, see the NPR story at <http://www.npr.org/2013/12/10/248506088/new-orleans-rat-fighters-go-beyond-baiting-traps>. So nice to see a story with a happy ending.



Special points of interest:

- > Rat infestation solved with IPM
- > Buggy Buffet
- > Digital microscope made from Smartphone
- > Prevent brining bed bugs home
- > Prepare classrooms for holiday break

The most efficient and effective way to deal with pests is to **prevent them in the first place**. Teachers play a vital role in pest management in the classroom. They know their room better than anyone else; they see what comes in and say what goes. They make the rules. So why do they have pest critters??? Because insects want the same thing you & I do:

Food, Water & Shelter
Janet Hurley, Texas A&M

Rat Infested School	1
Insect Smorgasbord	2
Digital microscope from Smartphone	2
Prevent bring bed bugs home	2
Prepare classrooms for break	3
Links	4

So You Missed the Buggy Buffet? Never Fear, You'll Have Another Opportunity Next Year!

Karen M. Vail

Why is it deemed socially acceptable in developed countries to eat some arthropods (shrimp, lobster and crab) but not others (insects)? Don't let societal perceptions dictate your protein sources, let your taste buds decide what is acceptable or not. Every year, around Halloween, Jerome Grant's FYS 129 class provides an Insect Smorgasbord to those interested in partaking in an insect sampling. The event takes place somewhere on the University of Tennessee's Institute of Agriculture campus and usually lasts from 3:30 to 5:30. Please share this information with your science teachers so they can join us next year. Entomophagy, or the consumption of insects, is being touted as a solution to the world's food needs (<http://www.theguardian.com/environment/2010/aug/01/insects-food-emissions>).



A Digital Microscope Made from a Smartphone and a Few Other Items

Karen M. Vail

Here's another article we have for your science teachers or really anyone with a curious mind. A Smartphone can be used to create a digital microscope. Just visit our Facebook site at <https://www.facebook.com/pages/Urban-Integrated-Pest-Management-in-Tennessee/292662364150306> to link to a video that describes how to create this digital microscope.



Avoid Bed Bugs when Traveling Over the Holidays

Karen M. Vail

When travelling, do the following to avoid bringing bed bugs home:

- **Store** luggage away from beds. Some people store luggage in the bathroom or place it in a sealable plastic bag. Laptops give off heat and will attract bed bugs. When not in use, store a cool laptop in a sealable plastic bag.
- **Inspect** the hotel room before you unpack. You'll need gloves, a flashlight and magnifying lens. Check behind the headboard, along the mattress seams, and other accessible cracks and crevices. Ask for another room if bed bugs are found.
- **Check** luggage for bed bugs before leaving the hotel.
- **Wash and dry clothes** immediately upon your return home.

For a full explanation see our *Bed Bugs in Tennessee* website at <https://ag.tennessee.edu/bedbugs/Pages/residentsandhomeowners.aspx>

As we all prepare to enjoy a few days off with our family and friends, please remember these few short tips to help keep our classrooms, cafeterias, and offices free of places for pests to hide over the holiday break.

Janet Hurley, Texas A&M, Extension Program Specialist– School IPM

The most efficient and effective way to deal with pests is to **prevent them in the first place**. Teachers play a vital role in pest management in the classroom. They know their room better than anyone else; they see what comes in and say what goes. They make the rules. So why do they have pest critters??? Because insects want the same thing you & I do:

Food, Water & Shelter

...Eliminate these, and the incentive to come in goes away.

FOOD: Whether part of a program to provide breakfast & snacks, or a holiday party, food in the classroom is going to happen. It is the teacher's job to manage it.

- Okay, that top drawer candy bar or opened bag of munch 'ems are not being enjoyed by just you. Freezer zip-lock bags or plastic containers with lids are a must-use for this type of stuff.
- Designate an **eating area** for snacks & treats (preferably on tile).
- Choose foods that are easier to clean up (i.e. bagels instead of donuts or muffins).
- Get the kids to participate in post-snack clean up – tables, chairs and floors. (It's never too early to teach them to clean!)
- **Garbage and recycle bins** should be emptied regularly and should never overflow; it may be necessary to empty them more often at this time of year.
- Make sure tile and carpeting gets cleaned regularly – check **under furniture** for food debris, especially those pieces on rollers.

WATER: This includes ANY beverages, in ANY quantity.

- **Leaky faucets & pipes** are an oasis for night scavengers like crickets & roaches (common classroom pests). Make sure this maintenance issue gets reported.
- Sugary drinks have a way of getting spilled (try to avoid them in classrooms if you can). **Spills** should get wiped up immediately; efforts should be taken to get carpets as clean as possible.

SHELTER: Not just the clutter bugs, but organized teachers unknowingly invite critters in by HOW they store their materials.

- Arts, crafts, miscellaneous **supplies**... *Have you used it in the last year? Is there someone else who could use it more?* Ask yourself this... often.
- German cockroaches love **corrugated cardboard** – they are easily transported into buildings this way. Crickets will munch on it. Mice build nests out of it. Any pest may use it as harborage. If you're using cardboard for long term storage – DON'T. Move toward plastic bins or crates instead.
- **Clutter** is impossible to clean around – next to food, it's what critters want the most. Stop and take a look around, weigh the benefits and costs of having.

Take control of YOUR classroom. Get the bugs out.

UT YEAH Contact Information:

Karen Vail, Ph.D., Professor,
 Urban IPM Specialist, UT Extension
 370 Plant Biotechnology Building
 2505 E J Chapman Drive
 Knoxville, TN 37996-4560
 ph: (865) 974-7138
 fax: (865) 974-4744
 email: kvail@utk.edu
 web: <http://schoolipm.utk.edu>
<http://eppserver.ag.utk.edu/personnel/Vail/extension-work.html>



Martha Keel, Ph.D., Professor
 Housing & Environmental Health Specialist,
 UT Extension
 218 Morgan Hall
 ph: (865) 974-8197
 fax: (865) 974-5370
 email: mkeel@utk.edu
 web <http://utyeah.utk.edu>

James P. Parkman, Ph.D.
 Former UTIA IPM Coordinator
 370 Plant Biotechnology Building
 ph: (865) 974-7135
 fax: (865) 974-4744
 email: jparkman@utk.edu

Mary Rogge, Ph.D., Assc. Professor
 UT College of Social Work
 225 Henson Hall
 ph: (865) 974-7500
 fax: (865) 974-4803
 email: mrogge@utk.edu

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



Find us on facebook
<http://tinyurl.com/UrbanIPMTN>

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
<http://schoolipm.tamu.edu/>

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
http://www.whatisipm.org/schools_IPM.asp

EPA schools
<http://www.epa.gov/pesticides/ipm/>

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 <https://utextension.tennessee.edu/Pages/offices.aspx>

The University of Tennessee is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services. All qualified applicants will receive equal consideration for employment without regard to race, color, national origin, religion, sex, pregnancy, marital status, sexual orientation,

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.

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.