



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

2011 Regional School IPM Workshops to be Held at Waverley Elementary, Roan Creek Elementary and John Sevier Elementary Schools

Karen M. Vail

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 one of the following workshops:

Waverly Elementary School, 612 E Main St., Waverly, TN 37185
on August 3, 2011 at 10:00 am.

Roan Creek Elementary School, 2410 Roan Creek Road, Mountain City, TN 37638
on August 8, 2011 at 10:00 am.

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:

- > Regional IPM Workshops
- > School IPM: Good for Children, Easy on the Budget
- > Pest Spotlight: American Roach

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School IPM: Good for Children, Easy on the Budget

By Mary Woodsen and Elizabeth Myers, *From* [Northeast IPM Insights](#)

A TALE OF TWO SCHOOL DISTRICTS

Last year Gregg Smith's pesticide bill was \$5 for a can of wasp freeze. And that's for the entire Salt Lake City, Utah, school district—36 schools serving nearly 24,000 students.

"Three years ago I was spending \$28,000 a year on an outside contractor for pest control," Smith says. "My costs now are running about \$4,000 per year." But it's not just the money Smith cares about. Cutting back on pesticides has well-documented health benefits for children.

In Pittsburgh, Pennsylvania, Mike DiCroce tells a similar story. "I use a pressure hose to knock down small wasp nests in handrails and such," says DiCroce, the district's pest control operator.

Smith and DiCroce use IPM, or [integrated pest management](#), to deter insect invaders on school grounds. Their tools are simple. Vaseline, hoses, mops, flashlights, caulk, and sticky traps all prevent infestations. Vaseline, says DiCroce, keeps cockroaches from crawling up drainpipes, while caulk seals hairline cracks against ants.

Pesticides are a last resort. The reason? "Children are more sensitive than adults to pesticides," says Kathy Murray of the [Northeastern School IPM Working Group](#). Crawling, exploring, and hand-to-mouth activities can expose children to pesticides. Murray is one of two dozen people working on projects funded by the Northeastern IPM Center to teach children about IPM and implement least-toxic methods in schools.



THE RIGHT THING TO DO

For more than a decade, IPM proponents have persuaded school districts to choose pest prevention over sprays. "Schools that switch to IPM show a decline in pesticide use and are still able to keep pests at bay," says University of Massachusetts entomologist Bill Coli, who evaluates the impact of IPM projects. A case history of ten districts across seven states underscores his point: as schools adopted IPM, the average number of pesticide applications went down, and so did pest complaints. ([Contact Coli](#) for summary data on IPM regulations, adoption, and impacts in U.S. schools.)

A good chunk of funding for school IPM outreach has come from the [U.S. Department of Agriculture](#), an agency that knows pest management like the back of its hand. Through its [Regional IPM Centers](#), USDA unites private and public IPM supporters—including the [U.S. Environmental Protection Agency](#), which also devotes funds to reducing pesticide risks. In 2008, some of these partners created a [national plan](#) to make IPM a reality in all public schools by 2015.

"With nearly 50 million children enrolled in public schools, school IPM is the right thing to do," says Sherry Glick, EPA's school IPM team leader. Recently, her agency announced a \$1.5 million plan to bootstrap school IPM programs all over the nation.

Some of the progress at the school-district level has been driven by state decisions. Thirty-six states now promote IPM or legislate some restrictions on pesticide use. "EPA is increasing its focus to work directly with states through voluntary relationships," explains Glick.

THE BOTTOM LINE

In Keller, Texas, both pests and pesticide bills are down about 90 percent in a school district with 40 buildings, 33,000 students, and termites. The district once spent over \$90,000 a year to cope with pests; now it's below \$10,000, says John Gann, director of maintenance.

Now schools nationwide can use a [free online calculator](#), courtesy of Texas AgriLife Extension Service, that walks staff through their kitchens, offices, storage and utility areas—even building construction materials—to better assess pest risks and build solid IPM budgets.

In 1991, Texas passed one of the first school IPM laws in the nation. In contrast, Utah has no rules on the books about IPM. Yet the Salt Lake City district has embraced IPM wholeheartedly. Why? "Pesticides are expensive," says Smith. "You can buy a lot of sticky traps for what you'd pay for some kinds of pesticides, or for a professional contractor." In fact, notes Smith, he can buy enough traps to last three years or more on the cost to contract out the same services he now does in-house.

Even in states that promote IPM, many school districts lack IPM plans. They have plenty of other pressing issues on their minds.

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The [Northeast IPM Insights](#) promotes integrated pest management for reducing risks to human health and the environment.

Pest Spotlight

American Cockroach, *Periplaneta americana*

Description: Adults are brown to reddish-brown with a pale brown or yellow border around the outside of the top of the head shield (pronotum). Wings cover the abdomen. They are 1 3/8 to 2 1/8 inches long. Early nymphal stages are grayish-brown. Later stages are reddish-brown. Egg cases (ootheca) are dark reddish-brown to brownish-black and about 3/8 inches. There usually are eight eggs on each side. The droppings of American cockroaches can be confused with mouse droppings, but are shorter with square (rather than pointed) tips.

Life Cycle: Egg, nymph and adult

Where to Look: Indoors, they are found in warm areas with high humidity—boiler rooms, basements, sewers or around drains and pipes. They are more common in large commercial buildings infesting food-storage and preparation areas. Outdoors, they are found in moist, shady areas in yards, hollow trees, wood piles and mulch. They are frequent inhabitants of storm drains and sewers.

Management: See action plans at <http://www.extension.org/pages/20443/school-ipm-action-plan-for-american-and-smoky-brown-cockroaches>. Log all pest management activities into the Child-Serving Facility IPM Logbook (see schoolipm.utk.edu for example).



Adult American Cockroach. Credit: Daniel R. Suiter, University of Georgia, Bugwood.org



American Cockroach Nymph . Credit: Gary Alpert, Harvard University, Bugwood.org

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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

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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.

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