Greetings from School IPM 2015!

Every day, 49 million children attend school in the United States, served by nearly seven million teachers and staff. But they're not alone. Schools are also frequented by a number of pests including cockroaches, mice, dust mites and more. Asthma is epidemic among children, impacting nearly 6% of school children nationally with rates as high as 25% in urban centers. Cockroaches are potent asthma triggers.

Integrated Pest Management (IPM) is a prevention-based, highly effective approach proven to reduce pest complaints and pesticide use by up to 90% in schools and other public buildings. IPM practices such as sanitation and exclusion also improve food safety, fire safety and energy conservation. Our newsletter highlights real-life examples of IPM in practice and can help you start an IPM program in your school district. For more information, visit www.schoolipm2015.com.

Bed Bugs and Book Bags Teaches Kids Valuable Lessons

A new bed bug curriculum, Bed Bugs and Book Bags, is available following a request from Duval County Public Schools in Florida. According to Erin Harlow, commercial horticulture agent with the University of Florida - Institute of Food and Agricultural Sciences (IFAS), Duval County Extension, "There have been a few minor introductions of bed bugs in the area; schools are interested in prevention."

The curriculum is designed for third through fifth grades but can be used for a variety of age groups. It includes three lessons with a total of ten activities plus a teachers’ guide. The focus is on bed bug biology, feeding, harborage and prevention. Hands-on activities are included. The lessons are interdisciplinary and can be used in science, language arts, health, art and geography classes.

Anyone can download the curriculum for free after completing a 30-minute online training followed by a quiz. The training dispels common bed bug myths, helping to ensure that anyone using the curriculum has a general knowledge of bed bug biology and behavior. "It's really bad press for an insect to be misidentified as a bed bug when it's not," says Rebecca Baldwin, assistant professor and undergraduate coordinator in the Department of Entomology and Nematology at the University of Florida. "It can lead to panic and unnecessary pesticide applications."

"The idea was to start with third to fifth graders because they still talk to their parents," says Harlow. "We would love to see the transfer of knowledge from the school to the home." There is a pre- and post-test.
available for students, as well as a follow-up survey for parents, to help gauge efficacy. Several activities are designed specifically with knowledge transfer in mind, including a scavenger hunt for bed bug-conducive environments in the home.

Lessons are designed using the experiential learning model of “Do, Reflect and Apply.” “This teaching method makes the lessons fun and engaging,” says Harlow. Students start with an activity, followed by discussion questions which help students reflect on what they learned and think about real world applications.

Each individual section can be used as a stand-alone lesson, so teachers can use the curriculum piecemeal or as a whole unit. “They can be grab-and-go lesson that teachers can use without a lot of preparation,” comments Baldwin. The teachers’ guide “gives teachers enough education about bed bugs that they can be the expert in the classroom,” says Baldwin.

An Extension Enhancement Grant from the University of Florida provided funds to print 100 copies of the curriculum. The grant also paid for the online training for one year and covered several face-to-face trainings of other extension agents. “Many extension agents specialize in horticulture and don’t necessarily know a lot about urban insects,” says Baldwin. “Since an extension office is often the first place contacted to identify an insect, it’s vital for agents to have the knowledge to give the correct answer.”

The Duval County School Board has adopted the curriculum as a voluntary option for teachers. In addition to teachers, health departments have picked up the curriculum and the Florida Pest Management Association chose the curriculum as this year’s “Community Swarm” Public Service Project. Community Swarm allows association members to provide services to communities in which their businesses are located. Members typically give presentations to public and private schools, civic groups, scout troops, church youth groups and similar organizations.

The Jacksonville Bed Bug Task Force spearheaded the curriculum-development effort. The task force was formed in 2011 by the University of Florida Duval County Extension Office and is made up of 25 members from government offices and the community.

The IPM Minute Videos Show the Basics

Philip Smith, compliance assistance specialist with West Virginia Department of Agriculture, is creating a series of short educational IPM videos, The IPM Minute. Smith “wanted to create videos that didn’t have the usual dull academic flavor” and that were short enough to hold viewers’ attention.

The videos are, as advertised, about a minute long and cover IPM topics including monitoring, sealing exterior doors, creating an IPM recordkeeping file and rodent management. “I always want to encourage schools to improve,” says Smith. “Sometimes the program is on cruise control, with everyone doing only what is needed to get by.”

Smith created a YouTube channel to host the videos and is always looking for ideas, saying, “I have a list of things to talk about as I develop this further, but if anyone has something specific they think
would make a good topic, they are welcome to pass it along.”

Short videos are welcome. “Anything that anybody wants to submit would be great. Basic cameras and cheap or free video-editing software are all that’s needed to create a video,” notes Smith.

Keep in mind proper approvals may be needed before shooting your own video. “Many school systems don’t just allow you to come in and start recording video,” says Smith. It’s also useful to avoid any identifying characteristics of the school where you’re recording. According to Smith, “I opted to try to make these look like they could be made in Anywhere, USA. Some viewers may start to tune out if they see where the video came from, thinking the topic won’t apply to their region or situation.”

New York City Department of Education Renews IPM STAR Certification

The New York City Department of Education (DOE), IPM STAR certified since 2003, has renewed its certification for another three years. In order to become recertified, DOE was required to pass a rigorous 37-point, on-site inspection.

The DOE IPM program began in 1988 due to then-assistant director of pest control Dan Dickerson’s personal interest in reducing children’s exposure to pesticides and pests. Michael Siciliano, the current director of pest control, manages the IPM program which includes 1200 school buildings and services more than 1.1 million students.

The IPM program has reduced overall pesticide use by more than 90% since it was implemented and achieved a 95% reduction in service calls between 1988 and 1999.

Training and education are key components of the DOE’s program. “You need to be a communicator to get to everyone who has to be part of the solution,” says Siciliano. New food managers are trained by the pest control department on proper sanitation.

Before servicing schools, new pest technicians undergo a two-day classroom training, followed by a two-week field training with a supervisor. Siciliano is currently working with technicians to strengthen reporting practices to better track pests.

The DOE requires all contracted pest management service providers to be Green Shield Certified, which recognizes pest management professionals who can demonstrate their ability to provide advanced IPM services. Superior Pest Elimination services more than 280 New York City public school facilities. Michael Orlino, operations manager for Superior, says, “It is extremely critical to provide Green Shield Certified services in the school environment, for the health and safety of the children, teachers and staff at each school.” Verrazano Exterminating provides additional pest management services to New York City public schools.