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.

Terrific Resources for Managing Wildlife Challenges

"Wildlife control is the wild west of pest management," according to Stephen M. Vantassel, Project Coordinator of Distance Education for the University of Nebraska-Lincoln National Wildlife Control Training Program. "A major obstacle to consistent industry performance standards is the lack of high-quality resources. The Internet has nearly infinite information for wildlife control but the information provided does not always represent the best practices."

Vantassel and colleagues set out to create an authoritative resource and the result is a comprehensive training program including seventeen modules. Topics include legalities and ethics, physical safety, health and diseases, structural damage, communicating risks, and best practices for animal handling and euthanization. Five modules focus key skills needed for bats, raccoons, skunks, tree squirrels and unprotected birds.

A supplemental species manual was recently released to support seminar-style training for pest control agencies. This volume also includes suggested questions to ask before hiring a pest service provider.
What's New This Month

California Dept. of Pesticide Regulations: The Green Cleaning, Sanitizing, and Disinfecting Toolkit for Early Care and Education developed by California Dept. of Pesticide Regulations (DPR), the University of California San Francisco School of Nursing, the University of California Berkeley's Center for Environmental Research and Children's Health, and Informed Green Solutions is now online.

The toolkit includes the following downloads:

- Green Cleaning Fact Sheets for ECE Providers - 10 PDF fact sheets
- Green Cleaning Fact Sheets for Families
- Green Cleaning, Sanitizing, and Disinfecting Toolkit for Early Care and Education

The Toolkit curriculum provides a general overview of green cleaning, sanitizing, and disinfecting in early care and education (ECE) settings. Child care providers and staff can learn about the use of less-toxic products to clean, sanitize, and disinfect and why children are vulnerable to the health risks of cleaning products. Using the curriculum, individuals working with and for child care centers can develop and implement the training.

The training is available via a hard copy manual, on-line, or a two-day seminar. Click here to access the on-line resource. NWCTP also houses a digital collection of thirty years of pest management research, practices and proceedings. The database, available at (http://digitalcommons.unl.edu/icwdm/), includes more than 5400 free, searchable documents that have been prescreened for accuracy and usefulness for both pest management professionals and the public.

Vantassel reports that vertebrate pest management is largely unregulated in most states, particularly in western and southern states, often contributing to confusion and inefficiency for those seeking and providing wildlife pest solutions. NWCTP's training materials are available to regulatory agencies to use and modify as a tool for regulation and certification. For example, Delaware has adopted the program as a certification requirement for State Wildlife Control Operators.

Vantassel's articles have appeared in Wildlife Control Technology and Professional Wildlife Control Magazine. Presently he is National Wildlife Control Operations Association's representative for the state of Nebraska and is the editor of National Wildlife Control Operators Association News. The program and websites are collaborative efforts of the University of Nebraska at Lincoln and Cornell.

Foodborne Pathogens Lurking in Unexpected Places

Foodborne pathogens cost an estimated $152 billion annually in the US. Microorganisms responsible include E. coli, salmonella, avian flu and Listeria monocytogenes, a deadly pathogen and major food industry concern. Listeria affects 2,500 people in the US annually, resulting in an estimated 500 deaths. Salmonella causes close to two million illnesses a year and roughly the same number of deaths as Listeria.

Listeria is of particular concern both for its high mortality rate and its ability to thrive under harsh conditions. The bacterium can multiply rapidly and form a protective "biofilm" which makes it more difficult to kill using sanitizers or disinfectants. Listeria bacteria flourish on cutting boards, floor drains, floor mats and other frequently wet areas. Hard-to-reach and thus infrequently cleaned surfaces on floors and walls, under and behind equipment and other fixtures are also frequent harborages for Listeria and other pathogens. Listeria can survive temperatures as low as 41° F and is undetectable by look, smell or taste.

Floor drains are particularly important to clean regularly to prevent pathogen growth. Floor drains rarely get the same attention as food contact surfaces such as display cases, refrigerators, countertops and sinks. However Listeria and other pathogens can easily spread from floor drains to other areas on shoes, food or other objects dropped on the floor, or with the help of pests such as fruit flies, drain flies, ants or cockroaches.
can develop and implement cleaning, sanitizing, and disinfecting policies and practices in a safe and effective program.

**Highlights**

Evaluation webinars announcement! Gain a better understanding of the evaluation section of your grant proposal. The webinars are designed to answer evaluation questions regarding your specific project.


**Upcoming Events**

November 9th, 2013
Austin Insect Rodeo
Austin, TX

November 10-13, 2013
Entomological Society of America (ESA) National Meeting
Austin, TX

November 13, 2013
TIPMAPS Annual Conference
Austin, TX

December 20, 2013
IPM Coordinator Training
Lubbock, TX

Above: A clean drain compared to a dirty drain. Kitchen staff should clean from the floor up and be aware of the need to clean floor drains.

Drain cleaning practices can sometimes spread pathogens through airborne droplets formed when contaminated drains are scrubbed with brushes or pads. It is important to train food service staff to minimize spread. For example, all food should be put away prior to cleaning drains, and drains should be cleaned first, before food preparation surfaces.

For a good on-line resource on food safety, visit the Food Safety Magazine website at [www.foodsafetymagazine.com](http://www.foodsafetymagazine.com).

**IPM STAR Assessments will Verify IPM Performance in Schools**

At Washington State University's Urban IPM Program, experience has shown that nationally recognized [IPM STAR](http://ftp.ipminstitute.org/school_ipm_2015/October 13_eNewsletter.htm) certification is an incentive for Washington school districts to practice high-level, verifiable IPM.

The IPM STAR program, developed by Dr. Thomas Green at the IPM Institute of North America and collaborators, is designed to evaluate and recognize IPM performance in school districts. The peer-reviewed STAR program incorporates the basic tenets of IPM as its foundation, including pest knowledge, monitoring and inspections, record keeping and using long-term, effective strategies with a focus on pest prevention.

Certification includes two parts; first, the evaluator must verify that the school meets minimum requirements for legal compliance and effective sanitation and exclusion practices. Second, the evaluator scores each district for implementation of 37 specific practices including IPM policies, plans, and posting and notification of pesticide applications.

The evaluation takes about seven hours on average, beginning with an interview of the facilities director and/or IPM coordinator, grounds crew lead and any contracted pest management professionals. Together with the evaluator, they review IPM program...
professionals. Together with the evaluator, they review IPM program records and the school's history of IPM practices.

The evaluator then inspects and photographs buildings and grounds at three schools (high, middle and elementary) for pest activity and IPM practices, paying special attention to pest-conducive areas such as the kitchen and staff lounge. The evaluator also looks for evidence of pesticide use, especially in commonly overlooked areas such as the school's gardens and grounds.

During the evaluation, the evaluator interviews school staff about pesticide use, pest problems and IPM practices at the school. All of this information is reflected in the district's score. All required practices and a minimum score of 70% receive IPM STAR certification, with the benefit of a plaque and a press release recognizing their accomplishments. To learn more about IPM STAR certification program, visit www.ipminstitute.org/ipmstar.htm

Currently, Washington has one of the highest rates of IPM STAR certification in the country, with nine school districts achieving certification and several pending. Certified school districts spread the word about the IPM STAR program, which further increases participation among Washington school districts. As IPM STAR continues to gain popularity in Washington, Washington's Urban IPM Program looks forward to the day when all Washington school districts have verifiable IPM programs.