School Integrated Pest Management (IPM) Newsletter – April 2014



COLLEGE OF AGRICULTURE & LIFE SCIENCES

View this newsletter as a <u>PDF</u>.

EPA Awards More than \$500,000 to Schools to Help Reduce Children's Exposure to Pesticide

Integrated pest management practices are shown to reduce pesticide use by Cathy Milbourn

On March 12, 2014, the U.S. Environmental Protection Agency (EPA) announced three grants to facilitate integrated pest management practices in schools. This funding will help reduce student's exposure to pests and pesticides in the nation's schools, while saving money, energy and pesticide treatment costs.

"Children are among the most vulnerable members of our society, and it's EPA's job to protect them from harmful chemicals," said James Jones, Assistant Administrator for the Office of Chemical Safety and Pollution Prevention. "We aim to help schools implement sustainable pest management practices to create a healthier environment for our children and teachers."

Integrated Pest Management (IPM) reduces pesticide use, helps to eliminate pests and saves schools money. For example, 18 schools in Monroe County, Indiana have reduced both pesticide use and pest control costs by 90 percent using IPM practices. This approach has the potential to reach all 15,000 school districts and improve the health and well-being of the 49 million children attending public and tribal schools in the United States.

IPM measures help prevent pests from becoming a threat by taking action to address the underlying causes that enable pests to thrive in schools. These actions, such as repairing water leaks, adding weather stripping to windows, and installing door sweeps, reduce pesticide use and treatment costs while reducing water and energy costs.

The IPM common-sense approach is a stark contrast to conventional pest management in which an exterminator uses pesticides school-wide on a regular schedule, potentially exposing school children, teachers and staff to pesticides, with little emphasis on removing the underlying conditions that make it inviting to pests.

The three grants will be awarded to:

The Texas A&M AgriLife Extension to develop a central, internet-based hub for materials and phone apps that will give school districts the information and tools they need to adopt an IPM program. While the project aims to reach 1 percent of schools (552,350 students) within three years, it has the potential to reach all of the 15,000 school districts nation-wide and the 49 million children attending US public schools.

The University of Arizona and partnering institutions to develop and carry out a pilot training and certification program for school staff (custodians, kitchen staff, and school administrators) in

eight states and four tribes. The UA team is working with five other universities and stakeholders to accomplish these goals. Once finalized, the materials will be made available to schools nation-wide through partners.

The Michigan State University to help 5 percent of Michigan and Indiana schools adopt IPM through hands-on education, training, and coalition building, including web-based trainings and a website. About 135,000 children may be protected.

For additional information on the three funded grants and IPM in schools, visit: www.epa.gov/pestwise/ipminschools/grants.

National Team of Pest Control Experts to Create Nationwide Guidelines for Schools

From http://uanews.org/story/ua-pest-control-experts-to-create-nationwide-guidelines-for-schools

The Environmental Protection Agency on Wednesday Apr. 2nd awarded a \$250,000 grant to the University of Arizona and partnering institutions to support the creation of training materials for educators nationwide.

Through multidisciplinary expertise, the University of Arizona Community IPM Leadership Team, part of Cooperative Extension in the College of Agriculture and Life Sciences, helps schools implement safe and effective IPM programs that reduce risks from pests, including insects, rodents and weeds, as well as pesticides use in schools, on playing fields and in surrounding areas.

"IPM is the safest, most effective and most cost-effective way of managing pests while posing the lowest risks to people and environment," said Dawn Gouge, principal investigator for the EPA School IPM grant.

Integrated pest management addresses the fundamental reasons why pests are a problem by correcting conditions that are conducive to pest infestations in the first place. IPM includes pest identification and monitoring indoors and outdoors, pest-proofing of facilities, improving sanitation standards, and improving plant health in landscapes, including trees, shrubs and turf. Only the least toxic and most effective pest management tools are used.

The **School IPM** program is currently practiced in 44 school districts in Arizona, including some of the largest districts in the state. IPM in schools has reduced pest incidences by an average of 78 percent and pesticide use by 71 percent, according to the School IPM program.

In Arizona, pest incident reports have dropped by 85 percent for all School IPM programs combined. The Mesa Unified School District now trains 100 percent of its custodial and maintenance staff annually on IPM, Gouge said.

The IPM materials, to be made available in print and online, will include self-guided information for schools everywhere. After receiving training, school personnel will take proficiency exams and those who pass will receive certificates.

During Wednesday's event, EPA representatives Jim Jones, assistant administrator of the Office of Chemical Safety and Pollution Prevention, Thomas Cook, director of the Center of Expertise for School Integrated Pest Management, and Jeff Scott, EPA Region 9 division director (Waste Management Division and Communities and Ecosystems Division) visited Metro Tech High School to tour the school and present the check.

IPM has been used at the school for more than 10 years to control insects, weeds and rodents. Visitors saw how traps are placed at "hot spots" and how the focus is on prevention rather than widespread pesticide spraying. To help illustrate the pest problems in specific areas, live creatures including bedbugs, scorpions and cockroaches were on hand.

Project partners include: Dawn H. Gouge (University of Arizona), Tom Green (IPM Institute of North America), AI Fournier (University of Arizona), Shujuan (Lucy) Li (University of Arizona), Shaku Nair (University of Arizona), Dave Kopec (University of Arizona), Paul Baker (University of Arizona), Kai Umeda (University of Arizona), Ursula Schuch (University of Arizona), Carrie Foss (Washington State University), Tim Stock (Oregon State University), Susan T. Ratcliffe (University of Illinois), and Janet Hurley (Texas A&M AgriLife Extension).

The Arizona IPM Education Commitment Awards also were presented on Apr. 2nd to the following "heroes" in recognition of their dedication to IPM education and for establishing safe learning environments for children:

- Tony Scarfo, Phoenix Union High School District
- Ed Stallard, Mesa Public School District
- Bill Currie, International Pest Management Institute
- Dan Vezie, Maricopa Unified School
- Elaine Wilson, Intertribal Council of Arizona
- Doug Brunner, University Termite and Pest Control
- Fred Willey, Invader Pest Management
- Pat Copps, Orkin
- Ron Walker, Arizona Department of Agriculture Office of Pest Management

University of Arizona Education Award Winners

Fred Willey is President of Invader Pest Management. Fred has been a pest management professional (PMP) for 25 years and founded Invader Pest Management in March of 1994, so celebrates 20 years of great business. Fred interfaces through service contracts with over 1500 people monthly. About 50% of Fred's business involves environments with children. When I asked Fred why he is so passionate about IPM, he wrote a small book on the subject in under 20 minutes, so I have summarized his comments here: Fred promotes Integrated Pest Management because "I believe that it is a much more professional, effective and responsible means of delivering pest control to our customers. I believe in reducing the use of pesticides

and was the first pest control company in Arizona to become a Gold Member of the US EPA Pesticide Environmental Stewardship Program. I like to educate the public that as Professional Pest Managers, you hire us to resolve your pest issues not apply pesticides, and it's our responsibility to control your pest issues safely and effectively, and IPM strategies are a very effective course of action that utilizes chemical treatment as a last resort instead of first response. With IPM I choose when pesticides are used I like that better than the old fashioned way of just showing up and spraying, and while it might be easier, you could almost train a monkey to do that".

Fred says IPM is much more fulfilling not only for himself but for his employees. Building strong IPM skills is especially useful working in food handling and manufacturing establishments, LEED facilities and public buildings, in Schools, and homes. Not only does Fred want to provide IPM services to his customers, but he wants to provide the ability to offer a career with opportunities for personal growth to his employees.

Dan Vezie works for Maricopa Unified School District, he is a jack-of-all-trades and serves as the districts locksmith, warehouse man, helps with General Fixed Assets, and he is the pest management professional. Dan started with MUSD in 2008 and became licensed by the Office of Pest Management in October 2012. Dan came to see us at the University of Arizona Experiment Station to ask how to safely manage pests. Dan says that since he began implementing IPM his chemical inventory has decreased, his record keeping has improved, and he now has a better understanding of exclusion methods. Dan believes that "IPM serves as a framework to provide an effective, comprehensive, and low risk approach to protect our students, staff, and resources from pests".

Tony Scarfo is the Quality Assurance and Sustainability Specialist for Phoenix Union High School District. He has worked for PUHSD for 25 years, 18 as Lead Pest Control Technician and 7 in Quality Assurance. In Tony's own words: "IPM has provided PUHSD with an important tool to assist in the education and promotion of creating a safe and healthy environment for our students and staff. It has become an important part of our mission of responsible environmental stewardship by providing a fundamental shift in how we operate our daily pest control activities".

Ron Walker is the Continuing Education Coordinator for the Arizona Dept. of Ag. Office of Pest Management (OPM). Ron has worked at OPM (previously Structural Pest Control Commission) for 24 years. Ron says "Pesticide safety has been a priority of mine since starting with the SPCC after seeing how thoughtlessly and carelessly some people both in and out of the pest control industry use pesticides without thinking of either the short term or long term effects of pesticide misuse to themselves or the environment".

Doug Brunner is a pest management professional working for University Termite and Pest Control. Doug is the contract administrator, responsible for contract implementation of all IPM programs funded by the taxpayer (schools, hospitals, correctional facilities, federal agencies, cities, state agencies, etc.). This includes writing specifications for the locations, conducting inspections, and developing site plans and logbook reporting systems. He also deals with termite reports, and all bird abatement programs. Doug has been licensed for 19 years, and has worked for UTPC for 18 years. About 70% of Doug's work focuses on schools. He has 315 schools currently under contract. Doug will tell you that he has seen his share of nightmares and that IPM minimizes risks.

Ed Stallard has worked as the Mesa Public School District IPM Coordinator for 12 years. In Ed's own words: "MPS is totally committed to providing a healthy learning environment for

students and staff. The IPM process provides the elements of education, management and control in order to limit exposure to pesticides. In this way, on a daily basis, we are stewards for that healthy learning environment".

Pat Copps is an entomologist and technical services manager for Orkin. Pat started in Vector Control in 1972 and has worked as a pest management professional since that time. Pat has worked for Orkin for 15 years, and visits approximately 150 customer locations every year. About 20% are locations with children. Pat declares, "I promote IPM practices since this is the best approach and includes an emphasis on proactive procedures, partnership with the customer, and the resolution of root cause issues. This in turn permits a limited need for extensive treatments when pesticides are needed. I have observed many positive impacts when appropriate IPM based programs are used. These include the elimination of the pest issue and a reduced need for interventions with pesticides. In my opinion, homes, schools, food processing establishments and hospitals have all had positive impacts from the use of well-designed IPM programs".

William E. (Bill) Currie boasts a 30-year federal career included USFDA, USDA and EPA. He was transferred into EPA as a charter member when the agency began in 1970. Bill has had hands-on experience with all aspects of urban pest management during his 22 years at EPA as Training Officer and as an IPM Specialist. In 1979, Bill helped the National Park Service start their IPM program, and has written IPM plans for sixteen (16) National Parks. After retiring in 1992, Bill and two associates founded the International Pest Management Institute (IPMI), which has provided technology exchange for urban integrated pest management for school sites, parks and municipalities.

Bill's concerns with the adverse effects of pesticides on children have led to working with school systems and other urban sites, with a focus on reducing risks from pests and pesticides. From 1999 through 2002, Bill was the independent IPM expert for the Los Angeles Unified School District, and completed IPM training for over 7,500 staff members.

Elaine Wilson has worked with the Intertribal Council of Arizona as the Environmental Quality Programs Director since 1990 (24 years). Elaine works with 21 Tribes and provides pesticide safety training for over half of the member Tribes. When asked why Elaine feels IPM is important Elaine responds, "I believe IPM is the best approach in order to protect human health and the environment. I'm a firm supporter of IPM and ensuring the safety and wellness of all people, especially children. I also believe that pesticides can be used as a last resort and that it is to be used in accordance with its label and applicable federal/state/local laws. We continue to educate tribal communities on the importance of IPM and using pesticides safely and ensuring the label is read prior to the use of the product".



National Healthy Schools Day: Promote a Healthy School Environment

Parents, teachers, school nurses, custodians, advocates, and agencies have promoted National Healthy Schools Day activities nationwide since 2002. National Healthy Schools Day is coordinated by Healthy Schools Network in cooperation with many agencies and organizations. It promotes the use of EPA's <u>IAQ Tools for Schools guidance</u> as well as other EPA environmental health guidelines and programs for schools and children's health. Whether you are at the beginning stages of investigating school environmental Quality program, it is important to educate others and celebrate your school's successes.



This year, National Healthy Schools Day is Tuesday April 8, 2014.

Children's health is uniquely affected by surrounding environment. Both indoor and outdoor air qualityare essential for the development of the children. Good indoor air quality (IAQ) contributes to a favorable learning environment for students, protects their health, and supports the productivity of school personnel. Indoor air pollution can be asthma triggers for students and/or school staff. Environmental factors also can lead to other short-term and long-term health effects. Students and/or school staff who are asthmatic, allergic, chemically sensitive, wear contact lenses, or have impaired health may be particularly vulnerable. Schools must be prepared to manage students' exposure on high outdoor air pollution days.

Providing a healthy school environment requires all of us: parents, teachers, school nurses, custodians, facility directors, building principals, school administers, advocates and agencies, to work together and create a healthier environment for our children and school staff.

"What are your schools doing and what is your state doing to improve environmental health at school?" Find out the status of your state and read the new State of the States report in <u>Towards Healthy Schools 2015!</u>

Find more on Children's Health & Health Hazards In Schools: http://www.healthyschools.org/clearinghouse.html#chhhs

Find more on Promoting Green & Healthy Schools: <u>http://www.healthyschools.org/clearinghouse.html#pghs</u>

Find more information about Healthy Schools/Healthy Kids Clearinghouse: <u>http://www.healthyschools.org/clearinghouse.html</u>

Upcoming Webinars and Events

Attend Free Sessionsof the Green Strides Webinar Series. View archived webinars here.

The <u>Green Strides Webinar Series</u> provides school communities the tools to reduce their schools' environmental impact and costs; improve health and wellness; and teach effective environmental literacy, including STEM, green careers, and civic engagement.

April 14, 2014, 5:30-7 p.m. Eastern / 2:30-4 p.m. Arizona: <u>Newton's Laws and NASA</u> (NASA)

May 2, 2014, 2-3 p.m. Eastern / 11-12 a.m. Arizona: <u>All Bugs Good and Bad 2014</u> Webinar Series: Are Those Itsy Bitsy Spiders Good or Bad? (eXtension)

April 23, 2014, Wednesday, 7:30-3:30 p.m.: Workshop <u>Integrated Pest Management in a</u> <u>Child's World</u>. Yuma Cooperative Extension Office, 2200 W. 28th St. Yuma, AZ 85364

Free Registration. This workshop for school personnel will provide information on: Integrated Pest Management (IPM) philosophy and the best way to manage pests, including bed bugs, cockroaches, ants, head lice, scabies, and pesticide safety. Participants will be awarded 6 Continuing Education Units for Office of Pest Management (general category). To register for

the class or other inquiries, call Shaku Nair, Assistant in Extension for Community IPM, University of Arizona, at 520-840-9429 or <u>nairs@email.arizona.edu</u>.

April 25, 2014, Friday, 7-2 p.m.: <u>Ak-Chin Earth Day Event</u>. 46753 Farrell Road, Maricopa, AZ 85139

The Environmental Protection Department of the Ak-Chin Indian Community is planning 2014 Ak-Chin Earth Day Event. Departments/Organizations are encouraged to set up exhibits that promote environmental stewardship and to provide environmental educational opportunities.

May 7, 2014, Wednesday, 8-1 p.m.: <u>Turfgrass Field Day</u>, Karsten Turf Research Facility, 2101 E. Roger Road, Tucson, AZ 85719

Tour begins promptly at 8:15 AM to feature research about: irrigation impacts on salinity effects on turfgrasses, turfgrass remediation practices to reduce salinity effects, spring transition of winter overseeded grasses, development of saltgrass and curly mesquite for turf, and turf tillage implements demonstrations. Find more details: <u>http://turf.arizona.edu/</u>.

May 9, 2014, Friday: <u>23rd Annual Desert Horticulture Conference</u>, Casino Del Sol Resort, 5655 W Valencia Road, Tucson, AZ 85757

The Desert Horticulture Conference is the premier annual conference for all members of the Green Industry: landscape architects, designers, growers, retailers, contractors, maintenance personnel, suppliers and educators. Presenting timely and research-based information relevant for designing, building, maintaining, and producing plants for urban landscapes in the arid Southwest. Please visit the website at <u>http://cals.arizona.edu/deserthort/</u>.

May 13, 2014, Tuesday, 8-4 p.m.: <u>Pima County Parks and Recreation</u>, Pima County Administrative Office, 3500 West River Road, Tucson, AZ 85741

The class will cover topics in turf management, weed control and pest management as applicable to parks, recreational and right-of-way areas. 6 hours of CEUs will be awarded. For more details, contact Paul Baker (<u>pbaker@ag.arizona.edu</u>), Urban Entomologist, Department of Entomology, University of Arizona, Tucson.

For more information about the EPA Schools program, visit: http://www.epa.gov/schools/



For more information about the Community IPM, visit: http://www.extension.org/pages/23359/urban-integrated-pest-management-community-page





For more information about School IPM in Arizona, visit: http://cals.arizona.edu/apmc/westernschoolIPM.html

Shujuan (Lucy) Li, Newsletter Editor and Assistant in Extension. Email: lisj@cals.arizona.edu
Dawn H. Gouge, Public Health IPM Expert. Email: dhgouge@cals.arizona.edu
Shaku Nair, Assistant in Extension. Email: nairs@email.arizona.edu
Al Fournier, IPM Assessment. Email: fournier@cals.arizona.edu
Ursula Schuch, Landscape Horticulture. Email: ukschuch@ag.arizona.edu
Paul Baker, Urban Entomologist. Email: pbaker@ag.arizona.edu
Kai Umeda, Extension Agent, Turf. Email: kumeda@cals.arizona.edu
Dave Kopec, Turf Specialist. Email: dkopec@ag.arizona.edu

Acknowledgements

This material is based upon work that is supported in part by the National Institute of Food and Agriculture, U.S. Department of Agriculture (USDA NIFA). Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the U.S. Department of Agriculture. Additional support is provided by the U.S. Environmental Protection Agency (EPA) and the University of Arizona – Arizona Pest Management Center (APMC).





United States Department of Agriculture

National Institute of Food and Agriculture