

STOP SCHOOL PESTS

Building sustainable school IPM inside and out:

**Developing and implementing
standardized training materials and
IPM proficiency exams for certification**



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Project period:

Feb 2014 – Jan 2016

Full team



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STOP SCHOOL PESTS - A NATIONAL IPM STANDARD TRAINING AND CERTIFICATE PROGRAM

COOPERATIVE EXTENSION

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[Committee Members](#)

COMMITTEE MEMBERS

<http://cals.arizona.edu/apmc/docs/All-Hands-Members-021215.pdf>

Collaborations:

23 academic faculty

11 state lead staff

8 advocacy agency staff members

4 industry reps

2 federal agencies

4 school management staff

2 tribal representatives

Objectives:

To (1) increase adoption of verifiable IPM in K-12 schools, (2) reduce pest complaints, and pest management risks, by implementing a comprehensive, national training and certification program for key roles in the school community.



Objectives:

Education: one of the earliest steps in the implementation process.

- Increases awareness.
- Improves knowledge and understanding.
- Leverages community involvement and further investment.
- Forges connections between subject experts and practitioners.
- Maximizes impacts resulting from activities, resources developed and evaluation exercises.

Project materials

- Training materials will be:
 - housed on-line for self-guided viewing.
 - posted as free-to-access downloadable as fully modifiable PowerPoints for in-class use.
- Facility managers and pest management technicians can take an exam through the National Pest Management Association and receive Quality Pro for Schools certification.
- Other roles passing a proficiency exam will be allowed to print a certificate.



Approach

Online IPM training resources (Year 1)

The national 2020 school IPM implementation team have identified **nine key stakeholder groups** related to school IPM.

- **Introduction to IPM (All hands)**

1. Facility Manager
2. Maintenance Staff
3. Administrative Staff
4. Teacher
5. Food Service Staff
6. Custodial Staff
7. Landscape and Grounds Staff
8. School Nurse
9. Technician/PMP



Approach

Online IPM training resources (Year 1)

- Learning objectives for the All-hands and the 9 key roles established by developmental committee.
- Feedback from review committee incorporated.
- Feedback from stakeholder groups incorporated.
- Learning objectives were weighted based on job responsibilities by stakeholder groups.
- Training materials were developed based on the learning objectives.
- Exam questions will be written based on weighted learning objectives in year 2.

Approach

Online IPM training resources (Year 1)

Three kinds of groups

1) Development committee

Responsible for the preparation of learning objectives, and each of the modules using existing and newly developed materials, including presentations (PowerPoint, Prezi, video recordings, etc.), lecture notes, practicum exercises and experiential learning exercises.



Approach

Online IPM training resources (Year 1)

2) Review Committee

A multi-disciplinary alliance including technical subject experts, translational scientists, industry representatives, education specialists, school facility managers and experts in regulation and social science adoption and diffusion.

Responsible for critical review and modification.



Approach

Online IPM training resources (Year 1)

3) National network of experts and stakeholders

Review all completed materials, help with piloting and providing feedback.



Approach

National 2020 school IPM implementation team meeting (Year 1)

Dallas, TX, September 23-25, 2014.

Team members, partnering with EPA IPM Center of Excellence.



Approach

- All materials “field tested” and refined pursuant to trainer/trainee feedback to ensure high quality.
- Adaptable to meet region-specific needs.
- Buy-in from a broad group of change agents working towards school IPM 2020.



Current status

All completed materials have been placed online at <http://cals.arizona.edu/apmc/StopSchoolPests.html>



The screenshot displays the homepage of the 'Stop School Pests' program. At the top left is the logo for the Arizona Pest Management Center, which features a stylized sunburst. To the right of the logo, the text 'THE UNIVERSITY OF ARIZONA' is centered above the main title 'STOP SCHOOL PESTS - A NATIONAL IPM STANDARD TRAINING AND CERTIFICATE PROGRAM'. Below the title, 'COOPERATIVE EXTENSION' is centered. On the left side, a vertical yellow bar contains five blue buttons with white text: 'Home', 'About Us', 'Organization', 'Activities', and 'IPM Projects'. To the right of this bar, a list of links is provided: 'Description of the Project', 'Committee Members', 'Simplified Learning Objectives', 'Detailed Learning Objectives', 'Stakeholder Feedback Reports', and 'On-line Learning Lessons'. Below these links, the section 'DESCRIPTION OF THE PROJECT' is titled, followed by a paragraph stating that the project was initiated to address the need for a recognized, standardized, peer-reviewed national IPM training program for school communities.

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**STOP SCHOOL PESTS - A NATIONAL
IPM STANDARD TRAINING AND
CERTIFICATE PROGRAM**

COOPERATIVE EXTENSION

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DESCRIPTION OF THE PROJECT

The Stop School Pests project was initiated to address the need for a recognized, standardized, peer-reviewed national IPM training program for school communities.

Learning Objectives

Example-Module 1: Introduction to School IPM

Learning Lesson 1: WHAT is IPM:

1. Describe IPM in understandable terms.
2. Describe how IPM reduces the risks of pests and pesticides.
3. Explain the benefits of IPM in schools and other sensitive environments.
4. Identify the key elements of IPM.

Learning Lesson 2: WHY do IPM:

5. Identify health, environmental, and economic risks of pests associated with buildings and grounds.
6. Identify health, environmental, and economic risks of pesticides associated with buildings and grounds.

Learning Objectives

Example-Module 1: Introduction to School IPM

Learning Lesson 3: WHO does IPM:

7. Identify the important roles and responsibilities of the school IPM team.

Learning Lesson 4: HOW to do IPM:

8. Explain basic pest monitoring, inspecting and reporting.
9. Identify pest-conducive conditions and pest-vulnerable areas.
Identify corrective actions.
10. Identify key pest groups and signs of pest infestations in buildings and on grounds.
11. Explain how to keep pests out of facilities.

Feedback on Learning Objectives from Stakeholders

Example: School Custodians

85% feel confident they know enough about IPM

82% would like to know more

76% think IPM training/certification is necessary, 17% did not.

Training is necessary because:

- this affects the health and welfare of our students and staff
- I believe that most people do not have a good understanding of the requirements of IPM
- Only to an extent. IPM Awareness training should be all that is required!!!!!!
- I believe that an ongoing training in IPM is a must-have. Like people say, if you don't use it, you lose it.

Stop School Pests event, Phoenix AZ. March 3rd 2015.



School IPM partners review and weight individual learning objectives. These weights will be used in preparing exams.



Current status

- Online training modules will be available to stakeholders or any individual seeking multimedia presentations they can view and study from any location.
- On-line materials will be housed as part of the iSchool Pest Management project resources.



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ON-LINE LEARNING LESSONS

Please check your downloads after you click the following list

1) All Hands

[What is IPM](#)

[Why do IPM](#)

[Who does IPM](#)

[How to do IPM](#)

[Exam for lesson 3: Who does IPM](#)

2) Custodians

[Custodian Module](#)

Modules

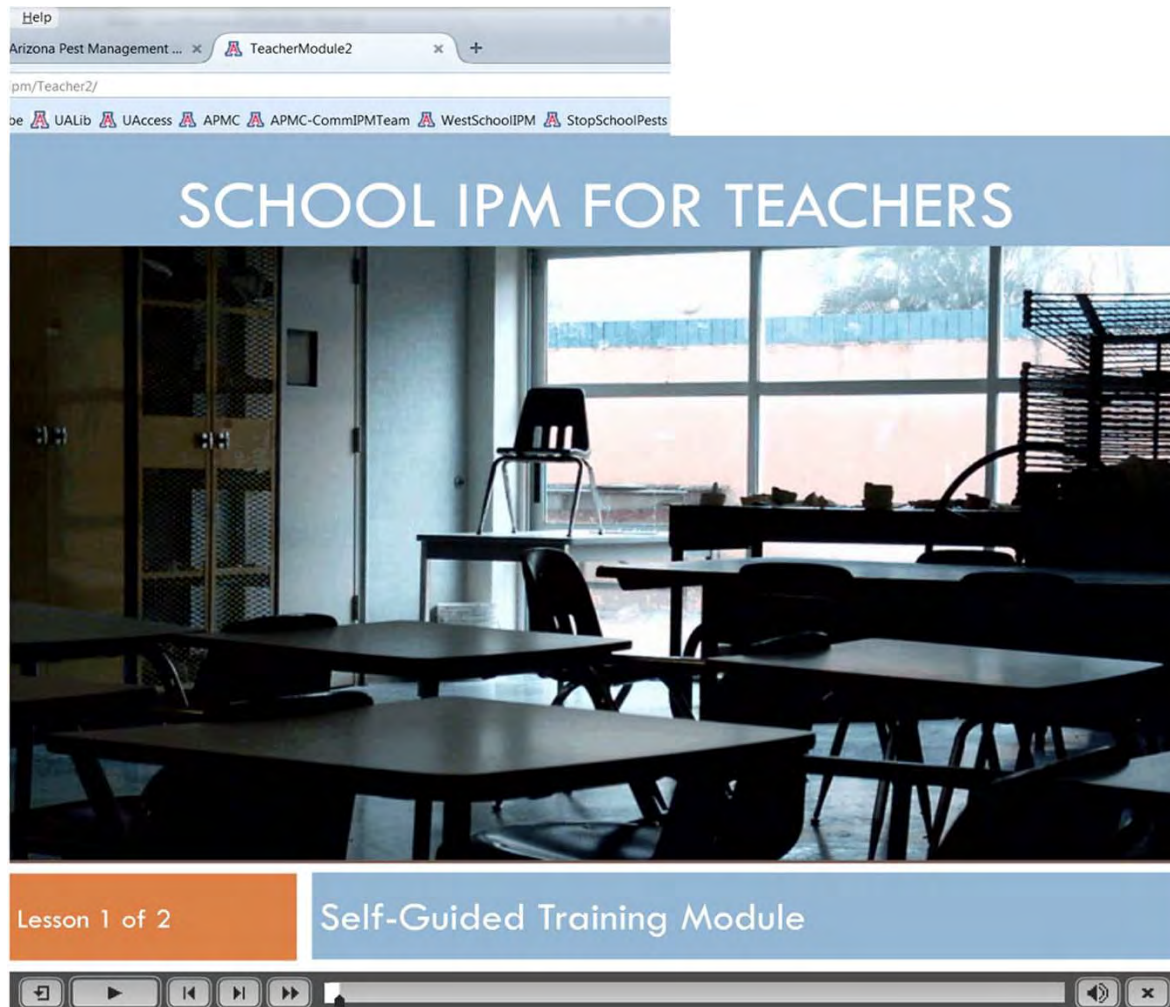
☐ View online

☐ Download



Modules – view online

<http://extension.arizona.edu/training/ipm/Teacher1/>



The screenshot displays a web browser window with the URL <http://extension.arizona.edu/training/ipm/Teacher1/>. The browser's address bar shows the page title "SCHOOL IPM FOR TEACHERS". The main content area features a large, high-quality photograph of a modern classroom with several wooden tables and black chairs arranged in rows. Large windows in the background offer a view of a red brick building and some greenery. Below the photograph, there is a blue banner with the text "SCHOOL IPM FOR TEACHERS" in white, bold, sans-serif capital letters. At the bottom of the page, there is a navigation bar with an orange section on the left containing the text "Lesson 1 of 2" and a blue section on the right containing the text "Self-Guided Training Module". Below the navigation bar is a standard video player control bar with buttons for play, pause, stop, and volume, along with a progress slider.

Pilot testing of modules

Training materials have been piloted in Nebraska, Colorado, Texas, and Arizona.



Pilot testing of modules

School nurse module piloted in Arizona: Feb 2015.



“I have been a school nurse for 25 years and I cannot believe I learned so much helpful information in just 1 hour”: Nurse Mary Griffin, Apache Junction Unified School District, AZ.

Approach

Advanced IPM certification for individuals who practice high-level IPM in schools (Year 2)

- Certification options will be available for
 - ✓ IPM Technician/PMP
 - ✓ Facility Manager

In collaboration with the
National Pest Management
Association



Approach

Advanced IPM certification for individuals who practice high-level IPM in schools (Year 2)

- The certification program will focus specifically on advanced IPM.
- Will address an underserved audience, including facility managers and school based staff critical to IPM success.
- Building on successful model of the National Pest Management Association – Quality Pro for schools.

Exams



- Administrators, grounds staff, custodians, maintenance staff, nurses, food service staff and teachers can earn a certificate through the completion of training and passing a proficiency exam.
- Throughout learning lessons, *check points* will guide and assist participants toward learning objective components in preparation for the quiz/exam.

Check Point

Match the Responsibility With the Role

Responsibility

- 1 Responsible for the day-to-day operation of your IPM program
- 2 Support priorities for maintenance and sanitation, identified by the IPM Coordinator.
- 3 Be aware of any children or staff with asthma, chemical sensitivities or allergies to stinging insects.
- 4 Staff is responsible for recognizing and correcting conditions that may lead to pest problems.
- 5 Understand that food handling, preparation and serving areas are among the most vulnerable.

Role

- a. Kitchen Staff
- b. School Nurse
- c. School IPM Coordinator
- d. Administrator
- e. Maintenance/Custodial/Grounds Staff

Approach

Piloting training and certification materials and procedures (Year 2)

- Training modules and certification exams will be piloted in 6 states and in partnership with 4 Tribes.
- 20 trainers new to school IPM will pilot the downloadable training materials.
- A minimum of 1 200 school staff, serving 1.8 million students will receive on-site training at school locations from experienced school IPM educators.

Approach

Piloting training and certification materials and procedures (Year 2)

- 200 school staff will review the online training modules, and 200 school staff volunteers will be subject to the appropriate certification (at least 20 individuals per category) after either face-to-face trainings or reviewing online modules.



Sustainability and growth



The Business Case For Integrated
Pest Management in Schools:
Cutting Costs and Increasing Benefits

- Consensus content fosters broad buy-in and use.
- Adaptable by trainers for in-class training events, and meeting region-specific needs.
- Builds appreciable value to create and sustain support from participants and sponsors.
- Incentives for school districts to enroll all staff.
- Links to continuing education credits (CEs)/recognition/award programs both internal to districts and external.

Sustainability and growth



The Business Case For Integrated Pest Management in Schools: Cutting Costs and Increasing Benefits

- Supports and encourages train-the-trainer opportunities.
- Educators will learn how to use IPM to teach the common core standards and STEM.
- Participation delivers multiple benefits including pest and pesticide risk reduction, and improved food safety, fire safety, energy conservation and employee satisfaction!

Outreach and marketing



- Organizations including PTA/PTO, school business officials association, school facility manager associations, US EPA, state lead agencies and others recruited to assist with outreach and to provide opportunities for training in conjunction with their events.
- National Pest Management Association will provide technician certification.
- National IPM Working Group with more than 225 members will be provided with resources and recruited to do outreach to school districts, pest managements professionals and land care professionals that they work with.

Some of the many collaborating organizations



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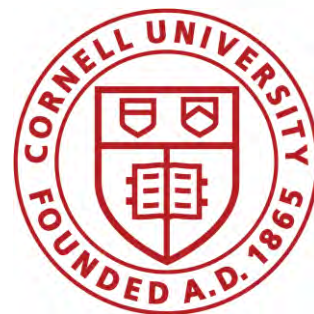


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