Relevance

The Texas public school system consists of 1,235 school districts and charters, 8,322 campuses and over 4.7 (4,728,204) million students. Of the 1,235 total numbers of districts, 1,030 are considered public school districts and are recognized by the Texas Department of Agriculture to adhere to the Texas school IPM rules. Texas has the second largest student base in the country, with more school systems currently than California.

In 1991, the Texas Legislature passed a law requiring that pests in and around school buildings be managed using integrated pest management. This was one of the first laws in the U.S. requiring schools to implement integrated pest management (IPM) as part of their maintenance programs. In 2007, the Legislature updated the laws defining regulatory guidelines more definitively. Texas is one of the few states that mandate all IPM Coordinators attend a six-hour training course on the basics of IPM principles and specific state regulations. The Texas Department of Agriculture released the new school IPM rules on July 7, 2009 requiring that all IPM Coordinators receive an additional six hours of school IPM training starting Sept. 1, 2009.

Texas AgriLife Extension is the only state agency that conducts the required training. IPM Coordinators are taught the defining principles of IPM, proper inspection methods, pest identification, use of non-chemical control tactics, and basic pesticide science. In addition, coordinators must become familiar with Texas school IPM regulations.

Potential benefits of school IPM programs include improved indoor air quality, reduction of pesticide exposures among students and staff, and improved pest control. The school IPM program team provides individual assistance with developing and improving the school IPM program when requested.

Response

The school IPM team offered four two-day regional workshops, plus additional one-day trainings for three Educational Service Centers and one stand alone training. The school IPM coordinator training has become standardized which allows the program format to incorporate active and passive learning. The active learning includes a hands-on exercise in which coordinators are provided an empty insecticide container and asked to provide the product trade name, active ingredient, and signal word. The IPM Coordinators are asked to determine the category, based on Texas regulations, which the product falls into – green, yellow or red. This exercise serves multiple purposes: 1) the training is a hands-on training; 2) the training provides a quick assessment of coordinators’ grasp of the training content and their ability to apply it in a practical situation; 3) the training assists coordinators in completing the needed paperwork for documenting pesticide use as required under the law. Passive learning includes traditional power point presentations.
with additional handouts that covers’ the Texas School IPM rules, introduction to IPM and pesticide safety.

277 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained at the school IPM Coordinator training. Of the 138 school districts that attended our training in 2009, 1,117,191 million school children will be impacted by the result of us training school IPM coordinators, additionally 42 new school districts were trained by AgriLife Extension. Coordinators learn how to prevent pests from entering their buildings so that the children will be safe. School IPM covers more than pest control, it aids in keeping buildings safe from a variety of problems, even the flu.

Other educational methods were offered by the school IPM team:

- **School Pest News newsletter** - four major issues of *School Pest News were written and distributed*. Readership currently started at 1,147 and ended the year at 1,226 IPM coordinators, pest management professionals and other interested stakeholders. Our list has grown thanks to the statewide school IPM conference and other trainings.

- **School IPM website** – Maintaining an up to date website [http://schoolipm.tamu.edu](http://schoolipm.tamu.edu)

- **National State and Regional Conferences** – Attending state and regional conferences speaking about school IPM. The readership of the *School Pest News* continues to increase by 15% each year as a result of talks at these meetings.

- **National School Plant Management Association** - Ms. Hurley attended the National School Plant Management Association meeting as a presenter and exhibitor. Over 100 copies of school IPM management plans were handed out to conference attendees.

- **Association of School Business Officials** – Ms. Hurley attended the annual ASBO conference to host a booth on school IPM and to introduce IPM to other states.

**Results**

In an attempt to determine the programmatic impact of the School IPM Coordinator training, a retrospective post evaluation was provided at the end of the program for each day. This survey was developed in conjunction with Organizational Development to help collect additional data. These new evaluations are now designed to collect customer satisfaction along with knowledge, skills, intent to adopt and behavioral change questions. All results are below.

**Day 1 results.** The first section of results for day 1 asked participants several questions on level understanding and plans to adopt. These questioners are designed to allow the school IPM team to measure level of understanding as well, measuring a skill, changes in behavior and plans to adopt new technology. Results below are from eight days of required school IPM training done as a team and with Ms. Hurley as instructor.

Number of participants 186 with 177 participants turning in completed surveys.

**Overall:**
97% of all respondents were mostly or completely satisfied with the activity.

**Level of Understanding: (% of respondents who increased their understanding of.)**
- (47%) – Understood their role as IPM coordinator.
- (52%) – Felt they have the skills needed to implement an IPM program.

**Plans to Adopt: (% of respondents who definitely will adopt the following practices)**
- (52%) – Will only apply pesticides when pests are present.
- (46%) – Will post outdoor notification signs for each application.

15 - 25% of the attendees have already adopted to apply pesticide when pests are present only and post outdoors for all pesticide applications. This is based on training location. For example, the training conducted in Garland (DFW area) the majority of the school districts who attended answered that they currently have adopted policies on managed applications and prior posting notifications.

43% (75) of class participants were first time attendees to a school IPM Coordinator training.

**Day 2 results.** As stated before new participant surveys were developed by Organizational Development to assist in measuring knowledge and behavior changes. Interpretation results are based on economic change and impact, level of understanding for knowledge and skills, plus plans to change behavior and to adopt new technology. Results below are based on four second-day training workshops conducted in four regions of the state.

Number of participants 91 with 83 participants turning in completed surveys.

**Anticipated Changes & Economic Impact:**
- 97% of respondents plan to take actions or make changes based on the information from this activity.
- 92% of respondents anticipate benefiting economically as a direct result of what they learned from this Extension activity.

**Level of Understanding: (% of respondents who increased their understanding of.)**
- (70%) – I understand the difference between monitoring and sampling.
- (77%) – I can identify at least three different types of Green Category Products

**Plans to Adopt: (% of respondents who definitely will adopt the following practices)**
- (47%) – Implement IPM plans into my program.
- (58%) – Will organize my IPM records.

15 - 25% of the attendees have already adopted written plans for their IPM program and feel they have well-organized records.
The total 2009 website statistics for http://schoolipm.tamu.edu website received the following: **Successful requests for pages**: 512,389; **Distinct files requested**: 5,258; **Distinct hosts served**: 57,101; **Data transferred**: 20.31 gigabytes **Average data transferred per day**: 57.34 megabytes