

2-1-2002

Extension Assistance for Integrated Pest Management Programs in K-12 Schools

John C. Stier

University of Wisconsin- Madison, jstier@facstaff.wisc.edu

Karen A. Delahaut

University of Wisconsin- Madison, kadelaha@facstaff.wisc.edu

Phillip J. Pellitterri

University of Wisconsin- Madison, pellitte@entomology.wisc.edu

R Chris Williamson

rcwillie@entomology.wisc.edu



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

Recommended Citation

Stier, J. C., Delahaut, K. A., Pellitterri, P. J., & Williamson, R. (2002). Extension Assistance for Integrated Pest Management Programs in K-12 Schools. *The Journal of Extension*, 40(1), Article 18.
<https://tigerprints.clemson.edu/joe/vol40/iss1/18>

This Ideas at Work is brought to you for free and open access by the Conferences at TigerPrints. It has been accepted for inclusion in The Journal of Extension by an authorized editor of TigerPrints. For more information, please contact kokeefe@clemson.edu.



February 2002 // Volume 40 // Number 1 // Ideas at Work // 1IAW3



PREVIOUS
ARTICLE



ISSUE
CONTENTS



NEXT
ARTICLE

Extension Assistance for Integrated Pest Management Programs in K-12 Schools

Abstract

We developed a training and education program in integrated pest management (IPM) for K-12 school building and grounds managers. The purpose of the program was to reduce exposure of children to pesticides at schools. Web-based and hard copy resource materials were developed in a cooperative effort between University of Wisconsin-Extension and the state's Department of Agriculture. Since 1999, personnel at 46% of Wisconsin's public schools have received training, education, and assistance in developing IPM programs. This high degree of voluntary participation is expected to affect pending legislation aimed at mandating IPM in schools.

John C. Stier

Assistant Professor, Environmental Turfgrass Science
Internet Address: jstier@facstaff.wisc.edu

Karen A. Delahaut

IPM Specialist
Internet Address: kadelaha@facstaff.wisc.edu

Philip J. Pellitteri

Entomologist
Internet Address: pellitte@entomology.wisc.edu

R. Chris Williamson

Entomologist
Internet Address: rcwillie@entomology.wisc.edu

University of Wisconsin-Madison
Madison, Wisconsin

Brian P. Becker

IPM Coordinator
Wisconsin Dept. of Agriculture, Trade & Consumer Protection
Internet Address: Brian.Becker@datcp.state.wi.us

Introduction

Concern over children's potential exposure to pesticides has led to efforts to ban pesticides at Wisconsin schools K-12. Legislation is pending that would require school personnel to receive certification in Integrated Pest Management (IPM). Three states, Massachusetts, Maryland, and Michigan, already require IPM to be used at schools.

The University of Wisconsin-Extension (UWEX) and the Wisconsin Department of Agriculture, Trade and Consumer Protection (WDATCP) developed a volunteer IPM training program for school building and grounds managers. The goal is to help schools develop IPM procedures to reduce children's exposure to pesticides.

The Wisconsin program is unique for two reasons. First, equal attention is given to indoor and outdoor pest management. In most states only indoor pesticide use is of concern. Second, while several states have developed training materials or manuals, we provide hands-on training plus Web-based, hard copy, and telephone support.

Program Development

In 1998, a committee of UWEX specialists, WDATCP, professional pest control operators (PCOs), school personnel, toxicologists, and parents developed a three-part program to encourage adoption of IPM:

- Production of a school-specific IPM manual,
- A pilot training program in 1999, and
- A full-scale program in 2000.

Phase I: School IPM Manual.

The 200-page manual provides practical information for schools to develop IPM programs. The manual is formatted for a three-ring binder to allow pages to be removed for photocopying and so users can add their own information, e.g., pesticide labels, application records, maps of school grounds, etc. Action points are provided for each pest. An appendix contains auxiliary information such as calibration procedures. The main sections of the manual are:

- Essential elements of IPM
- Turf management
- Outdoor insects and diseases
- Outdoor vertebrate pests
- Indoor pests
- Developing pest management plans

The manual describes proven methods to allow cost-effective implementation of IPM such as guidelines for prioritizing needs. For example, schools often apply fertilizer and pesticide treatments equally across the grounds, yet certain areas are used more intensively than others and require different levels of management (athletic fields vs. general turf areas).

School staff often lack the time and knowledge to develop the policies and record-keeping tools needed for an IPM program. The manual contains the following sample policies and forms that can be customized as needed.

- Pest management plan
- Pesticide use policy
- Licensing/training information
- Labels/MSDS
- Pest reporting
- Pesticide use logs
- Building/grounds maps

Pesticide selection, application, and compliance issues can be confusing to persons not trained in pesticides. Approximately 50% of Wisconsin schools hire professional pest control operators (PCOs), but many of them under utilize IPM. The manual contains the following sections to ensure pesticide use is performed in accordance with IPM guidelines.

- Posting and notification guidelines
- How to select a professional pest control operator
- Pesticide selection

The manual has been requested by dozens of schools, parks, and municipalities in the U.S. Parts of the manual were used by a private company in Michigan for production of a CD on school safety training. The IPM Institute of North America has utilized the manual in production of its School IPM certification process. The manual is available on-line at <http://ipcm.wisc.edu>.

Phase II: 1999 Pilot Program.

We visited six school districts three times between spring and autumn of 1999. During the first visit we met with staff, administrators, and PCOs. We discussed IPM, the manual, their pest problems, and conducted indoor and outdoor pest assessments. Schools were visited 2 months later to assist in the development of IPM plans and practices. During autumn, schools received a third visit to assess their adoption of IPM. Eighteen other school districts received the manual only because they wished to try IPM without assistance.

We enjoyed enthusiastic cooperation at each school we visited. All of the indoor PCOs we met were already practicing IPM, though the schools didn't realize it. The following examples characterize the impact of the IPM program.

- One school district quit the routine spraying of classrooms for lice, which is an ineffective and unnecessary use of pesticide.
- Indoor insect problems at several schools ceased once food policies were changed to restrict food to the cafeteria.
- Schools that regularly applied herbicides but didn't fertilize turf saved money by fertilizing instead of applying herbicides.
- One school switched to dragging infields with a spiker to remove weeds instead of using herbicides.

All of the schools we visited developed IPM policies and procedures. Of the schools we didn't visit, only five looked at the manual and only one adopted IPM procedures and policies.

Phase III: Full-Scale Training

The state legislature approved \$55,000 to UWEX for the full-scale program in 2000. Four 1-day seminars were held during April in key suburban areas because this is where the majority of public concerns were raised. Parents in rural areas had minimal concern because pesticides are used routinely for farming, while parents in inner city areas had unrelated concerns for their school-age children.

The 250 seminar attendees were from 115 school districts (27%), representing 947 public schools (46%). School IPM manuals were given to each attendee. During summer we provided hands-on training at 13 school districts; personnel from nearby schools/districts were invited to participate. Approximately 200 school personnel, representing 37 districts, attended the training sessions.

Future of Wisconsin School IPM Extension Training

Legislation proposed in 2001 may require IPM certification for school staff. Additional funding is being sought to continue the training program.

Copyright © by Extension Journal, Inc. ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the [Journal Editorial Office, joe-ed@joe.org](mailto:joe-ed@joe.org).

If you have difficulties viewing or printing this page, please contact [JOE Technical Support](#)