Midwest School IPM Workshop Notes: March 25, 2004

Successes & Failures of School IPM Programs
Iowa, Illinois, Indiana, Minnesota, Texas, and Wisconsin
Moderator: Mark Shour, Iowa State University

1. Successes and Failures

a. Minnesota – July 1998

1) MDA, UMNE, (Dean Herzfeld), Department of Education (Health/Safety), Department of Health, Office of Environment Assistance, Environment Advocates, PCO, School Systems

2) Successes

a) group participation
b) IPM fact sheet
c) Web site access
d) hands-on exercises
e) presenter to "click" with audience
f) certificate of participation given out

3) Did not work

a) getting more schools to participate
b) full day programs

b. Indiana

1) Teaching issue

a) know your target audience well – "Bugs & Clutter Bugs" fact sheet okay for administrators but teachers were offended.
b) Know political situations in schools
c) show, don't tell
d) use peer teachers or peer administrators as trainers
e) Linking to issues important to schools - - asthma, air quality: then they will pay attention to you.

2) Administrative Issues

a) Central Administration vs. Site Administration – release time needed to be approved; bureaucratic considerations
b) don't let assumptions/preconceived ideas stop you –keep work groups active –but some won't click
c) Ask work group who should be involved that is currently not involved.

c. Wisconsin –optional program

1) Advisory Committee setup
2) Development of one of first manuals in nation
3) Training through University of Wisconsin – 85% of schools sent at least one person
4) Walk through schools
5) Dealing with specific pest issues in schools on request
6) Pesticide use survey conducted

a) negative – advocacy group in WI wanted data and published it on website – offended schools – caused lack of trust and drove stake in heart of IPM programs.

7) 72-hour notification too long – slowed momentum
8) Law also dealt with pesticide use procedures
9) Be a resource; delegate projects

d. Texas

1) Successes
   a) full time person devoted to IPM
   b) prove yourself to school districts
   c) Texas video series and workbooks
   d) institutionalized IPM in schools – making it part of normal school operations
2) Negatives
   a) long time to get started –kickoff was statewide satellite -Janet Hurley started in 2001
   b) never formed a strong working group
   c) did not do extension based survey of school before starting
   d) program is not self-sustaining (needed 1½x salary brought in with training fees)
   e) Takes a lot of work – must go out to schools

e. Illinois

1) Need to do
   a) establish a work group
   b) secure funds to provide consistent school IPM work
   c) go state wide – beyond Chicago Public Schools
   d) institutionalize IPM in Illinois
   e) effectively communicate with custodians and maintenance personnel
2) Did Right
   a) grant writing
   b) leadership for school IPM
   c) visibility of issue to public
   d) knowledge, willingness – acted as a resource to schools

f. EPA Perspective

1) successes
   a) states are innovative
   b) designated staff in each state
   c) EPA person with interest
   d) getting $ to states
   e) keeping school IPM on forefront of radar screens of state management
2) failures
   a) better communication with partners
   b) time/resources to go to meetings
   c) better relationship with state pest management association
   d) difficult to secure management buy-in from EPA administrators
   e) incentive for adopting IPM

g. Iowa

1) things that were done right:

a) state wide pesticide use survey

b) 4 schools instead of 3 in pilot program

c) partnership with Iowa Department of Agriculture and Land Stewardship

d) partnership with EPA Region VII

e) on-site training

f) facility audits and written results

g) hands-off policy for one year following training to see if schools would adopt IPM

h) quantitative assessment of IPM adoption based on facility audits and general IPM concepts

i) work group at state level

2) things that were not done right:

a) needed to have schools buy in to program; pilot costs were 100% covered by grants

b) web site was bare minimum; needed to be redesigned

c) not enough time allotted by administration for IPM work

d) urban topic in an agronomic state

e) only 2 of the 4 pilot schools adopted IPM

f) no one to help me in the effort – occasional help form co-workers but no one given % of time to assist in the effort

West Des Moines Community School District
Integrated Pest Management Case Study

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1. IPM Activities - We began the process in 2001, so it has taken over 2 years to get to the point where we are now.
a. Inform yourself
b. Inform staff and management
c. Review existing contract and pest control procedures
d. Identify funding/assistance sources
e. Contact local pest contractors
f. Prepare Request For Proposal (RFP)
g. Bid process
h. Contract agreement
i. Staff training
j. IPM workbook

2. Next steps:
a. Program review
b. Integrate with other environmental programs

3. West Des Moines School District
a. 18 buildings
b. 1,366,659 total building square footage
c. 1,173 faculty/staff
d. 9,071 students
e. 156 operations staff
f. 9th largest district in IA. Originally planned to pilot test IPM at 5 facilities, but opted to go district-wide due to initial interest from pest contractors, the potential for environmental improvement, and also the hands-on help provided by ISU Extension.
g. Includes one high school, one 9th grade, two JH, 11 elementary, warehouse, and learning resource center (LRC).
h. Use by before/after school programs: sports, scouts, 7 churches, community ed, college courses, etc. Amount of community use is twice the educational use. Buildings are in use from 5:30 am to 11:30 pm.

4. STEP 1: Inform yourself
a. Websites: www.edfacilities.org and many others
b. Books: Blueprint for a Green School, Healthy School Handbook
c. ISU Extension: Dr. Mark Shour
d. Why we became interested in IPM: We identified our environmental footprint and wanted to reduce it. Through the EMS process, we identified several environmental improvement opportunities. Prior to this, we had no idea of what IPM was. IPM is appealing because of the immediate environmental and health benefits and the ability to implement mainly from within OPS. Other programs, like recycling and reduction in printing, involve many more players and are more visible. OPS has much more control over IPM. Potential future legislation also makes action favorable.

5. STEP 2: Inform staff and management
a. Operations management
b. Custodial
c. Grounds maintenance
d. Food and nutrition
e. Administrators
f. Nurses
g. Faculty
h. Have different approach with each group…direct contact, newsletters, specific literature, etc. Each group is different.
i. We wanted to find a way to reach several different sectors of the district with that information that was relevant to them. We ended up developing a series of informational brochures that we will distribute and post on the web site. Used "IPM" in all conversations daily.

6. STEP 3: Review existing contract and pest control procedures
a. No pest management contract
b. Monthly preventive program applied 2,000 gallons of chemicals annually
c. No communication between contractor and district staff
d. Explain past Service Master oversight of operations, lack of contract for present services of all kinds. Typical baseboard application was used with no standard procedures.
e. Community use of buildings minimizes opportunity to apply chemicals
f. Monthly invoice from contractor

7. STEP 4: Identify funding and assistance sources
a. EPA Region 7 Environmental Education grant funded IPM brochures ($5,000)
b. Iowa Department of Natural Resources Solid Waste Alternatives Program (SWAP) funded comprehensive environmental improvement project
c. Walk through of selected buildings with Dr. Shour helped identify many physical and structural improvement opportunities, behavioral modifications, and failures of current chemical treatment system.
d. ISU Extension supplied technical literature, on-site evaluations, training, and program development assistance

8. STEP 5: Contact local pest contractors
a. Review of Yellow Pages provided names of 13 potential contractors
b. Letter of interest
c. Telephone follow-up
d. Information session for 4 contractors with interest (existing pest control contractor not among those interested)
e. Contacted those who were members of National Pest Management Association

9. STEP 6: Request for Proposal (RFP)
a. Used format from recent solid waste project
b. Relied on EPA examples and an RFP for a Maryland school
c. Integrate contract requirements with RFP to streamline process
d. Also had review from Dr. Shour and Albert Green (U.S. General Services Administration, Washington, D.C.) federal contract agent. RFP will be posted on West Des Moines School Web site
e. Learned lesson from RM contract – write the contract before you do the RFP so that all parties have complete details up front.
f. This was a learning process for OPS staff, but hopes to apply the RFP/contract process to other services as well as a means of reducing operating costs and allowing better management of external service providers.
g. Involved extensive legal review. Estimate how long process will take and then double it to get a realistic appraisal of time involved.

10. IPM Objectives
a. Structural and landscape pests, as well as pesticides used to control them, can pose significant problems to people, property, and the environment. The District will therefore adopt procedures to incorporate IPM for management of pests on school property.
b. IPM practices will be adopted to:

1) Sustain a safe and healthy school environment for students, staff, and others.
2) Protect against any significant threat to public safety.
3) Prevent loss of or damage to school structures or property.
4) Reduce the likelihood of pests spreading into areas beyond school sites.

c. Not yet officially adopted by school district. Very difficult and timely process for item to be adopted.

11. Scope of Service
a. The Contractor shall furnish all supervision, labor, materials, and equipment necessary to accomplish the monitoring, management and pest removal components of the pest program.
b. The Contractor shall also provide written site-specific recommendations for structural and procedural modifications to aid in pest prevention. The primary service provided by the contractor is the contractor's knowledge about pests and their management, not the routine application of pesticides.
c. The service provided will include annual inspections of all facilities, pest monitoring on a monthly basis at the minimum, proper identification and management of pests consistent with IPM principles, and recommendations to prevent future pest infestations.

12. STEP 7: Bid process
a. Publish Notice of Intent
b. Hold pre-bid conference because IPM is new process
c. Notify all bidders of response to questions (there were none outside of the pre-bid meeting)
d. Review committee and ranking score sheet for generic proposals (2 received)
e. Describe the review process (Dr. Shour, Carol Pilcher, Doug and Shelly conference call to discuss).
f. Bid recommendation was not for low bidder
g. Bids vary by approximately 10%
h. Hourly rates for additional services vary
i. Selected Contractor had more detailed project approach and staff with construction expertise
j. Quote did not include termites or turf management, but would like to head this direction in the future. Quotes for special services, not in base bid, varied and were consideration in selection. Both contractors were very capable of performing the work.

13. STEP 8: Contract agreement
a. Used format from recent solid waste project
b. Relied on EPA examples and contract for a Maryland school
c. Legal review conducted
d. School board approval
e. Process took more time than anticipated because of legal and school board review. Likewise with the RM contract, so may be typical for other school settings.

14. STEP 9: Staff training
a. Head custodial 2 day training
b. Custodial 1 day training
c. Food service training
d. Educational brochures
e. Typical training time is limited. We experienced difficulty in getting commitment from those outside OPS (food service).
f. Led by Dr. Shour and Carol Pilcher.
g. Put as many positive spins as possible in training.
h. *Note*: trainees took information to their own homes and implemented IPM practices at home.

15. STEP 10: IPM Workbook – as simple and streamline as possible**.**
a. Logbook with implementation forms
b. Each custodian has a training notebook.
c. Each site has a logbook with completed and blank forms and basic instructions for program implementation.
d. Integrate with other environmental programs
1) Chemical management (Rehab the Lab)
2) Resource management (solid waste and recycling)
3) Green building design
4) Environmentally preferable purchasing
5) Turf management
6) Termite management
7) Curriculum
e. There are many operational issues with environmental implications to consider. Ideally, the District would like to have a well-formulated plan to address these, rather than react as situations arise. A single point of contact for these programs would be beneficial and coordinate the implementation of programs.

16. Benefits of IPM implementation - Improve monitoring, tracking system
a. Provide standard operating practices
b. Improve health of students and staff
1) Insurance and Workers Comp benefits
2) Improved building maintenance can result in cost savings
3) Increased awareness of trained staff
c. Quantifies cost and chemical use, as well as provides record of treatment.
d. All schools employ similar practices

17. Obstacles of IPM implementation
a. Time required in contract development
b. Competing projects
c. Commitment of building occupants
d. Lack of technical expertise
e. Legal review, lack of standard contracting procedures, overall budget crises makes schools resistant to change

18. Funding Possibilities
a. EPA Region 7 Environmental Education Grant www.epa.gov/region07
b. Iowa Department of Natural Resources Solid Waste Alternatives Program (SWAP) www.state.is.us/dnr/organiza/wmad/index.html
c. EPA and ICEC, REAP are education-based funds. SWAP is implementation-based with demonstrated reduction in hazardous and solid waste. May benefit by applying at AEA level
d. Iowa Conservation Education Council www.iowaee.org/ICEC.html
e. Resource Enhancement and Protection www.iowaee.org/REAPgrantapp.pdf
f. New website: LA School Operations http://dev.laschools.org/efm/mo/ipm

Keys to a Great Relationship with a Pest Management Professional
Brad Smith, Preferred Pest Control, Des Moines, IA

1. Background
a. Entomologist, B.S. Entomology/ Integrated Pest Management Iowa State University (1980)
b. President, Preferred Pest Control, Inc. (1985-present)
c. President, Iowa Pest Management Association (2004)
Integrated Pest Management
d. IPM is a process, not an event
e. A Pest Management Professional (PMP) uses a wide variety of technological & management practices
f. More and more schools are looking to the PMP to provide IPM services

2. Historical Perspective: Controlling Pests In Schools
a. Old Model…
1) Little communication between PMP and school officials
2) Inconsistent treatment strategies
3) The primary tool used for control is the application of pesticides
4) Health issues are raised due to greater exposure to pesticides
5) Marginal effectiveness
6) Price becomes the only criteria for choosing a provider
7) Fewer pest management providers will choose to participate in the bid process
8) The goal of the program is to complete the treatment
b. New Model…New Directions for Controlling Pests In Schools
1) Communication becomes key aspect of the pest management program
2) A consistent, standardized approach to dealing with pest suppression and prevention
3) A wide variety of techniques are employed as part of the pest management program
4) Virtually no health issues are raised because of judicious use of pesticides
5) Increased effectiveness
6) The pest management provider is chosen due to both merit and price
7) More qualified bidders will participate
8) The goal of the program is both control and prevention

3. Implementing IPM Programs in Schools
a. Leaders vs. Followers
1) Implementation of an IPM program involves leadership
2) Procedures that have been in place for decades will have to change
3) IPM program will not happen overnight
4) Realize that the pest control industry has changed
5) “Do you realize that if it weren’t for Edison, we’d all be watching TV by candlelight?” Al Boliska

4. Achieving Success with PMPs
a. Make sure that the PMP is dedicated to the principles of IPM

b. Give PMP latitude to be involved with the decision makers and managers of how the IPM program is implemented
c. Keep an open line of communication with PMP
Achieving Success (continued)
d. Pay PMP what they are worth
e. Respond to PMP recommendations (e.g. sanitation reports, physical repairs, contamination of monitoring devices and baits, etc.)

5. Conclusion:
a. IPM in schools is for now, not just the future

School IPM as a New Work-Load Responsibility

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1. Incorporating an IPM Program into the existing workload

a. Setting a Direction
b. Building capacity
c. leveraging resources

2. Wisconsin's Voluntary IPM Program for Schools

a. School IPM project
1) School Pesticide Use Survey
2) School IPM manual – by advisory committee
3) Advisory Committee – met on regular basis
4) Train school representatives: 84% of 426 public school districts + hundreds of contractors and private schools
5) School IPM Assessments – records, inspections, meetings

b. School Pesticide Use Law – posting and applicator certification (including General Use Products [GUP's])

3. Operating a School IPM Program

a. Defining your program - what is expected of your program and you?
b. What does "success" mean for your program?
c. How do you measure success in IPM?
d. What are your resources; how do you leverage them? – use to lift up your program

4. Wisconsin School IPM Work Plan 2002

Goal: Develop multi-level advocacy and implementation within the state for school IPM programming.

a. Outreach: build program capacity. Identify, establish and cultivate an outreach network. Focus on types of roles so there is overall balance in support and assistance from each level.

b. IPM technical issues: Make sound technical and administrative information available for IPM advocates at all levels.

c. Regulatory technical issues: Maintain regulatory integrity between the IPM Program and administrative rules.

d. IPM program management – Conduct routine but important procedures to support the overall program; develop where necessary.

5. Contacts: people contacting you for rule interpretations or to complaint.

a. Who: School employees, parents, school neighbors and other community members, advocacy groups, pest management professionals, other municipal and state agency contacts. Take time to listen to complaint and explain IPM.

b. Examples:
1) School principal's inquiry about rules for greenhouse

construction adjacent to a family and community education room
2) Gull problems at school on Lake Michigan – avicide questions
3) Use of "alternatives to pesticides" to kill things at school
4) Odors in the neighborhood after pesticide applications
5) Use observations – spin offs

c. Who are your potential IPM contacts? How can you reach them? How can you educate them about IPM?

6. IPM Supporters: like the idea but are not acting on it for various reasons

a. Who: Facilities Managers, District administrators – too much on their plate already; perhaps lack knowledge, lack funds

1) Wisconsin Association of School Business Officials article in trade journal: Hidden costs of chemical management at schools
2) Help in sighting of soccer pitch – natural area placement- put in contact with Ag Science Department
3) Media contact

b. What are the issues that obstruct supporters from acting*?* How can you help them?

7. Venues: will provide an opportunity for outreach

a. Who: School administrators and teachers; health, regulatory, parent, trade and advocacy groups; pest control industry, turf industry; knock on door to get to work with you, take a few minutes at annual meetings, add links to your web site

1) Publications: DPI and WI Green monthly, Turf publications, Pollution Prevention/health w3's (who, what, where)
2) Pest management professional's meetings
3) Annual school group meetings
4) IPM curriculum - Facilities Managers credential
5) Wisconsin School Agriculture Science newsletter
6) WI Multi-agency environmental health & safety group
7) Which groups present opportunities as IPM platforms? How can you involve them in an on-going way*?* – As a focal point through which you can send information? To screen and refer appropriate questions to you form their constituents? To send to marketing training sessions?

8. Models and Pilots: commit to demonstrations, takes time to develop in a sound professional way.

a. Who: Schools/districts, pest management companies

1) Structural contractor's IPM program
2) School turf IPM Pollution Prevention Project: EPA grant

b. Does a school have a tough pest problem and/or desire to see evidence that IPM works?

9. Resources: provide interpretations, examples, a sounding board, funding to WDATCP & schools

a. Who: EPA (Region V & HQ), WI IPM Advisory Group, Regional School IPM Resource Centers (Purdue and TAMU), colleagues in other states, other states policies/rules

1) Examples of rules as WI develops ours for posting and certification categories
2) Tracking national trends
3) What the IPM manual should cove
4) Sharing model programs – like this workshop

b. Support to network within and outside of organization? Team with other organizations with school EH&S roles? Is there a budget and skill-base to produce and deliver training and education materials?

10. Partners: a similar stake

a. Who: UW Extension, UW Madison

1) Presenters, trainers, authors, recruiters, technical resources
2) In-field evaluations and pilot project work

b. Expertise and commitment from allied organizations enriches the program content, scope and flexibility to do more

11. WDATCP: Legislative Responsibility to implement the Wisconsin school IPM Program& is the State Lead Agency for pesticide regulatory issues

a. Who: WDATCP (< 1 FTE) , in-house expertise including pesticides, enforcement, entomology, plant pathology, endangered/threatened species, land and water scientists

b. Virtually everyone can offer something to an IPM program which has regulatory, scientific, inter-personal, medical and management components. Optimize efficiency by recruiting and promoting people of many backgrounds

12. Wisconsin IPM Program

http://www.datcp.state.wi.us/arm/agriculture/pestfert/pesticides/school_ipm.html