

IPM Works!



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IPM Institute

Leveraging marketplace power to improve health, economics and environment



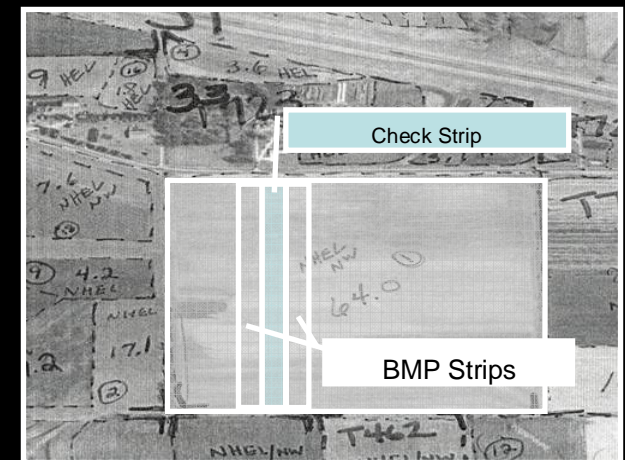
• In agriculture

- Sustainable ag/IPM standards, audit protocols, IPM/BMP performance guarantees for farmers



• In communities

- schools, childcare, healthcare, structural pest management professionals; strategic plan for IPM in all schools by 2015!



International IPM Symposium VI, Portland OR, March 24-25, 2009

IPM Works!

IPM contract specs and pest management contractor oversight reduces pesticide use and pest complaints by 90%.

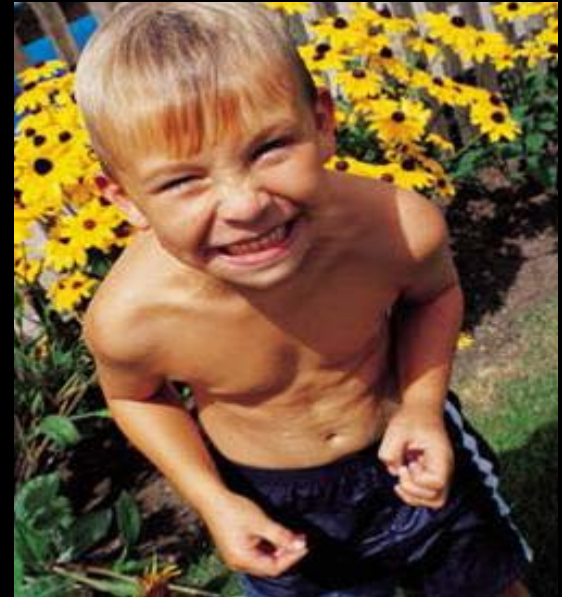
Greene and Breisch, J. Econ. Entomol., 2002

IPM schools had little pesticide residue vs. conventionally treated schools which had residues on baseboards and walls.

Williams et al., J. Econ. Entomol., 2005

IPM training model in ten school districts reduced pesticide applications by 71% and pest complaints by 78%.

Gouge et al., American Entomologist, 2006



IPM STAR

Excellence in Integrated Pest Management

- IPM an unknown to 85% of consumers
- Schools: ripe for improvement, tomorrow's consumers and taxpayers
- IPM STAR: *Measurable Standard*
 - 48-point *confidential* evaluation
 - policy, planning, implementation
 - on-site by third-party professional
 - detailed written recommendations
 - scored evaluation
 - pesticide hazard analysis
 - training powerpoint
 - certification, three-year renewal cycle

WHAT IS IPM?
Farmers use **Integrated Pest Management (IPM)** strategies to prevent crop damage from insect, weed, and disease pests.

IPM PRACTICES INCLUDE:



WHY SHOULD YOU CARE?
Because IPM practices help farmers:

- conserve our environment
- produce quality crops
- maintain farm profitability

RUZICKI'S COOPERATIVE EXTENSION NORTHEAST CENTER FOR RURAL DEVELOPMENT



On-site evaluation

Part One: Interview

- **Minimum standards**
 - **Regulation, policy compliance**
 - **Posting, notification**
 - **Application records, MSDS**
- **Point-based standards**
 - **IPM policy, plan**
 - **Applicator training**
 - **Pesticide selection**
 - **70% minimum score required**



On-site evaluation

Part two: Inspection

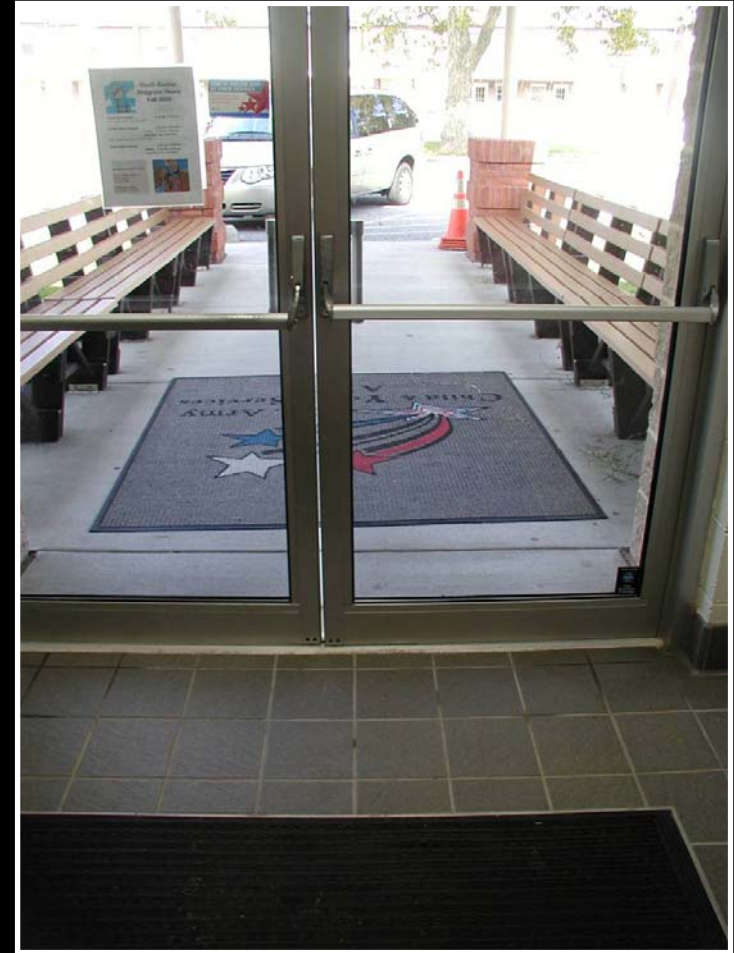
- **Monitoring**
- **Sanitation**



On-site evaluation

Inspection (continued)

- **Monitoring**
- **Sanitation**
- **Exclusion**



On-site evaluation

Inspection (continued)

- Monitoring
- Sanitation
- Exclusion
- Pesticide storage



On-site evaluation

Inspection (continued)

- **Monitoring**
- **Sanitation**
- **Exclusion**
- **Pesticide storage**
- **Pest vulnerable areas**
 - **Entrances, dumpster areas, kitchen, storerooms, staff lounges, custodial closets, mechanical rooms, ag/hort study programs**



Pest conducive conditions and unmanaged pest problems

On-site evaluation

Pesticide selection

- **Acute Toxicity: Caution, Warning or Danger Label/US EPA**
- **Neurotoxin: Cholinesterase inhibitor or listed on US EPA Toxics Reduction Inventory (TRI)**
- **Possible, likely, probable carcinogen: US EPA, State of California, International Agency for Research on Cancer**
- **Reproductive/developmental toxin: US EPA, State of California**
- **Acute aquatic toxicity: US EPA label, variety of published sources**
- **Toxic to key natural enemies/secondary pests: Extension recommendations**
- **Suspected endocrine disruptor: European Union**
- **Potential or known groundwater contaminant: State of California, variety of published sources**

Results: Deficiencies identified

<i>29 school systems evaluated, 12 passed based on initial evaluation.</i>	Overall
<i>Common pests: stinging insects, mice, ants, cockroaches</i>	<u>n=29</u>
Non-compliance with regulations/policy re posting/notification, applicator certification, record keeping	38%
Labels/MSDS not on file	45%
Routine, calendar-based pesticide applications	14%
No written IPM policy	7%
No written IPM plan	24%
Unmanaged pest problems (mice, ants, cockroaches)	38%
Secure pesticide storage	31%
Unregistered/outdated pesticides in storage	21%



The IPM Institute of North America, in partnership with the
U.S. Environmental Protection Agency
Pesticide Environmental Stewardship Program,
certifies that the

YOUR SCHOOL HERE

is an

**IPM STAR CERTIFIED
SCHOOL SYSTEM**

exceeding a

Rigorous Standard

for

Integrated Pest Management

YOUR SCHOOL'S

exemplary performance in
reducing pest and pesticide risks

to health and the environment

has been verified by an
independent, third-party audit.



2004-2006



Structural Pest Management Services

- On-site evaluation
- Similar criteria to IPM STAR
- Certify entire company or a service offering
- Launch June 2007
- Healthcare and other non-school facilities

www.greenshieldcertified.org



Opportunities

Regulation

- **Require posting and pre-notification with exemptions for pre-manufactured bait stations, gels, non-neurotoxic stinging insect sprays (soaps, botanicals).**
- **Eliminate health code violations for pests captured on monitoring traps!!!!**
- **Eliminate spray-applied liquids to exposed surfaces.**

Leadership by example

- **Preferential purchasing for third-party verified IPM**

Management

- **Improve maintenance and sanitation methods and oversight, “think pest”**
- **Effective door sweeps can reduce pest complaints by 65%**
- **Pest management input on building design and IPM during construction can eliminate many pest-conducive conditions and pest problems.**

We know how to do IPM. IPM works. Let's make it happen!

Thank you for all that you do!



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