Pest Management in New York State Schools: What's Happening?

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IPM Integrated Pest Management

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Outreach to New York State (NYS) schools on integrated pest management (IPM) has been ongoing for several years. In the spring of 2001, the state's public school districts and Board of Cooperative Educational Services (BOCES) districts were surveyed on the status of their pest management policies and practices.[1] This survey was conducted before the July 2001 enactment of a state school pesticide notification law. The survey was followed up by several dozen on-site interviews throughout the state.

INFORMATION GATHERING PROTOCOLS

Statewide Survey of NYS Public School & BOCES Districts

Survey objectives and format jointly developed by NYS Education Department, NYS Department of Health, & NYS IPM Program.
January 2001– NYS Education Department mailed survey to all 703 public school districts & all 38 BOCES districts in the state.
March 2001– Education Department re-sent survey to districts that had not responded to the first mailing.
May & June 2001 – NY Agricultural Statistics Service contacted by phone all districts that had not responded to either mailing.
Collectively, the return rate of completed surveys was approximately 80%.

On-site Interviews

Conducted December 2002 through July 2005.
Total of 38 public school districts (from 21 counties plus New York City) interviewed.
Relatively even geographical distribution throughout the state and included rural, suburban, and urban districts.
Selection not random but consisted of referrals and contacts from a variety of sources.
Interview format developed by Lynn Braband with feedback from other NYS IPM Program staff.
Except for 3 districts that were interviewed over the phone, the district decisionmaker for pest management was interviewed at his/her office.

Most of the interviewees and 45% of the survey respondents had a written pest management policy. Most (82% of survey) did not have a pest management advisory committee. Usually, there was little involvement in pest management by school boards, district administrations, teachers, and students.

Of the survey respondents (before the state's Notification Law), 81% had regularly scheduled pesticide applications on school property. The applications were largely done after school hours or on weekends/holidays.

From the school interviews, pest management plans (PMPs) for landscaping (trees, shrubs, flower beds) were usually loosely organized. Structural (school buildings) PMPs were generally more organized. Turf PMPs varied; some districts had highly organized PMPs for athletic fields.

Highlights of landscaping PMPs:

- No pesticides used (6)
- Cultural management emphasis (5)
- Emphasis on right plant, right place (5)

Most common pest management related techniques in school buildings:

- Sanitation/housekeeping (93% of survey respondents)
- Vacuuming (91%)
- Monitoring/inspections (76%)
- Structural modifications (49%)
- Baits (34%)
- Routine pesticide applications (33%)
- Mechanical traps (30%)

Most common pest management related techniques on school grounds:

- Raising mower height (51%)
- Aeration (40%)
- Over seeding (37%)
- Organic fertilizers (25%)

Highlights of school structural PMPs:

- Sanitation emphasis (17 of the 38 interviewees)
- Exclusion emphasis (11)
- Each school has a pest management logbook (6)

Highlights of turf/athletic field PMPs:

- Cultural management emphasis (11)
- Organic interest (7)

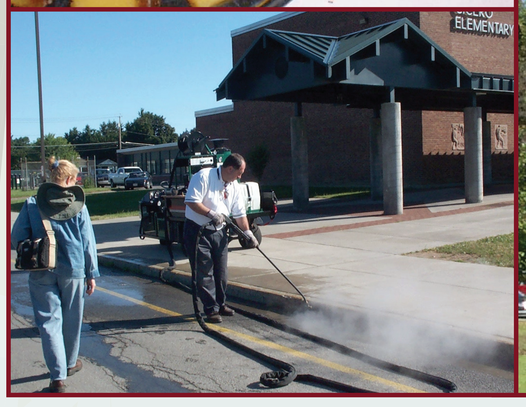
Pest management monitoring of school buildings was generally frequent and regular and conducted by pest management contractors. Monitoring of school grounds was less regular and usually done by school staff. Pest control (particularly pesticide applications) in school buildings was usually done by contractors. Collectively, pest control on school grounds was largely implemented by contractors and school staff.

During the 2000-01 school year (immediately before implementation of the state's Notification Law), 45% of New York's public school districts notified before pesticide applications. Post-notification has done by 21% of the districts. Posting was the most frequent means of notifying.

The on-site interviewees (after implementation of the Notification Law) most frequently described the impact of the law as:

- Little or none
- Reduced pesticide applications
- Costly increase in paperwork.

The pesticide use that most frequently resulted in notification was glyphosate.



Statewide, schools reported (both survey respondents and interviewees) that their most frequent or troublesome pests were ants, stinging insects, mice, and weeds. Downstate (Hudson River Valley/Catskills/Long Island) other major pests were geese, termites, cockroaches, and lawn grubs.

Eleven of the 38 interviewees indicated that they did not use what they would consider unusual or innovative alternative pest management techniques. The rest listed 41 different techniques.

When the interviewees were asked why their districts were practicing IPM, the most frequent responses included meeting legal requirements, better pest management, health concerns, environmental concerns, and good citizenship.

Most of the interviewees considered their pest management programs successful. The most common reasons given were fewer pest problems and pesticide reductions. When the interviewees were asked what were the obstacles to practicing IPM in schools, the most frequent responses were food in classrooms, constituency apathy/resistance, funds, and the heavy use of facilities. The interviewees indicated the need for improving communication and education among all of schools' diverse constituencies.

ALTERNATIVE PEST MANAGEMENT TECHNIQUES OF NYS SCHOOL INTERVIEWEES (n = 38)

Only techniques that were mentioned more than once are included.

Vacuums (8)
Dog harassment of geese (4)
Mint oil insecticides (3; 1 not satisfied)
Hot water machines (3; 1 not satisfied)
Mechanical and flame weed management (3; 2 not satisfied; 3 others planning to start)
Corn gluten (3)
Cleaning agents on ant trails (2)
Electronic distress calls for geese/gulls (2)
Planting resistant varieties (2)
Low acidic herbicides (2; 1 not satisfied)
Physically remove stinging insect nests (2)
Organic turf management (2)

When asked about finances, most interviewees felt that IPM was not any more expensive, especially in the long run, than conventional pest management. Some felt it was more costly but worth it. Three districts indicated that implementing IPM on school grounds was more difficult than in the buildings.

Long-term goals, for New York schools, established by a Statewide School IPM Committee in 2004 included the development of IPM curricula, incorporating pest prevention in new facility construction, and incorporating IPM in teacher training.

[1]Lynn Braband, Edward Horn, and Laura Sahr. 2002. Pest management practices: a survey of public school districts in New York State. NYS IPM Program Publication No. 613.