

School IPM Outreach and Research Activities, NYS IPM Program, 2018

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Abstract: NYS schools need assistance in reducing risks to children and others from both pests and the overuse of pesticides. In 2018, NYS IPM Program activities have resulted in school personnel becoming better informed and able to implement IPM in their school districts. A school IPM assessment tool was developed and continues to be refined and piloted. A phone survey of BOCES health & safety officers is providing input into school IPM outreach and implementation. NYS IPM Program staff worked with the Northeast School IPM Working Group to upgrade the Best Practices in School IPM website. We are working with a BOCES district to develop a school IPM policy development workshop. NYS IPM Program staff made numerous presentations, posters, and displays to and about school stakeholders. The NYS IPM Program made several blogs and tweets throughout the year with IPM stories of relevance to the state's schools and childcare facilities. NYS IPM Program staff collaborated with Cornell faculty on research of relevance to school IPM and were involved in statewide, regional, and national collaborations promoting school IPM.

Background and Justification: Pest management in schools has received increased attention in New York State and nation-wide. This is due to the critical need to decrease pesticide use to protect our children, who, by nature of their size and developmental stage, are at greater risk than adults. Yet, at the same time, we cannot compromise the quality of pest control because pests represent an equally important health hazard. Schools are especially challenging to manage because they include such varied settings as classrooms, cafeterias, laboratories, auditoriums, theaters, playing fields, playgrounds, and gardens. These areas are heavily used for a variety of purposes, including after-hours public meetings. Visitors, staff, and students are frequently in direct contact with the lawns, athletic fields, flowers, trees, playgrounds, and buildings on the school grounds. The New York State (NYS) pesticide notification law and "Safe Playing Fields" act have resulted in additional pressure on schools to reduce pesticide use. There is a concerted nationwide effort to have verifiable IPM in all of the country's schools.

School IPM Assessment: NYS IPM staff are developing a School IPM Assessment Tool with the objective of using selected measures (metrics) that would allow assessors to obtain a good picture of a district's pest management program within a limited timeframe. A secondary use would be on-line self-assessment by schools. The eight metric categories are:

- 1) *Written and effective policies and protocols regarding pest management and pesticide use and storage with an emphasis on least hazardous approaches.*
- 2) *Appropriate food storage practices*
- 3) *Appropriate trash and garbage management protocols*
- 4) *Systematic and regular building maintenance (pest exclusion) protocols*
- 5) *Effective monitor use in major food service areas*
- 6) *Effective system for reporting pest sightings.*
- 7) *Accessible and comprehensive recordkeeping.*
- 8) *Maintenance of athletic fields with cultural practices.*

In 2017 and 2018, we piloted the assessment in 3 school districts. Our current evaluation points toward the tool being best suited for a district-wide assessment while a different approach, especially the use of checklists, is desirable for an individual school building. One need identified during these initial assessments was assistance in developing written school IPM policies and programs. As described later in this report, we are working with Oneida-Herkimer-Madison BOCES to organize a workshop to address this. In 2019, the assessment tool will be further piloted, refined, and made available for use.

BOCES Health & Safety Staff Survey and Workshop Development: In 2014, NYS IPM staff began surveying, by phone, BOCES health & safety officers on their perceptions of the pest management related needs of the state's schools. The survey consists of 9 questions developed in consultation with our Community IPM team. To date, 24 BOCES districts, about 65% of the total, have been surveyed. The results will be used to provide input into our future school IPM outreach. Immediate results of the surveying have included developing outreach workshops with Wayne-Finger Lakes BOCES, Cayuga-Onondaga BOCES, and Orange-Ulster BOCES. Other highlights, to date, include that schools need assistance in turf and grounds management. Most have concerns about the "Child Safe Playing Field Act" but not the Neighbor Notification Law. The development of cooperative bids for pest management or landscape services is a good idea, as is hosting webinars.

In June, we made a presentation to a meeting of the Association of Educational Safety and Health Professionals to assess the possibility of organizing one or more workshops on developing written school IPM policies and programs. We are currently working with Oneida-Herkimer-Madison BOCES to development such a workshop.

The Cornell Turf Team, which includes NYS IPM Program staff, is working with Greater Southern Tier BOCES on a six-day turf management short course for school facilities staff. This workshop will be held in February and March 2019.

Statewide School IPM Committee: The NYS IPM Program organized a Statewide School IPM Committee in 2002. The sixteenth meeting of the committee was held in October 2018 in Rensselaer, NY. This was a joint meeting with the NYS Department of Health's Clean, Green, and Healthy Schools Program Steering Committee. Participants were from Cornell University, state Department of Environmental Conservation, state department of health, state labor department, NYS Energy, Research, and Development

Authority, NYS Teachers Association, school districts, BOCES districts, non-public schools, and healthy schools advocacy organizations. In addition to the always-appreciated round-table sharing, including updates on school IPM nationally and regionally, we had a discussion concerning outreach to charter schools with the charter school office of the NYS Education Department.

Northeast School IPM Working Group: A NYS IPM Program staff member serves as co-leader of this multistate group. In 2018, we held bi-monthly conference calls sharing updates on school IPM related activities in our respective states and organizations. In 2014 with funding from the NE IPM Center, NYS IPM staff evaluated, incorporated, and augmented existing resources in the development of a school IPM best management practices (BMP) website <http://www.northeastipm.org/bmps-for-school-ipm/>. In 2018, the working group began working with the NE IPM Center to update the web site and make it more accessible. A NYS IPM Program staff member applied for a NE IPM Partnership Communications Grant to facilitate the process. On behalf of the NE School IPM Working Group, a member from Maine received a grant from the NE IPM Center for outreach to school nurses, and NYS IPM staff participated in the implementation of this project.

School IPM Workshops, Webinars, Displays, & Blogs:

PRESENTATIONS

| Date | Location | Conference/ Meeting Name | Presentation Title | Contact Hours |
|------------|-------------------------|---|--|---------------|
| 2/5/18 | Rochester/ Monroe | Food Processing Sanitation and Pest Management: A Pest Manager's Recertification Workshop | Bed Bugs in Unusual Places: Responding to Introductions in Offices, Schools, Retail Stores and Food Facilities | 60 |
| 6/29/18 | Watertown/ Jefferson | AESHP Summer meeting | Discuss possibility of organizing workshop(s) on developing IPM policies & programs (tentative) | 19 |
| 6/29/18 | Watertown/ Jefferson | AESHP Summer meeting | Model IPM Programs/Don't Get Ticked NY | 19 |
| 7/10/18 | Guilderland/ Albany | Farnsworth Middle School Butterfly Station Docent Training | Don't Get Ticked NY | 25 |
| 7/24/18 | Guilderland/ Albany | Farnsworth Middle School Butterfly Station Docent Training | Don't Get Ticked NY | 25 |
| 8/3/18 | National webinar | All Bugs Good and Bad Webinar Series | Bees, Wasps, and Hornets, Oh My! | 210 |
| 8/30/18 | Fonda/ Montgomery | Fulton/Montgomery Counties School Health Professionals Meeting | Don't Get Ticked at School | 12 |
| 10/23/2018 | National webinar | US EPA IPM Webinar Series | Bed Bugs: Considerations for Healthcare Providers | 620 |
| 11/7/18 | Stony Brook/ Suffolk | Tick IPM for Schools Workshop | Ticks on School Grounds | 25 |
| 11/7/18 | Setauket/ Suffolk | School Tick Workshop | Led the hands-on workshop to build and use tick drags. | 100 |
| 11/30/18 | Queens/New York | Magic Exterminating Training Day | IPM for Schools | 17 |

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|----------|-----------------|----------------------------------|---------------------------------|----|
| 11/30/18 | Queens/New York | Magic Exterminating Training Day | IPM for Mosquito Management | 17 |
| 11/30/18 | Queens/New York | Magic Exterminating Training Day | Rodentology and Pest Management | 26 |
| 11/30/18 | Queens/New York | Magic Exterminating Training Day | The Dirt on Filth Flies | 26 |

POSTERS

| Date | Location | Conference/ Meeting Name | Table/Poster Theme | Estimated # of attendees | # of Event Hours |
|---------|---------------|---------------------------------|--|--------------------------|------------------|
| 3/19/18 | Baltimore, MD | 9th International IPM Symposium | Site Specific Management of Nuisance Geese on School Properties: A Case Study from New York State poster | 514 | 2 |
| 3/21/18 | Baltimore, MD | 9th International IPM Symposium | Repetitive overseeding of athletic fields for organic weed management poster | 514 | 2 |

TABLED EVENTS

| Date | Location | Conference/ Meeting Name | Table/Poster Theme | Estimated # of attendees | # of Event Hours |
|----------|----------------------|---|---------------------------|--------------------------|------------------|
| 10/16/18 | Syracuse/ Onondaga | 2018 Professional School Health Seminar | Don't Get Ticked NY table | 84 | 1 |
| 10/18/18 | Mayville/ Chautauqua | 2018 Professional School Health Seminar | Don't Get Ticked NY table | 40 | 1 |
| 10/24/18 | Latham/Albany | 2018 Professional School Health Seminar | Don't Get Ticked NY table | 57 | 1 |
| 10/26/18 | Poughkeepsie/ Putnam | 2018 Professional School Health Seminar | Don't Get Ticked NY table | 77 | 1 |

NYS School IPM Blog and Twitter: In 2014, NYS IPM staff initiated a blog and twitter account with IPM stories of relevance to the state's schools and childcare facilities. <http://blogs.cornell.edu/schoolchildcareipm/>. Through Twitter, [@NY_School_IPM](https://twitter.com/NYS_School_IPM) and Facebook <https://www.facebook.com/NYSIPM/>, we expanded contact with statewide and nation-wide school, childcare, and health professionals. The blog has 46 subscribers, and posts have resulted in 3,653 unique visitors and 5,676 pageviews. During 2018, blog entries included bed bugs, turf management, slime mold, outreach to charter schools, the NYS Clean, Green, & Healthy Schools program, ticks, school safety, and the Pest Defense for Healthy Schools national on-line training program.

Other Outreach: With funding from the NYS Senate, the NYS IPM Program has developed a statewide outreach program on reducing the risks associated with ticks and tick-borne disease. This campaign includes materials, workshops, and surveys focusing on schools. Details are in a separate annual report.

Geese on school grounds: Refer to the 2017 School IPM annual report for details of this project. In 2018, a short video was produced (yet to be made public).

Biological Pest Control on School Athletic Fields: Kyle Wickings (Entomology, Cornell) is implementing a project to apply NY-native beneficial nematodes (targeting grubs) to school playing fields and to assess their survival in these fields. In 2018, NYS IPM Program staff participated in a workshop that trained teachers from four school districts to incorporate sampling playing fields for beneficial nematodes into their science classrooms. Dr. Wickings and his lab inoculated playing fields at three of these districts and sampled the fields in fall 2018 to provide an additional assessment of nematode persistence (beyond the data students were already collecting).

NYS IPM Program staff participated in meetings, organized by the NYS Department of Health, of the Statewide School Environmental Health Program Steering Committee. The goal of this project is to promote sustainability and networking in promotion of school environmental health in NYS. A subcommittee, within which the NYS IPM Program had a key role, developed the *NYS Clean, Green, and Healthy Schools*, a recognition program for schools. We assisted in the recruitment of schools to pilot the program.

Upon request, NYS IPM Program staff conducted inspections for conducive conditions for rodents at two schools in the East Irondequoit Central School District, Monroe County.

NYS IPM Program staff collaborated with members of the National School IPM Steering Committee in the promotion of school IPM implementation nationwide
http://www.ipminstitute.org/school_ipm_2020/steering_committee.htm .