

## **School IPM Outreach and Research Activities, NYS IPM Program, 2015**

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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 2015, NYS IPM Program activities have resulted in school personnel becoming better informed and able to implement IPM in their school districts. The state's public school districts were surveyed on their pest management policies and practices, and the report is available on the NYS IPM Program's website. The information from the survey, together with a phone survey of BOCES health & safety officers, is providing input into school IPM outreach and implementation. Managing geese on school grounds was the focus of 3 workshops and a demonstration project in addition to several other presentations. Additionally, four other school IPM workshops and seminars were held as well as numerous related presentations in other venues. The NYS IPM Program made numerous blogs and tweets throughout the year with IPM stories of relevance to the state's schools and childcare facilities. NYS IPM Program staff made visits to several schools trouble shooting specific pest-related situations.

**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.

**Statewide School IPM Survey:** In 2001 and partnering with the NYS Health Department and the NYS Department of Education, the NYS IPM Program surveyed all of the state's public school districts and BOCES districts concerning their pest management policies and practices. The results have been helpful in guiding school IPM outreach activities. In 2011, we began planning a repeat of the survey in order to update this important database. The on-line survey was developed in 2012, promoted in 2012 and 2013, and distributed in 2013 and gathered information on pest management policies and plans, food policies, educational outreach and training, frequent pests, pest management techniques, turf management techniques, pest and pesticide-related complaints and incidents, pest management costs, Neighbor Notification Law (NNL), "Safe Playing Fields" Act (Chapter 85), and sources of information. The report on the results may be found at [http://nysipm.cornell.edu/publications/school\\_survey/school\\_survey2013.pdf](http://nysipm.cornell.edu/publications/school_survey/school_survey2013.pdf). The following is the Conclusions section.

Improvements from 2001 to 2013 included a large increase in the NYS public school districts that have a written pest management policy. There were also decreases in at least some types of pesticide application techniques notably baseboard spraying. Increased uses of aeration and overseeding in turf management were other positive outcomes. NYS schools received few complaints on pesticide applications and related health concerns and had very few pesticide spills. These are positive indicators of effective pest management programs at schools. NYS schools report that both the NNL and Chapter 85 have resulted in the reduction of pesticide use. In general, schools have adapted well to the NNL.

Prominent needs that still exist concerning pest management in NYS schools include the pervasive issue of food in classrooms and other non-cafeteria locations. This highlights the need for increased, effective outreach to all school stakeholders. Additionally, a persistent gap in the pest management framework at NYS schools is the lack of pest management advisory committees. Approximately 25% of the responding school districts indicated that they still have regularly scheduled pesticide applications within instructional buildings. Many schools are having significant challenges in complying with Chapter 85 and still maintaining the quality of their grounds. Pest pressures, in terms of species, have largely remained consistent. A notable exception was the increase in goose problems.

Aspects of NYS school pest management programs that may need further investigation include the drop of schools reporting the use of pest siting logs. Schools may be utilizing other effective means of reporting pests, or this may be a gap in their IPM policies. The reported decreased use of structural modifications and vacuuming as pest management techniques may also need clarification. Additionally, the impact of the decrease in school staff that are certified pesticide applicators could be elucidated. Future trends in the use of minimum risk pesticides by schools would also be informative. Finally, both the 2001 and 2013 surveys were of the public school sector in NYS. It would be informative to expand the survey to non-public schools to assess similarities and differences.

**BOCES Health & Safety Staff Survey:** 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, 19 BOCES districts, about 50% 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.

**Geese on School Grounds:** As reported above, geese were the only school pest situation that substantially increased in the 2013 statewide survey compared to the 2001 survey. Working with Paul Curtis (Cornell’s Department of Natural Resources), the NYS DEC, the USDA APHIS Wildlife Services, and local CCE associations, we organized outreach workshops on the topic in conjunction with the Rochester City School District, Delaware-Chenango-Madison-Otsego BOCES, and Questar III (Rensselaer Co.) BOCES. The impact of these workshops is described later in this report. Additionally, presentations on geese were made to school audiences in other meetings.

The Rochester City School District, working with NYS IPM staff, received a Community IPM grant to address the goose situation at one of their schools, Edison Tech. The Webster Central School District joined us in the project. School personnel tried various harassment techniques at Edison and Webster. Technique efficacy is not the only important aspect. The technique must also fit into the desires and workday of school staff. Webster preferred using a radio-controlled model truck while Edison favored an air dancer. Contacts have begun to develop community collaboration in the vicinity of Edison to address limiting goose production. We anticipate organizing public meetings for this during the winter of 2016.

**School IPM Outreach Workshops and Presentations:** Workshops on managing geese on school grounds were held in western NYS (Monroe Co.), southeast NYS (Chenango Co.), and east-central NYS (Rensselaer Co.). (Additionally, presentations on geese on school grounds were made at other venues in Ontario and Onondaga Counties and during a national EPA webinar.) Collectively, about 40 people from 22 school and BOCES districts, a consultant, and a Canadian municipality participated. In the written evaluations, all indicated that their knowledge of goose management increased with about 80% indicating that it greatly increased. Participants indicated that they plan to implement the following practices discussed in the workshops: hazing with lasers, dogs, and drones; shoreline and other exclusion on ponds; goose round-ups; modify turf management; and overseeding with fescue.

In addition to the goose workshops, more comprehensive school IPM seminars were organized and delivered in Ontario Co. (Wayne-Finger Lakes BOCES), Cayuga Co. (Cayuga-Onondaga BOCES), and Orange Co. (Orange-Ulster BOCES). Collectively, over 75 people from 37 school and BOCES districts and the US EPA participated. In the written evaluations, all indicated that their knowledge of pest management increased with about 70% indicating that it greatly increased. Participants indicated that they plan to implement more than two dozen IPM-related procedures that were discussed in the seminars. The most frequently mentioned were overseeding, fertilization, and developing IPM policies and programs.

The 2015 Turf & Grounds Exposition, held annually in Rochester, NY includes a regular track on Sports Turf and Schools. NYS IPM Program staff are on the conference organizing committee and helped organize the Sports Turf and Schools, IPM, and Invasive Species tracks. NYS staff made school related presentations on ticks, the Statewide School IPM Survey, and online turf resources. 109 conference registrants identified as working for a school.

The New York State School Environmental Health Summit: Is Your School Clean, Green, and Healthy? Conference, organized by the NYS Department of Health, attracted facilities managers, health and safety committee members, school nurses, administrators, and agency representatives to learn about and discuss environmental health issues in schools. NYS IPM program staff presented on IPM in schools.

The US EPA has organized a series of national school IPM webinars <http://www.epa.gov/managing-pests-schools/webinars-about-integrated-pest-management-schools>. NYS IPM Program staff made presentations in two of these webinars: Dealing with Nuisance Birds around Schools (February, 160 participants) and Keeping Your School Free of Stinging Insects (May, 175 participants).

During 2015, NYS IPM Program staff made school IPM related presentations in other numerous meetings. At least 250 individuals attended these presentations. The audiences included school facilities managers, university faculty, athletic directors among others.

In January 2015, one staff member presented a two hour workshop on bed bugs in schools for 28 school nurses from seven Rockland County school districts. This workshop focused on bed bug biology and habits, the risks to members of the school community and advice for nurses to use and to share with families affected by bed bugs.

Several school facilities employees attended a NYSIPM-hosted Hands-On workshop for the identification and management of structure-infesting pests. This 4-hour workshop was held in the Rockland County Cooperative Extension building in February 2015.

In March 2015, an educator presented a one-hour workshop titled "Critters in the Classroom" for the New York State Union of Teachers (NYSUT) Annual Conference in Saratoga Springs, NY. There were 17 people from schools across New York State in attendance.

**Statewide School IPM Committee:** The NYS IPM Program organized a Statewide School IPM Committee in 2002. The thirteenth meeting of the committee was held in November 2015 in Albany, NY. Participants were from Cornell University, state Department of Environmental Conservation, state department of health, state education department, NYS Teachers Association, school districts, BOCES districts, and industry. Discussions included a presentation by Dr. Michele Herdt-Losavio, Acting Section Chief, Child and School Health, NYS DOH on her unit's activities including the recent organization of the statewide school environmental health program. Also, we had a report from our sub-group that has been addressing the topic of managing food in the classroom, an often problematic pest conducive condition.

**Northeast School IPM Working Group:** A NYS IPM Program staff member serves as leader of this multistate group. In 2015, we held bi-monthly conference calls sharing updates on school IPM related activities in our respective states and organizations. We have applied to the Northeast IPM Center for funding to expand our regional outreach in 2016.

**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/NY_School_IPM), we expanded contact with statewide and nation-wide school, childcare, and health professionals. During 2015, blog entries included announcements

of NYS IPM Program school IPM outreach workshops, US EPA's school IPM webinar series, sports field management, the NYS pollinator conference, legal framework for nuisance wildlife control, wasp management, cleaning & IPM, ground bees, the statewide school IPM survey, school environmental health, ticks, head lice, bed bugs, the school IPM best management practices website, the Child Safe Playing Fields Act, and the statewide childcare center IPM survey.

**Publications:** Three new fact sheets: Understanding and Managing Ticks – A Guide for Schools, Child Care and Camps, Child Safe Playing Fields Act – Frequently Asked Questions, and Head Lice – Frequently Asked Questions were developed.

**Site Visits:** NYS IPM Program staff made several visits in 2015 to schools trouble shooting specific pest-related situations. In April, we made a site visit to a rural school district near Syracuse to provide feedback on nuisance geese management.

In May, as seasonal tick activity was increasing, a staff member visited two eastern Long Island schools to assess the athletic field and grounds for tick activity and to report and advise the grounds staff on precautions and modifications to lower the risk of tick-human interactions. Dozens of ticks were captured using tick drag mats in both school locations at the athletic field edges. In June we went to a new charter school in Riverhead to sample for ticks. In this case, a few ticks were captured, but poison ivy was discovered to be a greater risk than ticks. Advice on both pests was provided to the school manager and staff.

In July, a NYS IPM staff member participated in a dialogue and inspection / assessment of the pest management program of a southeastern NYS school district with representatives from EPA Region 2 pesticides team, the school's director of operations, and a BOCES health and safety officer. The inspection evaluated the IPM program for the school district, including an assessment of the contracted pest management services. A report was subsequently generated by EPA staff for the school district, which expressed interest in future trainings on IPM for staff.

**Other Outreach:** NYS IPM staff members are collaborating with Jenny Kao-Kniffen, Cornell University's Horticulture Department, with her USDA-NIFA-CPPM funded project, "Overseeding to Enhance IPM for School, Community, and Athletic Fields." Working on 50 school and community playing fields in New York, Maine, and Connecticut, the purpose of the project is to implement and evaluate the efficacy of repetitive overseeding on school and community playing fields as a safe, cost-effective means of weed control and reducing field compaction without the use of pesticides.

NYS IPM Program staff participated in a June meeting, organized by the NYS Department of Health and funded by the US EPA, 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. The steering committee organized the first statewide school environmental health conference which was held in Saratoga Springs during October and included a presentation by the NYS IPM Program.

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](http://www.ipminstitute.org/school_ipm_2020/steering_committee.htm) Included was a review of the bird section of the National School IPM Strategic Plan update.