

School IPM Outreach and Research Activities, NYS IPM Program, 2016

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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 2016, NYS IPM Program activities have resulted in school personnel becoming better informed and able to implement IPM in their school districts. Managing geese on school grounds was the focus of a demonstration project including the production and wide distribution of a fact sheet. A school IPM assessment tool was developed and will be piloted in 2017. 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 made visits to several schools trouble shooting specific pest-related situations, collaborated on a multi-state school turf overseeding research project, and were involved in statewide and national collaborations involving school IPM outreach.

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.

Geese on School Grounds: Geese were the only school pest situation that substantially increased in the 2013 statewide survey compared to the 2001 survey <https://ecommons.cornell.edu/bitstream/handle/1813/43853/pest-mgmt-schools-NYSIPM.pdf?sequence=1&isAllowed=y>. In November, 2014, the Rochester CSD, contacted the NYS IPM Program about a long term goose problem at a high school athletic field complex. We made a site visit, interacting with the district and school groundskeepers and athletic directors. We worked with the district to hold a goose on school grounds seminar at school on February 20, 2015. Upon request from DCMO

BOCES, a similar seminar was held in Norwich, NY on March 13, 2015 and another one was organized with Questar III BOCES in Rensselaer Co. on August 4, 2015. Participants indicated that they plan to implement managing turf with geese in mind (including planting fescue), a variety of hazing techniques, exclusion along shorelines and retention ponds, and round ups. Suzanne Wheatcraft, senior H&S official with the RCSD, and I successfully applied for a NYS Community IPM grant to address the goose situation at the school. A suburban school district joined us in this project. School personnel have been trying various harassment techniques. Technique efficacy is not the only important aspect. The technique must also fit into the desires and workday of school staff. The suburban district preferred using a radio-controlled model truck while the city school favored an air dancer. We have begun developing community collaboration in the vicinity of the high school to address limiting goose production. We made a presentation (April 6) to residents of Unity Village, a nearby senior living facility with nesting geese. We made several good contacts with commercial/manufacturing properties near the school. Building upon this project, Paul Curtis, Cornell's Department of Natural Resources, applied for and received a CIPM grant for managing geese in Ithaca urban areas. We published a fact sheet (<https://ecommons.cornell.edu/handle/1813/44456>) based on our project. This fact sheet has been tweeted by the IPM Institute & Wyoming, and sent to 608 schools by the University of Oregon. In late April and early June, we visited an urban wetland that probably contains the largest number of unmanaged geese in the immediate vicinity of the city high school. Hatching was occurring so the window of opportunity for dealing with those nests has largely closed for the spring. We wrote and distributed a follow-up letter to the landowners that we contacted, thanking them for their interest and promising to be in touch. We loaned the hazing equipment to Kathy Murray, State of Maine, for display and demonstration in a workshop of school athletic turf management. We presented a poster paper on the project to the annual meeting of The Wildlife Society in October. In December, we contacted property owners where we plan to oil eggs next spring and reminded them of the need to register with the USFWS on-line after the new year begins. We will evaluate whether the egg oiling appears to result in a reduction of the number of geese at the high school next fall.

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.*

Piloting the assessment tool in collaborating schools will be conducted in 2017.

Statewide School IPM Committee: The NYS IPM Program organized a Statewide School IPM Committee in 2002. The fourteenth meeting of the committee was held in October 2016 in Rensselaer, 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. In addition to the always-appreciated round-table sharing, including updates on school IPM nationally and regionally, we had a special presentation by representatives of insurance agencies on school IPM and liability. Also, Dr. Lorraine Maxwell, Cornell's Department of Design & Environmental Analysis, presented her research on the impact of school building quality on student outcomes.

Northeast School IPM Working Group: A NYS IPM Program staff member serves as leader of this multistate group. In 2016, we held bi-monthly conference calls sharing updates on school IPM related activities in our respective states and organizations. On behalf of the NE School IPM Working Group, we submitted a NE IPM Partnership grant proposal entitled, "Assessing School IPM Implementation Tools within the Northeastern United States."

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, [@NYSchoolIPM](https://twitter.com/NYSchoolIPM), we expanded contact with statewide and nation-wide school, childcare, and health professionals. During 2016, blog entries included announcements of NYS IPM Program school IPM outreach workshops, US EPA's school IPM webinar series and listserv and funded research, ticks, national on-line school IPM resources, and the misapplication of pesticides.

Site Visits: NYS IPM Program staff made several visits in 2016 to schools trouble shooting specific pest-related situations. These included visits to the Auburn City School District concerning mice, drugstore beetles, and fleas at 3 different schools and a Rochester school to make recommendations on a pigeon problem. Turf damage, possibly by big-eyed bugs, was investigated at 3 Albany area schools. Two Long Island school buildings were diagnosed for infestations of flies inside the buildings. One turned out to be moth (drain) flies emerging from an unused toilet in a closet, and the other were dark eyed fruit flies, likely coming from a floor drain in the kitchen.

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. Repetitive seeding of perennial ryegrass onto existing turfgrass fields in the Fall of 2015 and Spring of 2016 resulted in a significant overall decline in weed abundance and higher grass density, when examining all 50 playing fields across three states (New York, Connecticut, and Maine). Regional and individual site differences may have influenced the efficacy of the repetitive overseeding strategy, but the overall trend indicated that the method is effective in managing weed populations without the use of herbicides.

NYS IPM Program staff visited St. George's Episcopal Church school, Albany, to sweep for ticks and make recommendations for management. No ticks were found in the play area, and the recommendation was to not treat. Ticks were found in the wooded nature area and recommendations included a sample letter to parents to help with self-protection, keeping nature activity to the morning (when repellents are still working), and widening trails to reduce the risk of brushing against vegetation. This visit led to a tick presentation for the congregation and local community. The NYS IPM Program continued participation in the *Bethlehem Committee on Deer and Ticks*, including piloting tick presentations for different school groups within the Bethlehem Central School District. A staff member is also participating in the Public/Private Tick IPM Working Group and conducted spring tick sweeping as part of the larger Westchester County based leaf-mulching study. Three presentations on ticks were given to school groups (elementary, middle, and school nurses).

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 has a key role, is developing *NYS Clean, Green, and Healthy Schools*, a recognition program for schools.

A NYS IPM Program staff member was part of a team organized by the US EPA to St. Croix, US Virgin Islands, and Puerto Rico to deliver IPM education to pest management professionals, hotel managers, school staff and many others. This trip was planned in response to an incident where a Delaware family was poisoned by methyl bromide by pesticide applicators in a condominium in St. John USVI while on vacation.

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 including a presentation to the steering committee on the Scientific Coalition for Pest Exclusion project and ways that schools might adopt pest exclusion.