

Title:**Municipal IPM Outreach and Research Activities, NYS IPM Program, 2004****Project Leaders:**

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Project locations:

Suffolk County, Westchester County, Onondaga Count, New York City

Abstract:

Integrated pest management is an ideal approach to pest problems in municipal settings, where facilities that are provided for the public should be maintained as safe and pest free as possible. The New York State IPM program was involved in many efforts to demonstrate and promote IPM in municipal settings in 2004. A rodent management project in a village municipal building demonstrated that mice could be managed using exclusion and trapping. Program staff conducted least-toxic pest management workshops for Onondaga County workers and schools within Onondaga County. Program staff members also taught IPM techniques to employees of municipal vector control programs. Lastly, the NYS IPM Program provides expertise and IPM experience to two county committees charged with the implementation of pesticide reduction legislation.

Background and justification:

Implementation of integrated pest management in municipal settings is very important to the protection of human health in public places and public resources, such as drinking water. Municipalities have the responsibility of providing safe facilities for the public that are not overwhelmed with pests and pesticides. Some municipalities are attempting to eliminate most pesticide use on public property through legislation. IPM is a tool that can be used to support low-risk pest management plans and therefore IPM demonstrations, research, and outreach have been directed at several municipalities in New York State.

Projects:**1. Village of Babylon Rodent Management Project****Rationale**

The Village of Babylon Rodent Management Project was a cooperative demonstration project to manage rodents effectively from a whole-building standpoint, without the use of rodenticides. The Village Municipal building has had an ongoing active mouse problem and has the potential to develop a rat problem, because rats are evident in high numbers in nearby areas.

Objectives

This project was initiated to demonstrate the management of mice in a building by relying on IPM techniques such as trapping, exclusion of mice, and sanitation, rather than the use of rodenticides.

Implementation

The project began with a guided tour of the whole building perimeter with facilities staff. The building has diverse uses, including a public meeting site, offices, a fire department with kitchen and bar facilities, a sanitation department with garbage hauling trucks stored inside, and a horticultural center where annual and bulb plants are readied for the landscape. Photos were taken and notes made of areas suspected to be access points for mice into and throughout the building. Non-toxic monitoring bait stations were placed around the perimeter of the building. These non-toxic bait blocks encourage rodent feeding, so activity can be recorded. There were only two instances when monitoring blocks indicated rodent activity. The horticulture greenhouse and storage sheds were a main activity area for mice. The garage truck bays were likely another access point. All other sides of the building showed no activity, including the public plastic container recycling area.

Village staff members were surveyed about their experiences with mice in the building. Notes were taken about where each person had seen mouse activity. The fire department was inspected closely due to the constant availability of food and water. Mouse sightings have been regularly reported by members. Mice were evident throughout the fire department kitchen and a runway across the main room was also noted and sealed up. Pipe chases under the sinks were sealed with foam and copper mesh. Traps were placed under radiators where mice can hide. Members were reminded to store food properly. Later in the inspection process, a heating vent was discovered in an office closet that appeared to be a significant access point for mice from lower levels in the building. This area was loaded with mouse droppings, and was cleaned and sealed up as best as possible. Traps were set in the closet however no mice were ever caught.

As of May 5, 2004, after monitoring, trapping, cleaning and sealing up pipe chases, a total of 4 mice had been caught. This total was much lower than expected. After these captures, no mice were sighted until late December when the Village Mayor reported seeing a mouse in the mechanics garage, which is adjacent to the sanitation truck bay. In late April, an employee reported more than one mouse sighting in her office on the first floor next to the mechanics garage. No other mouse sighting have been reported as of November 2004.

In early 2004 the horticulture center was cleaned and straightened up at the request of management. As of May no bulbs or seeds were stored there and much of the clutter had been removed. No mice have been spotted in recent months. No complaints of mice have been made since the cleanup. Traps placed in the shed caught no mice over a period of four months. This was an excellent example of the correct approach to pest prevention.

Results

Conclusions made and reported to the Babylon Village Mayor's office:

- ① The garbage truck bays are a significant attractant and point of access. Mice may be brought in on garbage trucks. There is no way to prevent this, however trapping in the garage will help to prevent the spread of mice through the building.
- ① The fire department was the main area of activity on the second floor of the Village Hall, however in the latter half of 2004, activity has been limited to the mechanics garage and truck bays.
- ① Mouse activity at Village Hall has been lower than expected throughout this project. Compared to previous years, reports of sightings were significantly lower this year.
- ① Rats have not yet shown signs of activity in or around the Village Hall, but have been spotted in nearby Argyle Park and the marina, and are a significant problem near the train station and Deer Park Avenue stores. Maintaining buildings to prevent access by rats will be necessary to avoid serious problems in the future.

As a demonstration project, many recommendations were made to the Babylon Village Mayor's office:

- ① The garbage truck bay doors need to be fitted with broom-style door sweeps to close the gap between the bottom of the door and the pavement. This will prevent direct and uncontrolled access of mice, and potentially rats into the building.
- ① Door sweeps should be installed on all doors on the first floor of the building, including office doors and doors to the horticulture center area.
- ① Crude mouse traps should be made out of sticky traps and short lengths of PVC pipe, that can be placed inconspicuously along walls in the garage and not be disturbed.
- ① Holes in the foundation walls on the outside perimeter of the building need to be filled permanently with concrete.
- ① Staff (including volunteers) must be reminded of good food storage and disposal practices.
- ① Grass seed for any purpose should be stored in a metal container, no matter who uses it or where it is kept.
- ① Any pest sighting reports from staff or member should still be forwarded to the Mayor's administrative assistant, who has a Log Book to record pest management problems. This is for rodents and all other pest problems and the information should also be shared with the pest control professional contracted with the Village.

2. Non-Toxic Pest Management Workshops, Onondaga County, NY

The NYS IPM Program worked with Cornell Cooperative Extension of Onondaga County to develop a series of workshops on non-toxic pest management. Funding for the project was from a NYS Department of Environmental Conservation Non-Toxic Pest Management Grant. The training focused on non-toxic pest management methods and alternatives to pesticides for structural and outdoor settings. Four workshops, consisting of a series of two workshops repeated at two locations within Onondaga County, were organized.

In each series, the first workshop addressed the principles of IPM, state regulations, invasive species, and the basics of structural and grounds IPM. This first workshop also included a demonstration of IPM equipment and products.

The second workshop was divided into concurrent sessions on grounds and structural IPM. The grounds session covered turf, tree care, ornamentals, and bird control. Structural session topics were food safety, IPM in food service areas, animal problems, and stinging insects. Everyone in the second workshop participated in a tour where relevant grounds and structural pest management issues were discussed.

Speakers from the workshops were from the NYS IPM Program, Cornell Cooperative Extension of Onondaga County, NYS Department of Environmental Conservation, Cayuga-Onondaga Board of Cooperative Education Services, NYS Department of Agriculture and Markets, Pest Management Education Program of Cornell University, Cornell Department of Entomology, US Department of Agriculture, and Ashland Pest Control. Fifty people participated in the workshops. They consisted largely of buildings and grounds staff from municipal agencies and schools in Onondaga County.

3. Suffolk County Citizen's Advisory Committee for the Phase-out of Pesticides on County Property

The Suffolk County Citizen's Advisory Committee is comprised of community members and county agency representatives who work collaboratively to reduce the use of pesticides on Suffolk County owned and operated properties. This committee was mandated by a local law and serves to oversee the implementation of that law. NYS IPM program specialists serve an advisory role to this committee bringing scientific knowledge and practical IPM experience to the table to aid the County in managing challenging pest situations with minimal pesticide use. In 2004, these challenges included pest management on golf courses, in county buildings, for invasive species such as Asian longhorned beetle, weed management in parks and at the county airport, anti-fouling paints for boats, tick management on community college campuses, and many other problems. IPM Program specialists help the committee in decision making and by developing and supporting research efforts to find alternatives to pesticides.

4. Westchester County Pest Management Committee

Chapter 690 of the Laws of Westchester County established the Pest Management Committee (PMC) to "develop and implement pest management policies, rules and regulations" concerning pesticide reduction. The Westchester County Pest Management Committee is comprised of community members and county agency representatives who work collaboratively to reduce the use of pesticides on Westchester County owned and operated properties. This committee was mandated by a local law and serves to oversee the implementation of that law. A NYS IPM program specialist serves as a voting member on this committee and helps by bringing scientific knowledge and practical IPM experience to the table to aid the County in managing challenging pest situations with minimal pesticide use. In 2004, these challenges included pest management on golf courses, in county buildings, at the county

airport, and weed management in parks and along roadways. The committee must develop criteria for the selection of pesticides, which may be used under exceptions, considering the guidelines enumerated within 690.04.21. The committee also reviews the pesticide use exemptions to determine whether newer and safer products have been found, and if so, recommend these changes to the County Executive and the Board of Legislators.

5. Suffolk County vector control staff training

Suffolk County, NY, has one of the most comprehensive vector management programs in the Northeast. Each year new employees are hired to do field work and these individuals require training in public health (Category 8) for pesticide application. Suffolk County's IPM staff organize the 30-hour course and often ask NYS IPM staff to help teach. In 2004, Jody Gangloff-Kaufmann gave three hours of education to the group of 60 trainees. Curriculum included an overview of IPM principles, local pesticide regulations, and management of stinging insects and other arthropods.

6. NYC vector control staff training

In May 2004, the NYS IPM Program was asked by Gil Bloom, Director of the New York State Pest Management Association to help train helicopter pilots from the New York City Police Department to apply pesticides. These pilots were being recruited to stand in as vector control aerial applicators as the City planned to devote one helicopter to the application of mosquito management insecticides. Dr. Gangloff-Kaufmann gave a two-hour lecture in aerial pesticide application with attention to the use of IPM and the need for environmental stewardship in such an occupation.