

Community IPM Program Progress Report, 1994—1998



nysipm.cornell.edu

Community IPM Program Meets the Need

Presenting you with the first progress report of the Community IPM Program at Cornell gives us great pleasure. Growing public concerns about the fate of pesticides in homes, schools, workplaces, and public settings has created an unprecedented demand for integrated pest management education in community settings. State and local governments continue to wrestle with legislation about the use of pesticides, in some cases eliminating pesticides on public properties. With limited funds, we have responded to growing requests for education by beginning to develop programs people can depend on. Such educational programs have the potential to eliminate not only pest populations, but also the potential risks associated with pest management.

With a core group of Cornell Cooperative Extension (CCE) field staff and faculty, we have forged a vision of what Community IPM could be. Our goal is to create an educational outreach program for nonagricultural audiences that is as successful as New York State's agricultural IPM program. And we are well on our way.

As this report shows, in the past two years we have focused on IPM for schools. One reason is that in 1993, 87% of New York schools used pesticides, with at least 50 different active pesticidal ingredients being applied to school buildings and grounds around the state. The children in these schools are particularly vulnerable to unnecessary and misapplied pesticides, and we need to be reducing their risk of exposure to the lowest level possible.

Schools tie in well with our central mission, which is "to educate and encourage public and private sectors to manage pests by using a combination of methods that pose minimal risk to human health, are environmentally sound, and attain aesthetic quality."

We take the role of educating seriously, and it occurs on many levels. For example, industry is developing alternatives to pesticides, and one of our jobs is to teach Extension educators and others how to integrate these new technologies into pest management programs. Or in a school setting, we might work with coaches, grounds managers, students, parents, and administrators to develop an IPM program for athletic fields.

One of New York's greatest environmental challenges for the coming decade will be how to educate homeowners about pests and the "integrated" ways to manage them. Homeowners have access to a large array of pesticides but have little or no training in the use of these chemicals or potential negative effects on human health and the environment. Developing sound alternative methods and reaching homeowners with this information is critical.

The Cornell IPM Program recently documented how New York farmers who consult CCE or participate in Extension-sponsored IPM programs adopt more IPM practices than do farmers who have not consulted CCE. Similarly, we believe that hands-on education in Community IPM, if we had the means to accomplish it, will spell greater adoption of IPM principles and benefits to the environment.

New York State and the College of Agriculture and Life Sciences have invested in agricultural IPM for more than a decade. Isn't it time that we invested in Community IPM?



James P. Tette, Director
Cornell IPM Program



Gerard Ferrentino, Coordinator
Community IPM Program

From Urban to Community

In 1993, the government of New York State and a number of agencies began approving resolutions and policies for practicing IPM in and around state office buildings, schools, parks, and arboreta. These forms of “mandated” IPM programs created numerous requests for education and training in IPM methods. Many of these requests came to Cornell Cooperative Extension (CCE), the New York State IPM Program, nongovernmental organizations, and the New York State Departments of Health, Environmental Conservation, Education, and Agriculture and Markets.

That year, Cornell scientists, Extension field staff and IPM program staff met to discuss an IPM program that could address the needs of the urban environment. Attendees at the meeting agreed that a new program should educate pest managers; produce written resources that would convey the latest IPM methods; form a coalition with advocacy groups and professional associations; and continue building a research base. With this group, which soon became known as the Urban IPM Working Group, a small but ambitious effort of outreach and education began.

Three watchwords of those early years continue today: listen, network, and educate. In March 1995, the Working Group surveyed, then met with, representatives of the structural pest control and landscape industries to discuss the direction for the program and ways to be helpful. To promote networking, the Program orchestrated a meeting of governmental officials, pest managers, Extension personnel, environmental advocates, and others. This group, now known as the Community IPM Coordinating Council, still meets semiannually to anticipate problems, dialog about pest management concerns, coordinate educational efforts, and reinforce commonalities.

In 1995, CCE Smith-Lever 3(d) funds were used for urban IPM demonstration and implementation projects. These continue today (see below). Community IPM projects have resulted in specific details about IPM:

Sampling procedures can accurately determine whether controls for European chafer larvae are necessary on lawns. Using these procedures could mean that pesticides are applied 50-80% fewer times than with prophylactic sprays.

Using IPM on Kentucky bluegrass promotes better color and density than using IPM on a tall fescue blend or low-maintenance grass mix. For color and density, IPM surpassed low maintenance and organic methods, according to a three-year study conducted on CCE grounds in Nassau County.

Certain composts, such as Sustane, can suppress development of dollar spot in turf if applied at the proper time and if disease pressure is not severe.

Tiny beneficial worms (nematodes) will manage grubs in turf when applied correctly.

In 1996, in response to guidance from the Working Group, the Program began to focus on IPM for educational facilities. Staff drafted an IPM manual for school buildings that became the backbone of a pilot training project in Rockland County. A web site was established for the program, and three educational brochures were produced.

In the spring of 1998, the program changed its name from Urban IPM to Community IPM to better reflect the breadth of the program’s audience.

Year	Projects	Funds
1995	4	\$10,221
1996	3	\$8,900
1997	7	\$22,488
1998	3	\$9,924

Delivering Effective Educational Programs



Susan MacAvery, CCE - Orange county, spearheads educational IPM programs in horticulture.

The Community IPM Program has taught thousands of educators and consumers about IPM through inservice trainings, presentations, publications, and other interactions.

Inservice Training and Workshops

In 1996 and 1997, IPM program staff developed and delivered two inservice trainings to approximately 75 participants. To determine what CCE educators needed to learn about community IPM to be effective, program staff surveyed association directors and consumer and commercial horticulture Extension educators. Information ranking highest on the “request list” concerned structural pests, landscapes, homes and grounds, and schools.

The first Community IPM inservice focused on the management of pantry pests, lice, cockroaches, carpenter ants, flies, and mice. The second inservice familiarized Extension personnel with the latest IPM research on landscape and turf, including how to prevent winter damage. A third inservice, on wildlife, is being planned.

In the past three years, Extension educators and Community IPM program staff have conducted 12 IPM workshops to meet the needs of more than 500 stakeholders. Six workshops on school IPM were held in August, 1998, in different locations throughout the state in conjunction with the Department of Environmental Conservation. During these one-day events, IPM program staff demonstrated pest management methods for interiors and grounds to school staff, private consultants, government personnel, and Extension field staff.

In 1997, during a hands-on turf workshop in Monroe County, Brian Eshenaur provided information about fertilization, grub sampling, renovation, and IPM as a replacement for routine pesticides. As a result, 95% of participants planned to monitor for insects and 94% said they would try to spot treat instead of applying blanket sprays. The next year, in a one-day workshop, Brian taught IPM principles to 60 people who manage turf on athletic fields. Anna deCordova of CCE—Rockland County, working closely with the Community IPM Program in 1997, taught 45 administrators and custodians from seven school districts how to practice IPM in schools.

Extension educators who attend workshops share the new information with their constituents. For example, in only three months during 1998, CCE—Nassau County extended IPM information to 3,300 professionals via an agricultural forum, PRO TIPS newsletter, Master Gardener training, and the Horticultural Information Center (phone, mail, personal visits, and recorded messages).

Presentations

In the past four years, Community IPM Program staff have taught 10,000 listeners about ways to practice IPM, pests, and natural enemies. A sampling of settings: NYS Turfgrass Association’s annual meeting; Nassau-Suffolk Landscape Gardeners Association; the NYS Vegetable Conference in Syracuse; Nurserymen and lawn care professionals in Albany; NYCAP school workshops; Turf and landscape training sessions at Elmira College; Basic Horticulture School in Rochester; and BCERF (Breast Cancer and Environmental Risk Factors) programs.

Newsletters

Eleven issues of Community IPM News, a six-page newsletter, have been produced since 1994. The readership of this free newsletter has grown from several dozen to more than 400. Issues feature the latest IPM research results

from Cornell and ways to use these in the field; specifics about how the private sector (arborists, landscapers, the pest control industry, and others) practice IPM; and information about Program activities.

The Program supported *Branching Out: An Integrated Pest Management Newsletter for Trees and Shrubs*, for two years, enabling the editors to continue providing valuable information to nearly 700 subscribers. In addition, an article written by Program staff explaining how to choose trees with natural resistance to pests (to decrease pesticide use) was printed in Extension newsletters throughout the state and reprinted in *American Nurseryman*, reaching thousands of readers.

Brochures/Fact Sheets

Four brochures explaining how to manage pests with IPM methods were produced, advertised, and distributed in the past two years. Topics included the carpenter ant, the cockroach, the house mouse, and the white grub. Another brochure describing the program was produced in 1996 and is routinely updated. Because of IPM funding, CCE—Monroe County was able to mail turf fact sheets to workshop participants throughout the season.

Manuals and Books

A 150-page school IPM resource manual was developed to accompany the School IPM Workshops, and 700 additional copies were made available to the DEC for future distribution. Included in this manual were guidelines for developing a school IPM policy, a document that was developed, reviewed, and produced by the Community IPM Program.

With the assistance of IPM funds, the Urban Horticulture Institute revised *Urban Trees: Site Assessment Selection for Stress Tolerance Planting*. They made the manual available to landscapers and others to help them properly select trees and sites that would minimize the need for pest management, and created a companion web site with a searchable database and color slides.

To ensure that Extension educators had access to comprehensive IPM information, the Program provided the book *Common Sense Pest Control* at below list price to 50 workshop participants in 1997.

Electronic Communication

Program staff developed a website featuring the Community IPM Program that informs the public about recent developments and provides information on pests, management alternatives, and program activities. The Program's Extension Educator established a listserv of about a hundred professionals across the country with expertise in urban IPM. People can find information quickly and inexpensively via this listserv and through a searchable IPM database that the Program made available via the web in 1998.

Other Media

Program staff spoke three times about IPM and pesticide-related issues for Extension's "Second Tuesday" satellite downlink and related programs for counties. County Extension offices use newspapers, radio, and television to share results from IPM-funded projects. For example, in 1997 CCE staff in Monroe County promoted turf educational programs and explained IPM topics through the media, reaching a potential audience of 343,000.

With assistance from the Program, Extension entomologist Carolyn Klass completed a Home Grounds IPM slideset that uses real-life scenarios to explain IPM concepts. It is available to Extension through the Homes and Grounds library.

Face to Face

Since 1994, the Community IPM Program has worked closely with Extension offices in three counties to implement IPM in local schools. The Baldwin Union Free School District (Nassau County), Rockland County schools, and Cortland County schools have put programs in place for grounds and interiors.

More than a dozen golf courses have been included in demonstration programs for grubs and other pests. CCE—Orange County worked for three years with two local golf courses and was able to use IPM principles to cut both the number of pesticide applications and the pounds of active ingredient in half. Five golf course superintendents in the capital region reduced insecticide use for grubs by basing their pesticide treatments on scouting information.

With help from the IPM Program, CCE—Westchester conducted a pilot project of eight lawn-care professionals, teaching them to scout for white grubs prior to treating for them, and to apply insecticides only as needed.

Funded Projects: 1995 - 1998



Brian Eshenaur, CCE - Monroe County, works with school grounds managers to improve IPM practices on playing fields.

Schools

Implementing IPM in Rockland County Schools. Anna Perkins, CCE—Rockland Co.

1996 Safety Under Foot, a School Grounds IPM Educational Program. Frank Rossi, Department of Floriculture and Ornamental Horticulture. 1998

Landscape

Home Grounds IPM. Carolyn Klass, Department of Entomology. 1995

Branching Out: An Integrated Pest Management Newsletter for Trees and Shrubs (Year 1). George Hudler, Department of Plant Pathology. 1996

Branching Out: An Integrated Pest Management Newsletter for Trees and Shrubs (Year 2). George Hudler, Department of Plant Pathology. 1997

Recommended Urban Trees Bulletin. Nina Bassuk, Department of Floriculture and Ornamental Horticulture. 1997

Turf

Implementation of IPM White Grub Scouting Techniques on Residential Turfgrass by Commercial Lawn Care Businesses. David Chinery, CCE—Westchester. 1995

Long Island IPM Lawn Demonstration Study. Maria Cinque and Kevin Masarik, CCE—Nassau County; Rod Ferrentino, IPM Program. 1995

Validation of a Scarab Grub Sampling Plan for Home Lawns. Jennifer Grant, IPM Program, Jan Nyrop and Mike Villani, Department of Entomology. 1995

Long Island IPM Lawn Demonstration Study. Maria Cinque and Kevin Masarik, CCE—Nassau County; Rod Ferrentino, IPM Program. 1996

Demonstration of Compost and Chemical Fungicide Interactions on Golf Course Turfgrass in the Capital District. David Chinery, CCE, Rensselaer Co. 1997

Turfgrass IPM Educational Days. Project Leader: Brian Eshenaur, CCE, Monroe Co. 1997

Westchester County Golf Course Urban/Suburban IPM Demonstration Project. Project Leaders: Todd Schongalla, Nancy Cook, CCE, Westchester Co.; Andrew Corbin, IPM, LIHRL. 1997

Demonstration of White Grub Scouting Techniques on Golf Course Fairways in the Capital District of NYS. Project Leader: David Chinery, CCE, Rensselaer Co. 1997

Orange County Golf Course Integrated Pest Management. Project Leaders: Andrew Corbin, IPM, LIHRL; Susan MacAvery, Teresa Rusinek, CCE, Orange Co. 1997

Safety Under Foot, a School Grounds IPM Educational Program. Project Leader: Frank Rossi. 1998
 Westchester County Golf Course IPM Demonstration. Project Leaders: Todd Schongalla, Nancy Cook, CCE—
 Westchester Co. 1998
 Integrated Pest Management on Sports Fields. Project Leader: Brian Eshenaur, CCE—Monroe Co. 1998

Behind the Scenes

Community IPM Coordinating Council

- Lynn Braband, Wildlife Management
- Joseph Broyles, Total Plant Care
- Barbara Dougall, Procurement Services Group, OGS
- Marilyn DuBois, Legislative Commission on Toxic Substances & Hazardous Wastes
- Judith Enck, NYPIRG
- Rod Ferrentino, Community IPM Program, Cornell
- Gunther Fishgold, Intelligent Pest Management
- Ron Gardner, Pesticide Management Education Program
- Richard Kammerling, RK Chemical Systems
- Carolyn Klass, Insect Diagnostic Laboratory, Cornell
- Christian Klossner, New York Public Interest Research Group (NYPIRG)
- Fred Langley, R.I.S.E.
- Robert Lupica, J. P. McHale Pest Management Services, Inc.
- Steven Miller, CCE—Oneida County
- Pam Hadad Hurst, New York Coalition for Alternatives to Pesticides
- Robert Mungari, NYS Department of Agriculture & Markets
- Richard Muscarella, Ashland Pest Control
- Carmi Orenstein, Breast Cancer & Environmental Risk Factors, Cornell
- Mary Roy, NYS DEC
- John Santacrose, Audubon International
- Walter Schroeder, Long Island Pest Control Association, Inc.
- Beth Seme, NYS Turfgrass Association
- Michael Sorgan, Environmental Protection Bureau, NYS Attorney General's Office
- James Tette, NYS IPM Program
- Audrey Thier, Environmental Advocates
- Laura Sahr, NYS Education Department
- Michael Villani, Dept. of Entomology, Cornell H.
- Pat Voges, Nassau/Suffolk Landscape Gardeners Assn.
- Richard Weir, III, CCE—Nassau County

- John White, Pesticide Control Specialist, NYS DEC
- John Zimmerman, Buffalo Exterminating



Joseph Broyles, Council member

Community IPM Working Group

- Nina Bassuk, Department of Floriculture and Ornamental Horticulture
- Paul Curtis, Department of Natural Resources
- Margery Daughtrey, Plant Pathology, Long Island Horticultural Research Laboratory
- Rod Ferrentino, Community IPM Program
- Fred Fladd, Cornell Cooperative Extension
- Ron Gardner, Pesticide Management Education Program
- Joann Gruttadaurio, Department of Floriculture and Ornamental Horticulture
- George Hudler, Department of Plant Pathology
- Carolyn Klass, Cornell Diagnostic Laboratory, Entomology
- Charles Mazza, Home Grounds and Consumer Horticulture
- Steven Miller, CCE—Oneida County
- Eric Nelson, Department of Plant Pathology
- Frank Rossi, Department of Floriculture and Ornamental Horticulture
- Donald Rutz, Department of Entomology
- James Tette, Cornell IPM Program
- Michael Villani, Department of Entomology

Future Possibilities

One quarter of the counties in New York have some type of IPM policy for county facilities and have made progress in implementing IPM practices at these facilities. What has hampered them in adopting more IPM practices is the lack of knowledge and the lack of time to learn more.

The Community IPM Program, through local county Extension offices, is trying to deliver the knowledge, but is limited by resources. The Program would like to expand its educational outreach to schools, pest control operators, municipalities, golf courses, and other community settings. If more funds were available, the Community IPM Program would be able to put into effect the following:

Five-Year Plan

- Develop and improve IPM programs for New York schools
- Design a process and educational program to assist county and municipal governments in the adoption and implementation of IPM practices
- Demonstrate and implement IPM methods with landscape professionals and homeowners
- Demonstrate IPM concepts for management of golf course turfgrass
- Train Master Gardeners and homeowners
- Develop an IPM curriculum that students and teachers can use

Grants Program

An improved grants program would provide supplemental funding at the local level, through Cornell Cooperative Extension, for demonstrations of IPM methods and educational workshops. Such a program would also support the development of new knowledge and technology. In addition, a strong grants program would foster implementation of IPM methods and evaluation of impacts.

Pest Diagnosis

Identifying pest problems is a difficult task, even for professionals. Support will be required for diagnostic laboratories in key county Extension facilities and at Cornell for pest identification. Funds to improve diagnostic capabilities, especially through electronic technology, are necessary.

Applied Research and Development

Developing new IPM methods and strategies is a critical component of a Community IPM program. Support for an assistant professor with research and extension responsibilities in the Department of Entomology—Ithaca is integral to a team effort. Extension staff have specifically requested help with the biological control components of their demonstrations, a task that could be addressed by this professional.

Production of Resource Materials

We have begun to network with other states with the goal of sharing knowledge and resources. To ensure sound educational outreach for New Yorkers, Extension educators will need brochures, fact sheets, videotapes, computer training programs, curricula, and other educational materials that can be used to teach a range of audiences.