

## **Community IPM Outreach Efforts for 2014**

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NYS IPM Program

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### **Abstract:**

The core mission of the Community IPM Program is to provide New Yorkers with safe and effective solutions to manage pests where people live, work, learn and play. Because the field of Community IPM is vast, including all aspects of life that are not associated with growing food or horticultural goods, the practices promoted by this program apply to all New Yorkers, and help to reduce health and environmental risks associated with pest management practices. In 2014, Community IPM staff engaged diverse audiences in New York and other states in two important and effective ways.

The Community IPM Program provided over 1600 contact hours of in-person presentations, workshops and seminars. These face-to-face meetings offer participants the opportunity to ask questions of experts in a comfortable environment, obtain contact information, and learn about resources available from the NYS IPM. Program staff provided site visits to address specific pest problems and appeared in public media, including local and international television broadcasts.

To complement the appearance of IPM staff at events, meetings and on television, social media and other internet-based resources were emphasized in 2014. In this age of technology, countless sources of information related to pest biology and management are available. However, many non-university resources are inaccurate and may provide recommendations that are illegal or unsafe. Therefore, IPM staff generated new fact sheets, YouTube videos, blogs, Facebook posts, Tweets (Twitter), webinars and a bed bug educational module that are linked to the website or can be found using standard search-engines. IPM staff also contributed to trade magazines and peer reviewed publications. Because this content is available in several formats, this increases the reach of the Community IPM program and the possible adoption of IPM strategies.

### **Background and Justification:**

Among New Yorkers, familiarity with the term “integrated pest management” is somewhat low. However, when the tenets of IPM are explained, a majority of people feel that an integrated approach is most desirable because it reduces the risks presented by household and public health pests, and the methods used to control them. Therefore it is essential to the mission of the NYS IPM program that community outreach efforts generate an increase in awareness of IPM, ideally leading to increased adoption of IPM strategies. This is accomplished by changing

decision-making behaviors of people seeking to control pests, which occurs over time with persistent effort.

Educational programs that result in an improved ability to identify pests can reduce the reliance on pesticides for management. This is because accurate identification provides information about an organism's food preferences, life cycle, and preferred harborage sites. While Master Gardener Volunteers (MGVs) can use this information to provide management recommendations for homeowners, pest professionals can hone in on infestation sites and employ sanitation and exclusion techniques to directly reduce pest populations. Thus, a major emphasis of education by IPM staff is to enhance the ability of New Yorkers to accurately identify pests.

In order to reach diverse audiences in New York State, including those in various age groups, program staff promoted the IPM Image Gallery on Flickr, the NYS IPM Facebook page, YouTube Channel and Twitter account, and the NYS IPM and School IPM Blogs. The use of multiple outlets for disseminating information is based on the premise that different generations obtain information in various ways. Whereas older generations prefer hard-copy materials, such as fact sheets, younger generations gather most of their information in short posts and through social media. By adjusting our messages to appear in different formats, we are able to reach diverse audiences and enhance adoption of IPM principles.

### **Objectives:**

- To increase the awareness of New Yorkers about integrated pest management and the best ways to reduce their risk from household and public health pests, including the pesticides used to manage them.
- To create educational materials for community IPM awareness that are easily accessible to New Yorkers and beyond.
- To promote sustainable landscapes as a method of implementing IPM to manage both indoor and outdoor pests.

### **Activities:**

#### **I. Traditional Outreach**

##### *Urban IPM Short Course*

Presentations for pest management professionals, as well as fact sheets and other resources typically include images of the target pest. However, these images are often taken using ideal specimens under considerable magnification. One possible result of this practice is that homeowners, Master Gardener Volunteers (who may be involved in pest identification at a Cooperative Extension office) and pest professionals may be unable to identify an actual arthropod specimen they receive. Therefore, the Urban IPM Short Course was developed to enhance the identification skills of those responsible for diagnosing pest problems. In addition to a full day of lectures, the Short Course offers hands-on identification experience and a take-home manual for participants. Part or all of this Short Course is available to train various audiences.

### *Collaboration and Information Sharing*

Each year, the Community IPM Coordinating Council meets to provide updates on funding, projects and other endeavors of participating individuals and organizations. In 2014, the Council invited stakeholders to speak at meetings on topics relative to IPM:

- Dr. Bryon Backenson from the University of Albany, who spoke about mosquitoes and tick borne disease epidemiology,
- Quinton Hasak from Cooperstown Doubleday Field, who spoke about the challenges of managing an iconic baseball field under intense use without pesticides, and
- Joanne Gruttadaurio who spoke about a new resource for turfgrass management and a statewide overseeding project on school grounds.

In 2015, IPM staff will head to Salt Lake City for the 8<sup>th</sup> International IPM Symposium. Two Community IPM Sessions have been accepted, and will include presentations from IPM staff:

- Increasing Connections between IPM and Wildlife Damage Management
- Reaching New Audiences: Innovative Strategies to Communicate IPM

### *CIPM Grants Program Coordination*

The 2014 CIPM Grants program attracted 11 proposals. The Community IPM Coordinating Council reviewed these proposals and ranked them in order of priority and likelihood of success for funding. Eight projects were selected for funding. A separate report for each funded project is available from the NYS IPM Program. Funded projects included:

- Late Blight Management in Home and Community Gardens: Benefits Transcend Community/Ag Boundaries
- Asian Tiger Mosquito and Tick Awareness Workshops
- Managing Grubs in Turf with Persistent Nematodes
- Development of Spanish-Language Educational Materials to Manage Pests in Immigrant Farmworker Housing
- Influence of Weed Population, Establishment Method and Soil Characteristics on Conversion of Weedy Lawn Areas to Tall Fescue
- Development of a Weed Identification and Control Strategy Online Tool
- High-Level IPM at Cooperstown's Doubleday Field

### *Scientific Coalition on Pest Exclusion: SCOPE*

A multistate project led by Dr. Stephen Kells (University of Minnesota), the Scientific Coalition on Pest Exclusion will evaluate the effectiveness of exclusion practices in structural pest management. The goal of this coalition is to determine what strategies work, and which are most effective. NYS IPM staff have participated in conference calls, an in-person meeting, and grant proposal writing for funding. IPM staff administer the Pest Exclusion Facebook page, Twitter account and record data from a Google Form completed by individuals interested in SCOPE progress. (Note: as of January 2015, grant proposals to the Northeast IPM Center and North Central IPM Center have been selected for funding).

### *IPM Staff Contributions to Media Outreach*

- Lynn Braband discusses IPM on Time-Warner Cable News:  
<http://www.twcnews.com/nys/central-ny/going-green/2015/01/26/going-green-indoor-pests.html>
- Jennifer Grant discusses IPM on Time-Warner Cable News:  
<http://albany.twcnews.com/content/lifestyles/799660/integrated-pest-management-offers-common-sense-approach-to-pest-control/>
- Jody Gangloff-Kaufmann discusses ticks on CBS Local News:  
<http://newyork.cbslocal.com/video/10135914-resilient-disease-carrying-tick-population-raises-new-concerns/>
- Jody Gangloff-Kaufmann discusses Asian Longhorned beetle and USDA eradication efforts in Farmingdale, NY on CBS Local News:  
<http://newyork.cbslocal.com/2014/06/23/clock-is-ticking-in-fight-against-asian-longhorned-beetles/>
- Matt Frye discusses rodent populations in NYC on RTVI (segment in Russian):  
<http://www.rtv.com/video/10153>
- Matt Frye discusses IPM in commercial accounts in a PCT Magazine podcast:  
<http://www.pctonline.com/Frye-Pachamuthu-IPM-Commercial-Facilities-podcast.aspx>

### *Invasive Species Outreach and Education*

Invasive species is a term used to describe organisms that have been introduced to a new area from another region or country, and subsequently exhibit rapid reproduction and spread. In their new range, invasive species can outcompete or directly attack native species and cause economic damage. In 2014, IPM staff joined local Partnerships for Regional Invasive Species Management (PRISMs) to learn more about New York State's efforts for managing invasive species. IPM staff were subsequently involved in removal of invasive Chinese water chestnut (*Trapa natans*) from Five Rivers Environmental Education Center and Oriental bittersweet (*Celastrus orbiculatus*) from the Saw Mill River Parkway. One staff member is part of the New York State Kudzu Task Force, and created an educational slide presentation about this invasive plant (<http://www.nysipm.cornell.edu/publications/kudzu.pdf>). Finally, IPM staff assisted a 4H outreach project in Westchester County by obtaining specimens of the Asian Longhorned Beetle and preserving them in Riker mounts. These displays were used at 4H fairs, farmers markets and other public places to increase awareness of this invasive tree-damaging species.

## **II. Internet-Based Outreach**

### *Social Media, Blogs and YouTube*

Images, news stories and announcements are posted daily to the NYS IPM Facebook page by IPM staff. In 2014, the page jumped from 160 followers to over 440, with hundreds of people talking about the posts, and a total reach of thousands of people. These numbers and other results from Twitter illustrate a continued need to improve online reach and presence in the minds of New Yorkers. Social Media provides a platform to accomplish outreach to otherwise unknown and under-reached audiences.

The NYS IPM and School IPM Blogs were created to offer useful information in a narrative format. While the NYS IPM blog covers all IPM commodities (fruit, vegetable, livestock, greenhouse, etc.), Community-related posts have addressed the biology, management and regulations regarding wildlife, rodents, stinging insects, bed bugs, occasional invaders, grubs, turf management, mosquitoes, and the Child Safe Playing Fields Act. To date, the blog is distributed to 45 subscribers and posts (nearly 100) have been promoted on the NYS IPM Facebook page and Twitter feed. Our goal in 2015 is to increase subscribers to NYSIPM blogs.

The Westchester County Pest Management Committee filmed a video entitled “Workplace Pest Prevention,” which has been posted to their YouTube channel and linked to the NYS IPM channel. NYS IPM staff provided an introduction to the video, including information on the local law that prohibits pesticide use on county property, and an introduction to the concept of IPM. This video is intended to provide pest management tips to office workers as a means of reducing pest problems in county owned buildings. The information is needed because only one individual performs all pest management at these sites. In addition, NYS IPM staff have added 6 short videos to the NYS IPM channel that are meant to be interesting, funny and offer information on pest biology or management.

#### *Image Gallery on Flickr*

The IPM Image Gallery continues to grow, with over 500 photos categorized into 32 albums. A name and brief description is given to each image and key words are added to help users find the images on common search engines such as Google. In many cases, links to resources from the NYS IPM website are present in the image’s description. Although the current focus of the database is structural pest management, many pictures of agricultural pests and beneficial insects are featured. All other IPM Program staff in agriculture and horticulture commodities have been asked to submit photographs and will be represented as the Gallery increases in size.

#### *IPM Fact Sheets*

NYS IPM received several fact sheets from entomologist Dr. Gary Alpert of Harvard University (previously published on the Harvard website). They were removed from the Harvard website due to an administrative decision and offered to the NYS IPM Program for re-publishing. To date, nineteen have been reviewed and updated, and six were posted to the Buildings and Schools Fact Sheets website about the following pests: [American Cockroach](#); [Blow Fly](#); [Brown-Banded Cockroach](#); [Bumble Bees](#); [Paper Wasp](#). These fact sheets have been cross-referenced in the IPM Image Gallery, and were also promoted on the IPM Facebook page. A series of three fact sheets that provide information for schools and municipal buildings have also been posted to the [Buildings and Schools Fact Sheets](#) website. These documents offer step-by-step, easy to follow recommendations on implementing IPM, and provide templates for pest sighting logs, exterior and interior inspections, building maintenance, and a cockroach trap monitoring log sheet. Finally a [Community IPM brochure](#) was produced that describes some of the program’s scope of work and its staff’s areas of interest.

### *IPM Staff Contributions to Trade and Professional Publications*

- Lynn **Braband**, PCT Magazine Bird Management article: Mix it Up (November 24, 2014): [www.pctonline.com/pct1114-bird-management-techniques.aspx](http://www.pctonline.com/pct1114-bird-management-techniques.aspx)
- Hurley, J.A., T.A. Green, D.H. Gouge, Z.T. Bruns, T. Stock, L. **Braband**, K. Murray, C. Westinghouse, S.T. Ratcliffe, D. Pehlman and L. Crane. 2014. Regulating Pesticide Use in United States Schools. *American Entomologist* 60(2): 105-114.
- **Gangloff-Kaufmann**, J.L. and R. Harper. July 2014. "Arborists and Stinging Insects in the Landscape: A Potentially Painful Encounter" Arborist News, Journal of the International Society of Arborists, Champaign, IL.
- **Gangloff-Kaufmann**, J.L. and R. Harper. September 2014. "Stinging Insects in the Urban Landscape: THEIR Management, YOUR Safety" Arborist News, Journal of the International Society of Arborists, Champaign, IL
- **Frye**, M. & P. Pachamuthu. 2014. IPM in Commercial Pest Management, pp. 65-74. *In*: L.J. Lupo & J. Fenner (eds.), PCT Guide To Commercial Pest Management. GIE Media, Inc. Richfield, OH.
- Firth, C. A., M. J. Bhat, M. A. Firth, M. J. **Frye**, and W. I. Lipkin. 2014. Detection and characterization of human pathogens in commensal *Rattus norvegicus* in New York City. *mBio* 5(5) e01933-14.
- **Frye**, M.J., C.A. Firth, M.J. Bhat, M.A. Firth, X. Che, D. Lee, S.H. Williams & W.I. Lipkin. 2015. Preliminary survey of ectoparasites and associated pathogens from Norway rats in New York City. *Journal of Medical Entomology (in press)*.

All staff responded to e-mails, phone calls, walk-ins, eXtension, Facebook, etc. on a variety of topics related to pest management in private homes, office buildings, schools, childcare facilities, sleep-away camps, nursing homes, public housing, private lawns, and sports fields.

### **Results and discussion:**

Although much of the work done by NYS IPM educators is area-specific (school IPM, turfgrass management, bed bug outreach) some does not fall into such a category, and yet it represents a significant need in New York. The variety of pests encountered in homes and landscapes is large and the means of controlling such pests are varied from doing nothing to using pesticides that may pose risks to human health. The need for IPM awareness and adoption is as strong as ever.

In 2014, over 1700 arthropod specimens were collected, mounted on pins or placed in vials of hand sanitizer, and organized by pest guild (ex. stinging insect, wood destroying, etc.) for the Urban IPM Short Course. A series of lectures that cover arthropod taxonomy, nomenclature, morphology, life cycles and identification were created, and complemented by a 60 page manual with the same content. Two lectures, "The Science of Monitoring" and "IPM in the Commercial Kitchen," were created to yield a full day course. Part or all of this Short Course has been delivered to two audiences in the state, with positive feedback from both.

In 2014, the NYS IPM Program's Facebook page gained 280 new "likes," and presently has 440 followers. Individuals that "like" the IPM Program's Facebook page receive images, news

articles and other posts from NYS IPM on their wall. Analytics on the page determined that an average of 43.1 people were engaged with our content each week in 2014, while our message reached an average of 419.5 people per week. In 2015 we will continue to utilize Facebook as a social media tool.

The NYS IPM Program’s Flickr page currently has 517 unique images in 32 sets. Images are posted to the program’s Facebook page, have been used in professional presentations and are linked to IPM resources. One expected outcome of the image gallery is that individuals using Google Image search will encounter our photographs when looking up a pest and will subsequently have access to accurate information, including identification and treatment methods. We continue to tag images with key words and cross-reference them with pertinent pest management information on the IPM website as it becomes available.

NYS IPM staff members helped train professional pest managers in structural, wildlife and landscape management. Over the past decade a shift toward the adoption of IPM has been apparent in the professional pest management industry. From the promotion of key IPM tenets, such as pest prevention, to support of the adoption of IPM in schools the National Pest Management Association has embraced IPM and the extension programs supported by IPM funds. Each year the NYS IPM program is asked to present an IPM talk to a large audience at the NPMA Eastern Annual meeting. Community IPM staff were involved in over 1600 contact hours of training and reached more than a half million individuals with online materials.

Presentations (including all bed bug and school IPM presentations that are also listed in other reports). Contact hours are a measure of the number of participants and the duration of time spent (ex. for 10 participants in a 1 hour session, the contact hours would be 10 \* 1 = 10 hours).

Date	Location (Town/County or City/State)	Conference/Organization	Title	Contact Hours
1/8/14	Webinar (recorded)	Building Campus-County Connections Webinar Series: CCE Program Development	Collaborations on IPM in Schools and Communities	14
1/15/14	Middletown/ Orange Co.	CCE Orange County	Commercial Response to Bed Bugs	80
1/29/14	Toronto/ Canada	Ontario Pest Management Association	Stinging Insect IPM	230
1/30/14	Smithtown/Suffolk Co.	13th Annual Conference and Symposium: Professional Certified Applicators of Long Island	Home Invasion: The Story of Overwintering Pests	10
2/4/14	Batavia/Genesee Co.	Turf & Pest Management Class: Genesee Community College	Introduction to Integrated Pest Management	10
3/6/14	Canandaigua/ Ontario Co.	Wildlife Management Class: Finger Lakes Community College	Wildlife Damage Management	23.75
3/14/14	Yaphank/Suffolk Co.	30-Hour Pesticide Applicator Training Course	Bed Bug Basics	51
3/19/14	Lake Placid/Essex Co.	NYSTA Adirondack Regional Conference	Making Cents of IPM	33.75
3/19/14	Lake Placid/Essex Co.	NYSTA Adirondack Regional Conference	Informing IPM-Ecology of Lawns	12
3/18/14	Albany/Albany Co.	Pesticide Recertification Day: CCE Albany County	Structural Pest Management Session	21

3/19/14	Bethpage/Nassau Co.	Nassau County Bed Bug Task Force Workshop	Bed Bug Biology and Management	80
3/27/14	Hamden/Delaware Co.	Expanding Educational Opportunities and Membership for K-12 Schools Luncheon	Summary of State-wide Efforts to Help Schools meet the Child Safe Playing Fields Act	1.7
4/5/14	Cobleskill/Schoharie Co.	15th Annual Northeast Wildlife Management Seminar	Relevance of the North American Model of Wildlife Conservation to Nuisance Wildlife Control	22.5
4/8/14	Albany/Albany Co.	CDCCC Directors' Meeting: Capital District Child Care Council	Child Care and IPM	37.5
4/14/14	Portland/Maine	15th Annual Northeast Wildlife Management Seminar	A Snapshot of the Status of the Nuisance Wildlife Control Industry	8.75
6/12/14	Saugerties/Ulster Co.	Winning Fields Seminar: New York State Turf Association	An Overview of the Child Safe Playing Fields Act	8.25
7/1/14	Delmar/Albany Co.	Town of Bethlehem Deer and Tick Born Disease Committee Meeting	Know Thy Enemy: Understanding Ticks and Their Management	15
7/1/14	Henrietta/Monroe	2014 Facilities Personnel Conference: Genesee Valley School Boards Institute for Staff Development	Keeping Your School Pest-Free, Pesticide-Free, and Teacher-Happy	4.5
7/17/14	Ithaca/Tompkins	Cornell Farmworker Program	Structural Pest Management	14
7/18/14	Cazenovia/Madison Co.	Christmas Tree Farmers Association of New York Summer Meeting	Ticks and Disease: Risk Assessment, Surveillance and Treatment	50
9/15/14	Harrisburg/Pennsylvania	Northeast Pesticide Applicators Certification & Training Conference: Northeast Pesticide Safety Educators	Techniques for School Institutional Pest Management without Using Pesticides	50
9/16/14	Hornell/Steuben Co. & Almond/Allegheny Co.	School IPM for the Southern Tier: NYS IPM Program, Alfred-Almond CSD, CCE of Allegheny & Cattaraugus Co., GST BOCES	Tenets of School IPM	6.5
9/16/14	Hornell/Steuben Co. & Almond/Allegheny Co.	School IPM for the Southern Tier: NYS IPM Program, Alfred-Almond CSD, CCE of Allegheny & Cattaraugus Co., GST BOCES	Structural Pest Management	13
9/16/14	Hornell/Steuben Co. & Almond/Allegheny Co.	School IPM for the Southern Tier: NYS IPM Program, Alfred-Almond CSD, CCE of Allegheny & Cattaraugus Co., GST BOCES	Resources for Your IPM Program & Engaging Your Constituencies	9.75
9/18/14	Walton/Delaware Co.	School IPM for the Catskills: NYS IPM Program, Walton CSD, SUNY-Delhi	Principles of a School IPM Program	7.5
9/18/14	Walton/Delaware Co.	School IPM for the Catskills: NYS IPM Program, Walton CSD, SUNY-Delhi	Basics of Managing Quality Sports Field Turf	9
9/18/14	Walton/Delaware Co.	School IPM for the Catskills: NYS IPM Program, Walton CSD, SUNY-Delhi	Structural Pest Management	11.25
9/19/14	East Aurora/Erie Co.	Master Gardener Training: CCE of Erie County	Structural pests	32
9/20/14	Delmar/Albany Co.	Five Rivers Environmental Education Center (DEC) Fall Festival	Your Home as Habitat display	4
9/23/14	Uniondale/Nassau Co.	Nassau County Bed Bug Task Force	Bed Bug Biology and	45



		In-House Training for Department of Social Services	Management	
9/24/14	Uniondale/Nassau Co.	Nassau County Bed Bug Task Force In-House Training for Department of Social Services	Bed Bug Biology and Management	84
9/29/14	Melville/Suffolk Co.	New York State Pest Management Association 47th Annual Fall Workshop	IPM for Ticks	115
9/30/14	Rochester/Monroe Co.	LifeTime Care	Bed Bugs Suck	75
10/8/14	Mahopac/Putnam Co.	Master Gardener Training Series: CCE of Dutchess, Putnam and Westchester Counties	Arthropod Identification and Landscape IPM	107.5
10/14/14	Saratoga/Saratoga Co.	Saratoga Housing Authority	Bed Bug Workshop	27
10/14/14	Canandaigua/Ontario Co.	Wildlife Management Class: Finger Lakes Community College	Wildlife damage management	22.5
10/16/14	Cooperstown/Otsego Co.	Doubleday Field-Field Day: NYS IPM	Doubleday Field - Field Day	2
10/16/14	Uniondale/Nassau Co.	Nassau County Bed Bug Task Force In-House Training for Department of Social Services	Bed Bug Biology and Management	19
10/23/14	Lake Buena Vista/Florida	PestWorld Conference: NPMA	Wildlife control regulations & implications for pest management professionals	37.5
11/6/14	Elmsford/Westchester Co.	Reducing Chemical Usage on Golf Course Turf: Westchester Pest Management Committee	Integrated Pest Management for Ticks	17.5
11/6/14	Elmsford/Westchester Co.	Reducing Chemical Usage on Golf Course Turf: Westchester Pest Management Committee	TracGolf	5
11/6/14	Elmsford/Westchester Co.	Reducing Chemical Usage on Golf Course Turf: Westchester Pest Management Committee	Jennifer	30
11/12/14	Rochester/Monroe Co.	Turf & Grounds Expo: NYS Turfgrass Association	Team-based implementation of school IPM	30
11/12/14	Rochester/Monroe Co.	Turf & Grounds Expo: NYS Turfgrass Association	The Child Safe Playing Fields Act	25
11/15/14	Brockport/Monroe Co.	Annual Paper Session of the Rochester Academy of Science: Rochester Academy of Science	2013 Statewide Survey of Public Schools Pest Management Policies & Practices	2.5
11/18/14	Uniondale/Nassau Co.	Nassau County Bed Bug Task Force In-House Training for Department of Social Services	Bed Bug Biology and Management	35
12/4/14	Long Beach/Nassau Co.	Long Beach Housing Authority Training: StopPests in Housing Program		25
12/10/14	Uniondale/Nassau Co.	Nassau County Bed Bug Task Force In-House Training for Department of Social Services	Bed Bug Biology and Management	36
12/12/14	Colonie/Albany Co.	Northeastern NY CASA Meeting: Central Atlantic States Association of Food and Drug Officials	IPM for Schools and Child Care Centers	37.5
<b>Total Contact Hours:</b>				<b>1648.7</b>

### Samples of Resources Developed

Flickr: <http://www.flickr.com/photos/99758165@N06/>

Fact sheet: <http://t.co/7YkuHm0JOE>

Facebook Page: <https://www.facebook.com/NYSIPM>

NYS IPM Blog: <http://blogs.cornell.edu/nysipm/>

School IPM Blog: <http://blogs.cornell.edu/schoolchildcareipm/>

YouTube Channel: <https://www.youtube.com/user/NYSIPM>