

Community IPM Outreach Efforts for 2013

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Abstract:

The core mission of the Community IPM Program is to raise awareness and proficiency of all New Yorkers in the successful management of pests, and to reduce associated health and environmental risks. The field of community IPM is vast and includes all aspects of life that are not associated with growing food or horticultural goods. The tasks undertaken by IPM staff in 2013 were diverse and addressed many types of audiences in effective ways.

Resources that help New Yorkers identify a pest and provide recommendations for control can facilitate the adoption of IPM strategies. Community IPM staff engaged audiences throughout the year in presentations about pesticide prohibitions, structural pests, mosquitoes, school and child care IPM, public health pests and wildlife. In 2013, the Community IPM Program created an online Pest Identification Center for Structural Pests, a fact sheet on carpenter ants that includes control techniques, and an image gallery of pests, conditions that favor their survival, and pertinent management techniques. Facebook has been used to promote the whole New York State IPM Program, specific projects and to disseminate new and interesting materials.

Engagement of Community IPM staff with larger local, regional and national groups helped promote IPM adoption and maintain the visibility of the Community IPM Program. Nearly 2450 people were reached directly through presentations (including those on bed bugs and school IPM) and our online resources enjoyed over 350,000 unique web views.

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 community 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.

Accurate pest identification is the foundation of an IPM program because it yields information about an organism’s food preferences, life cycle, and preferred harborage areas. However, most homeowners and many pest professionals lack the training to accurately identify a pest. This can lead to treatments that fail to control a pest and the unnecessary use of products that

are harmful to the environment. Dichotomous keys are tools used by taxonomists to identify an organism, and work by presenting users with opposing descriptions (couplets) of the same trait (ex. wings present; wings absent). Because traditional keys can be difficult for lay audiences to use, NYS IPM staff created a user-friendly tool to help residents and pest professionals to identify indoor and outdoor pests associated with buildings.

The IPM Image Gallery was proposed as a resource where individuals could observe photographs of common pests, the conditions that favor their survival, pest entry points, and photographs taken during IPM events. These images would assist in identification and descriptions of pests, and also to link back to pest management information on the IPM Program website.

An existing fact sheet on carpenter ants provided by the New York State IPM Program offers useful information about pest biology and control. However, this fact sheet was designed as a one page, three-fold pamphlet with limited space available for text and images. Therefore, effort was needed to update the information and make this document more complete. A series of pest fact sheets, formerly published on the Harvard University website, were given to the NYS IPM Program to be updated and republished.

Objectives:

- To increase the awareness of New Yorkers about integrated pest management and the best ways to reduce their risk from structural and public health pests, including the pesticides used to manage them.
- To create 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:

Academic IPM programs play an important role in ushering university information to the public. This has been accomplished in a diverse number of ways, including traditional presentations, fact sheets and site visits. Collaborative arrangements between the NYS IPM program and other IPM experts reduce the duplicity of efforts within the region and nation-wide, and result in strong networks of land-grant specialists, private industry, and federal and state agencies. These elements are vital to the success of IPM initiatives that seek to raise awareness about IPM and to ultimately change behaviors. The use of traditional outreach methods, such as seminars, workshops, and written materials is consistent and reliable, and these methods are enhanced through incorporation into web-based media. For example, online training courses, blogs, social media and demonstration videos engage audiences in the practice of IPM from the comfort of their own home or office. With a high percentage of individuals using mobile and handheld devices for Internet access, the Community IPM Program increased efforts to promote new resources and interesting news on the NYS IPM Facebook page and Twitter feed.

The NYS IPM Program continues to fulfill the needs of New Yorkers when it comes to pest management information and guidance.

Pest Key and Image Gallery

A list of common structural pest species was used to create a dichotomous key. Features used in couplets are those that can be observed with a hand lens or the un-aided eye. Images of common structural pests were taken with a digital camera and a digital microscope. Each page of the website contains a left and a right column to represent the two couplets. Below the description of each couplet are several images of pests that exemplify the described feature. Users click on the description that best fits their pest to proceed to the next couplet, ultimately eliminating groups of pests and narrowing down on their specific organism. At any point within the key, an individual can click on the image of a pest to learn its identity and proceed to a terminal page, which contains a link to information on pest biology and control. This product was launched on 30 July, with an announcement made on the NYS IPM home page, Facebook, Twitter, and sent to Master Gardener Volunteer Coordinators in each county. On 27 September, a survey was distributed to Master Gardener Volunteer Coordinators and to the Community Horticulture Listserv for feedback on the functionality of this tool. A link to the survey can be found here: <http://www.surveymonkey.com/s/PL8DLTP>

Photographs utilized in the IPM Image Gallery were watermarked with the IPM logo and uploaded to the Flickr site in 'sets' (<http://www.flickr.com/photos/99758165@N06/sets/>). A name and brief description was 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, individuals in other commodities have been asked to submit photographs.

CIPM Grants Program Coordination

The 2013 CIPM Grants program attracted 15 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 chosen for funding. A separate report for each grant funded project is available from the NYS IPM Program. Funded proposal titles were the following:

- Managing Grubs in Turf with Persistent Nematodes
- IPM Wildlife Control for Master Gardeners and Homeowners
- "Use IPM to Rid Your Home of Pests and Improve Your Health....it's safe, inexpensive, and easy!"
- Evaluation of Non-Chemical Re-Grassing Methods to Transition Lawns to Low Maintenance Turfgrass Species and Reduce Weed Populations
- Development of a Weed Identification and Control Strategy Online Tool
- Promoting Adoption of IPM Strategies in Plant Selection and Design of Lawns, Gardens and Landscapes
- Unique Delivery of Lawn Care Advice to Reduce Reliance on Pesticides
- IPM Resource for School and Community Sports Fields

- High-Level IPM at Cooperstown's Doubleday Field (withdrawn by Project Coordinator)

Revision and update of fact sheets

The Carpenter Ant Management fact sheet was revised and published in an online format similar to other new 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 submitted to the program's designer for formatting. These fact sheets will be posted to the NYS IPM website and cross referenced in the Pest Identification Key and IPM Image Gallery.

Social Media via Facebook and Twitter

Images, news stories and announcements are regularly posted to the NYS IPM Facebook page by six IPM staffers. In 2013, we achieved a total of 160 followers, with hundreds of people talking about our posts, and a total reach of thousands of people. These numbers and other results from Twitter illustrate a need to improve our 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.

Workplace Pest Prevention Video.

The Westchester County Pest Management Committee filmed a video on 29 October 2013 entitled "Workplace Pest Prevention." 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 information is needed because only one individual performs all pest management on county owned property in Westchester. A first version of the video was released to members of the committee, which was reviewed for content and flow. The expected outcome is that this video will reduce the conditions that lead to pests, and ultimately reduce pest problems.

IPM Staff Contributions to Media Outreach

- January 2013, AOL "Deadliest Creature" was published online. This is a segment about mosquitoes. <http://on.aol.com/video/school-of-thought--worlds-deadliest-creature-517639197#comment>
- On camera interview at CBS Local with Jennifer McLogan <http://newyork.cbslocal.com/2013/05/29/mosquitoes-ticks-invading-post-sandy-long-island/>
- On camera interview with Good Day New York (Local Fox News NYC) titled "Millions of Cicadas to Emerge for the First Time in 17 Years" <http://www.myfoxny.com/story/21929270/millions-of-cicadas-to-emerge-for-first-time-in-17-years>
- Newsday consultation with Patricia Kitchen in May: <http://www.newsday.com/news/health/as-weather-heats-up-mosquitoes-reappear-1.5374487>

- Newsday consultation with Patricia Kitchen in mid- and late-June about the rainfall and its effect on pests, mosquitoes and specifically Asian Tiger Mosquito.
- Radio Interview with BBC TV Channel 5 Drive Program (England) about the 17-year emergence of cicadas in America <http://www.bbc.co.uk/programmes/b02x9zys>
- Consulted with Dan Rivoli at AMNY (Newsday NYC) about the status of the bed bug epidemic in NYC.
- Consulted with National Geographic Traveler about bed bugs.
- Interview on a Brooklyn-based radio show called “Heritage Radio Network” to speak about cicadas. <http://www.heritageradionetwork.org/episodes/4291-HRN-Community-Sessions-Episode-149-Nothing-Urgent-Cicadas-The-Northside-Festival>
- Interviewed by Jeff Wilkin at Schenectady Gazette about summer bugs and itches.

All staff responded to e-mails, phone calls, walk-ins, eXtension, Facebook, etc. on birds at the Hawaiian Convention Center, NWCO referrals, spiders, mites, snakes, millipedes, visual harassment of geese, powder post beetles, shrew(?) feces, cicada killers, lawn problems, stinging insects, mice, mosquitoes, ticks, bed bugs, NY NWCO manual, tenants’ rights and wood boring insects. A member of the Community IPM staff participates in the New York State Kudzu Task Force and spent time in 2013 scouting for kudzu with the NY Natural Heritage Program.

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.

To overcome the difficulty of using taxonomic keys, the New York State IPM Program created an online Pest Identification Center that uses the dichotomous key format, but limits the use of technical identification terms. Images of common structural pests, annotated with their size range, are included with each couplet to provide an example of the described feature. The Identification Center includes a Quick Identification Guide with generalized, black and white diagrams of pests, and an Insect Basics section that demonstrates the parts of an insect, features of beetles and how to distinguish ants from termites.

The Identification Center was initially launched on 30 July 2013 and has subsequently received 4,474 unique page views, with the main page receiving 39 % of views (1,427). At the bottom of each page within the key is a survey link for users to provide their feedback. Twenty-nine individuals took the survey, predominantly Cornell employees (41 % Cooperative Extension staff, 38% Master Gardner Volunteers, and 21 % Community Horticulture Educators). Six individuals (21 %) that took the survey were homeowners. Fifty-eight percent of all respondents indicated that they were able to correctly identify their pest, though some users later indicated that they had not used the key prior to completing the survey. Sixty percent of users said they

would use the key again, while 27 % said “maybe.” Respondents requested more images, more diversity of arthropods (“all pests”) and that the site contained more information on control. These needs will be translated into the upcoming plan of work for Community IPM.

The NYS IPM Program’s Flickr page currently has 314 unique images in 24 sets. Images are posted to the program’s Facebook page, have been used in presentations and will be included in [Pinterest](#) posts in the future. One expected outcome of the image gallery is that individuals using Google Image search will encounter our images 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.

The original carpenter ant factsheet prepared by Gary Alpert (Harvard University) was integrated with information from a Cornell University factsheet created by Kathy Sharpe and Carolyn Klass. New information and pictures were added, content was edited and a new visually appealing factsheet was designed. Other fact sheets from Dr. Alpert are being added to the website and integrated with other resources, such as the Pest Identification Key and IPM Image Gallery.

In 2013, the NYS IPM Program’s Facebook page gained 102 new “likes,” and presently has 160 “likes.” 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 14.8 people are talking about the IPM page each week, and content posted by the IPM Program reaches an average of 244.6 people per week. In 2014 we will continue to utilize Facebook as a social media tool, adding also the use of [Pinterest](#).

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 trained over 2400 people directly and reached more than a third of a million more with online materials.

Presentations (including all bed bug and school IPM presentations that are also listed in other reports)

Date	Title and type of presentation	Location	Audience	#
Date	Title and type of presentation	Location (town/county— if multi-county, list county location first)*	Audience (growers, school staff, etc.)	# people
1/17/2013	The Science Behind Stinging Insect IPM	Atlantic City/Atlantic, NJ	PMPs	200

2/5/2013	Bird Management in and Around Food Facilities (Food Processing Sanitation & Pest Management Workshop, PMP)	Henrietta/Monroe, NY	Food facility managers & pest control operators	100
2/5/2013	Hantavirus, What is it? How do I Protect Myself? (Food Processing Sanitation & Pest Management Workshop, PMP)	Henrietta/Monroe, NY	Food facility managers & pest control operators	100
2/21/2013	Stinging Insects (30 hr. pesticide applicator training course. CCE of Clinton Co.)	Plattsburgh/Clinton, NY	Pest control operators	22
2/21/2013	Ants & Cockroaches (30 hr. pesticide applicator training course. CCE of Clinton Co.)	Plattsburgh/Clinton, NY	Pest control operators	22
2/21/2013	Bats and Misc. Pest Animals (30 hr. pesticide applicator training course. CCE of Clinton Co.)	Plattsburgh/Clinton, NY	Pest control operators	22
2/26/2013	Structural Pest Control (Master Gardener training/CCE of Monroe Co.)	Rochester/Monroe, NY	Master Gardeners & pest control operators	35
3/2/2013	Controlling Critters in the Workplace	Saratoga Springs/Saratoga, NY	School safety officers - BOCES	14
3/5/2013	Nuisance Pests of the Landscape	Uniondale/Nassau, NY (Nassau Coliseum)	Nassau Suffolk Landscape Gardeners Association	145
3/7/2013	Bed Bug Update	Farmingdale/Nassau, NY (Molloy College)	Bed Bug Task Force stakeholders	85
3/18/2013	Keeping Your House Pest-Free and Pesticide-Free (Town of Penfield public meeting)	Penfield/Monroe, NY	Homeowners	25
3/19/13	Managing Wasps and Bees in Grapes	Lancaster/Lancaster, PA	Grape growers, producers and extension agents	50
3/26/2013	Wildlife Damage Management (FLCC Wildlife Management class)	Canandaigua/Ontario, NY	College students	16
4/3/2013	Keeping Your House Pest-Free and Pesticide-Free (WROC-TV interview)	Rochester/Monroe, NY	TV viewers	?
4/10/2013	Millions of Cicadas to Emerge for the First Time in 17 Years [television interview] http://www.myfoxny.com/story/21929270/millions-of-cicadas-to-emerge-for-first-time-in-17-years	Fox News: Good Day New York	TV viewers	?
4/16/2013	IPM for Common Structural Pests (Master Gardener training for western	Albion/Orleans (telecast also to 2 other locations)	Master Gardeners	30

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4/22/2013	Tenets of School IPM (SchoolDude University)	Myrtle Beach/South Carolina	School facilities staff	20
4/22/2013	Structural Pest Management in Schools (SchoolDude University)	Myrtle Beach/South Carolina	School facilities staff	14
4/25/2013	Tenets of School IPM (School IPM Workshop, NYS IPM & E2CC BOCES)	Fredonia/Chautauqua, NY	School facilities staff	30
4/25/2013	Structural Pest Management (School IPM Workshop, NYS IPM & E2CC BOCES)	Fredonia/Chautauqua, NY	School facilities staff	30
4/30/2013	IPM for Mosquitoes	Queens/Queens, NY	NYPMA members (PMPs)	180
5/6/2013	Urban Pest Management [classroom presentation to students in Insect Pest Management Course at the University of Delaware]	Newark/New Castle, DE	Graduate and undergraduate students	21
5/7/2013	Dealing with Critters on Your Course (Finger Lakes Association of Golf Course Superintendents)	Ontario/Wayne, NY	Golf course superintendents	20
6/17/2013	Cicadas [radio interview] http://www.bbc.co.uk/programmes/b02x9zys	BBC Channel 5 Drive Program: England	Radio listeners	?
8/6/2013	Team-Based Implementation of School IPM (School turf management workshop, NYSTA/SUNY Delhi)	Delhi/Delaware, NY	School facilities staff & athletic directors	22
9/10/2013	Pest Inspections and IPM Considerations for Food Facilities	Ithaca/Tompkins, NY (Cornell University: Statler Hotel)	NYS Dept. of Agriculture and Markets Division of Food Safety and Inspection	55

Samples of Resources Developed

Pest Identification Center: http://www.nysipm.cornell.edu/pest_key/default.asp

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

Carpenter Ant Factsheet: <http://t.co/7YkuHm0JOE>

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