

## **Forest Pest Outreach Survey Project- Raising Awareness**

NYS IPM portion

Final Report - September 1, 2016-August 31, 2017

**Goal of project** – educating the public to prevent the spread of forest pests (insects and diseases)

**Education objectives** - Provide training and resources to Cornell Cooperative Extension (CCE) Educators in a train-the-trainer setting so that they can educate the public

1. Create focus groups of Cornell Cooperative Extension Educators to ensure the program meets educators' needs.
2. Collate/create resources for the 5-10 most relevant pests (based on discussion with NYS Department of Ag and Markets) to allow each region to choose those they wish to use for outreach and education;
3. Hold a minimum of 5 regional training programs in the regions most relevant to the project but with intent to reach most of the 50 counties that have Master Gardener programs
4. For the Master Gardener portion of the project, NYS IPM will follow up with an evaluation of those trained to learn what outreach projects they created and carried out, and if there are additional resources they need.
5. Creating an advisory group of ornamental nursery producers and retailers to determine how they might function as part of the outreach to the public on forest pests. This group would include a representative from NYS IPM. Because growers/retailers are often seen as sources of information to their customers, they could distribute similar resources as those developed for the Master Gardener component;

### Activities

1. Creating a focus group of CCE Educators

Based on meetings with Cornell Cooperative Extension educators at the November 2016 In-service training, we formed a focus group of 5 CCE educators who showed interest in the project. The focus group 'met' via follow-up conference calls in November and December 2016 and emails throughout the project. A Box file system was created to collaborate on resources.

Focus group members were instrumental in determining which pests should be covered, how train-the-trainer sessions should be run, and what types of resources would be useful for training the public.

Focus group (In addition to Elizabeth Lamb and Lori Brewer):

Kristina Ferrare, Oneida County

Laurel Gailor, Saratoga County

Emily Staychock, Yates County

Jennifer Stengle, Putnam County

Linda Svoboda, Broome County

Other CCE educators participated in various aspects of the project

## 2. Regional training programs

Locations and dates for regional training programs were identified by the focus group, with the intent of having a training location accessible to the majority of the NYS counties. A general outline for the training sessions was designed to encourage participants to discuss the local forest pest issues and how they might teach the public about them. The draft cover sheets were provided to attendees so that they could provide input on how best to present information to Master Gardeners, Master Forest Owners, and Master Naturalists to use for public outreach.

Each local organizer was free to amend the general agenda as it was most useful to their region, including asking representatives from other organizations to speak or present their relevant resources. The most appropriate 3-5 forest pests for the region were highlighted in the training.

### **Capital District**

March 22                      CCE Saratoga

Local lead organizer: Laurel Gailor

*Counties in Region:* Albany, Clinton, Essex, Franklin, Fulton, Hamilton, Montgomery, Rensselaer, Saratoga, Schenectady, Warren, Washington

### **Finger Lakes Region - South**

March 30                      CCE Broome

Local lead organizers: Kevin Mathers, Linda Svoboda, Barb Neal (Tioga)

*Counties in Region:* Allegany, Broome, Cattaraugus, Chautauqua, Chemung, Chenango, Cortland, Schuyler, Steuben, Tioga, Tompkins

### **Lower Hudson Valley**

April 3                         Teatown Reservation, Ossining NY

Local lead organizer: Jennifer Stengle

*Counties in Region:* Columbia, Delaware, Dutchess, Greene, Orange, Otsego, Putnam, Rockland, Schoharie, Sullivan, Ulster, Westchester

### **Western NY Region**

April 5                         CCE Wyoming

Local lead organizer: Sharon Bachman, Emily Staychock

*Counties in Region:* Erie, Genesee, Niagara, Ontario, Orleans, Livingston, Monroe, Seneca, Wayne, Wyoming, Yates

**Finger Lakes Region - North**

April 14 Skaneateles Library

Local lead organizer: Kristina Ferrare , Paul Hetzler

*Counties in Region:* Cayuga, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, St. Lawrence

### 3. Creation of resources

The focus group, with input from other CCE educators, created a master list of 29 forest pests. Some are currently found throughout NYS, some are found only in certain areas – quarantined or not, others have immediate potential for entering the state, and some are not yet found in the US but are considered potential pests.

The concept of ‘cover sheets’ – a one page sheet of basic information that would serve as an introduction to each pest – was discussed and accepted by the focus group. The intent of the cover sheet is to collate existing resources, provide characteristics for identification, and explain how to report finding the pest. There is no management information included. In some cases, reporting was considered more important; in others, there are few management options available to homeowners.

Jennifer Stengle created the initial drafts of the 25 cover sheets included in the workbook based on existing resources.

After several drafts, the final template includes:

Common name

Quarantine status

Also called

Scientific name

Type of pest

How was this pest introduced to North America, US, Northeast or New York?

Characteristics for pest ID

Which species does this pest damage?

If evidence of pest or damage is found, who should be told?

Select resources

Where has the pest been found? (with maps where available and useful)

Pictures to aid in identification

The final list of forest pests for which cover sheets were created is:

Asian gypsy moth

Asian longhorned beetle

Bacterial leaf scorch

Balsam woolly adelgid

Brown spruce longhorned beetle

Dogwood anthracnose  
Elongate hemlock scale  
Emerald ash borer  
European gypsy moth  
Hemlock woolly adelgid  
Jumping worms  
Norway spruce shoot gall midge  
Oak wilt  
Pine shoot beetle  
Rhizosphaera needlecast disease  
Sirex woodwasp  
Southern pine beetle  
Spotted lanternfly  
Spotted wing drosophila  
Sudden oak death  
Thousand cankers disease  
Velvet longhorned beetle  
Viburnum leaf beetle  
White pine needle damage  
Winter moth

Based on the train-the-trainer sessions, additional resources on NYS regulations on moving firewood, NYS resources, and Partnership for Regional Invasive Species Management (PRISM) were included with the cover sheets.

In order to facilitate presenting information at the type of events that Master volunteers often organize – including outside events, and those where the public may just walk through an exhibit - durable, waterproof posters on stiff backboards were requested. Based on requests from the members of the focus group, 3 posters were created. An existing oak wilt poster created by Karen Snover-Clift was updated with the current map, Carrie Marschner of the Hemlock Initiative created one on the Hemlock woolly adelgid, and Elizabeth Lamb created a Southern pine beetle poster. Although there were not funds available to print and mount the posters for all the counties, there are enough for the focus counties, and the posters can be downloaded from the Forest Pest Box file.

#### 4. Outreach projects created

We have been waiting for the materials to be completed and distributed to as many NYS counties as possible before sending out a survey on outreach projects to the public on forest pests. That survey should be completed and sent out this winter. Results will be shared with the NYS Department of Agriculture and Markets.

#### 5. Industry advisory committee

Because the primary activity of green industry growers would be providing information to consumers, having the printed and downloadable resources available seemed essential to the discussion. Now that they are available, we will organize a group of nursery growers and landscapers to learn how they could extend the information to their customers. Information collected will be shared with the NYS Department of Agriculture and Markets.

### Outcomes and Impacts

#### 2. Regional training programs

Across the 5 regional trainings, 145 people attended from 38 NYS counties. Of those, approximately 69 were Master Gardeners, 26 were Master Forest Owners, 2 were Master Naturalist, and 21 were CCE employees. There were also several representatives of PRISMS, DEC, and NYSDAM and representatives from a variety of environmental organizations that deal with the public.

Although number of people trained is not a direct measurement of outreach to the public, the fact that most people receiving training organize events to extend information to the public, we feel sure that they will use the training and resources to educate the NYS public about forest pest issues.

#### 3. Creation and distribution of resources

Existing poster and information card resources on relevant insect and disease pests, available through the Sentinel Plant Network, were distributed to 38 counties at the regional training meetings and at other meetings since then. We hope to reach as many of the remaining counties as possible at the CCE In-service Training in November 2017.

Pestdeck for Northeast (<http://www.sentinelplantnetwork.org/content/northeastern-pest-deck> with added Spotted lanternfly)

Photo clues for Asian longhorned beetle, Emerald ash borer, Hemlock woolly adelgid, Ramorum blight, Spotted lanternfly, Sudden oak death, and Thousand cankers disease. (<http://www.sentinelplantnetwork.org/diagnostics>)

Identification posters on look-alikes for Asian gypsy moth, Asian longhorned beetle, Emerald ash borer, and European gypsy moth.

The Forest Pest Handbook is available electronically for CCE educators in “Weeds and Invasive Species” in the Box folder “CCE Hort Resource Sharing Library” (<https://cornell.box.com/v/ccehortlibrary>). It will be available to the public on the NYS IPM website soon. Where appropriate, the cover sheets will be linked to NYS IPM’s Interactive Plant Manager – a fact-sheet based website aimed at landscapers and homeowners that is currently being revitalized. Once those resources are in place, they

will be advertised via the NYS IPM blog and website.

In addition to the electronic version, hard copies have been printed and distributed to 37 CCE offices, the Finger Lakes and Capital/Mohawk PRISMs, the Nature Conservancy, the Hemlock Initiative, and the Finger Lakes Institute.

#### 4. Outreach projects created, or other outreach related to the project

In Erie County, one of the trained people gave a presentation on October 4, 2017 as part of a Master Gardener monthly meeting, with 61 people attending.

The cover sheet on Asian Jumping Worms has been referenced several times through the CCE Horticultural Diagnostic list-serve as a number of inquiries have come in lately. I offered to send an electronic copy and had 16 immediate requests by CCE educators. Although not perhaps directly related, Carrie Marschner, an Invasive Species Specialist at Cornell, is organizing a Zoom meeting with CCE educators to discuss resources on Asian jumping worms, with the possibility of applying for a Towards Sustainability Grant.