



**ILLINOIS
FIRST DETECTOR**

WELCOME

Kelly Estes
Illinois Natural History Survey

Thank You!

This program would not be possible without the assistance and work done by our Extension hosts.

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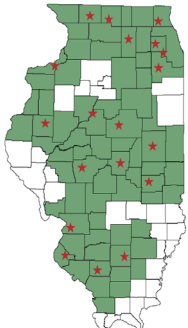

**ILLINOIS FIRST
DETECTORS: EYES & EARS
OF INVASIVE SPECIES
DETECTION**

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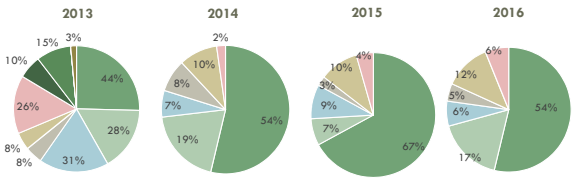


Participants

Year	# Attendees
2013	324
2014	175
2015	222
2016	197





Participants



Year	Master Gardener/Master Naturalist	Arborist/Forester	Landscape/Garden Center/Nursery	Conservationist	City/County/State/Extension	Other
2013	26%	15%	3%	10%	8%	8%
2014	54%	10%	8%	7%	19%	2%
2015	67%	10%	4%	3%	9%	7%
2016	54%	12%	5%	6%	17%	6%


- Master Gardener/Master Naturalist
- Arborist/Forester
- Landscape/Garden Center/Nursery
- Conservationist
- City/County/State/Extension
- Other




Outreach – Secondary Outreach

Participants were asked to indicate the number of people they encounter in regards to plant/tree/landscape care. This number could be utilized to project how many people this information may potentially reach.

Select One	Outreach (People/Year)	Year	Projected Secondary Outreach	Projected Outreach to Date
	0 to 50	2013	51,950	107,650
	51 to 100	2014	25,050	
	101 to 500	2015	25,700	
	501 to 1000	2016	34,950	
	1000 +			




Goals




Pest of Concern/High Risk Pest?

- Organism that could become economically devastating if established
- Many times we are associating **invasive species** as a high risk pest




Asian longhorned beetle




Phytophthora ramorum

Photo credit: Top - David Dunn, USDA Forest Service, www.bugwood.org, #1124041; Bottom - Joseph O'Brien, USDA Forest Service, www.bugwood.org, #1427092




Definition of an Invasive Species

- Non-native (or alien) to the ecosystem under consideration and
- Whose introduction causes or is likely to cause economic or environmental harm or harm to human health.



Why Do Invasive Pests Have High Risk Potential?

- Few or no natural enemies
- Abundant suitable habitat and food resources
- Delay in detection and identification
- Lack of natural history information
- Lack of control recommendations
- Can threaten agricultural, ornamental, forestry, or floriculture crops
- Can also threaten native species which can affect the overall habitat or ecosystem



How are High Risk Pests Introduced?



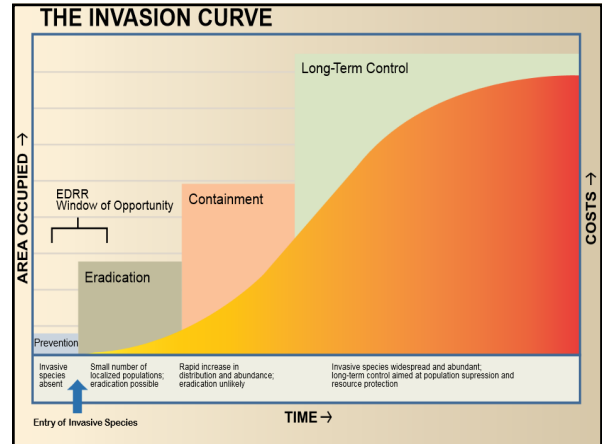


- Accidental introduction
 - Commercial trade
 - International tourism
- Deliberate introduction
 - Smuggling plant material
 - Agroterrorism



Early Detection

- The most critical step in addressing a new invasive species is to know it exists
- Early detection is key
- Requires a network of trained volunteers and professionals



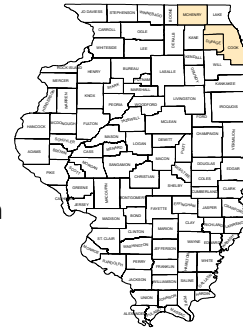
Likely Detection Scenarios

- A invasive with limited distribution spreads to new areas
- A invasive species not on the radar is identified
- One of the known exotics is discovered



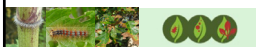
Jumping Worm Status Winter 2016

- First reported in late July, 2015 in DuPage County
- 3 counties (7 populations) confirmed in IL in 2015



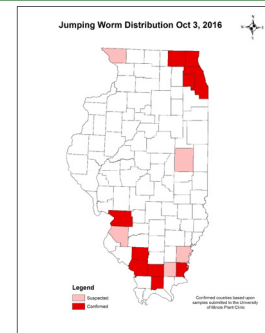
Jumping Worms

Chris Evans, University of Illinois NRES



Jumping Worm Status Winter 2017

- 10 positive counties
 - 7 new in 2016
- 5 suspect counties
- Reports
 - 35 reports in 2016 (18 reports confirmed)
 - 20 from southern IL (14 reports confirmed)



What Can You Do?

- Be familiar with common regional and local pests
- Be familiar with typical pests of economically important crops.
- Know seasonal pest patterns.
- Know typical weather patterns

“One of these things is not like the other”



What Happens Now?

- On tap for today.....
 - Invasives and Human Health
 - Oak Diseases
 - Emerging Forest Pests
 - Report and Respond

