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Can You Spot the Spotted Lanternfly (SLF) Update and What You Can Do To Help

Extension Master Gardener Volunteer Program
October 6, 2021

Amy K. Stone, Ag and Natural Resources Educator
OSU Extension, Lucas County

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Knowledge Education Monitoring Reporting And Again . . .

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Session Objectives:



- Introduction
- What Is The Spotted Lanternfly?
- Where Is The Spotted Lanternfly?
- Why Should I Care About The Spotted Lanternfly?
- What Can I Do?

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Another Invasive Species on the Radar



Awareness and Engagement

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Native to China, India, and Indochina (Vietnam, Cambodia, Laos, Myanmar, Thailand)

In 2006 it was discovered in Korea – outside its native range

In 2014 it was discovered in North America in Pennsylvania

It is continuing to spread naturally, and through artificial movement

In 2020 it was discovered in Ohio – individual detections and a reproducing population – and the story continues . . .




Photo by Mike Friel

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The SLF Path



Steps Included: Discovery – Survey – Research – Implementation – Outreach and Awareness – Evaluation – Adjustments – More Discoveries . . . And Repeat


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Spotted Lanternfly Quarantine Map

Countries Under Quarantine as of November 4, 2017



Western PA – three years into the infestation

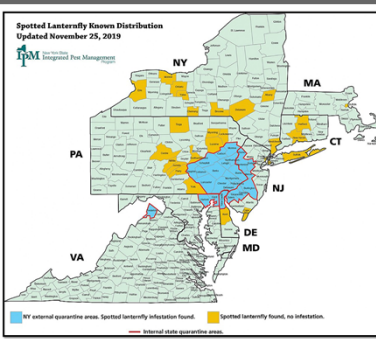
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Spotted Lanternfly Known Distribution

Updated November 25, 2019



five years into the infestation

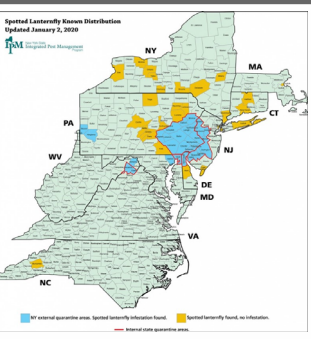
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Spotted Lanternfly Known Distribution

Updated January 2, 2020



a few months later

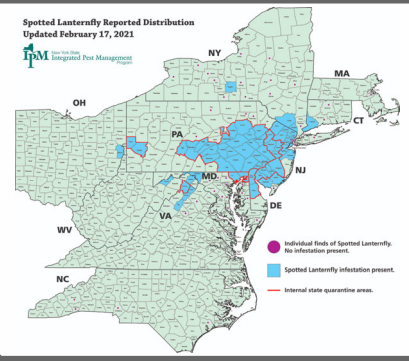
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Spotted Lanternfly Reported Distribution

Updated February 17, 2021



Individual finds of Spotted Lanternfly. No infestation present.

Spotted Lanternfly infestation present.

Internal state quarantine areas.

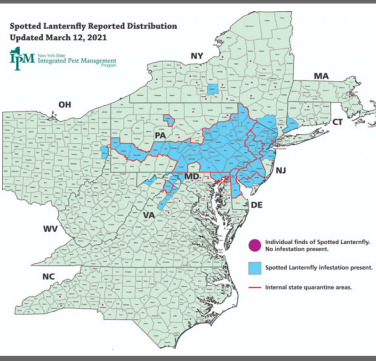
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Spotted Lanternfly Reported Distribution

Updated March 12, 2021



Individual finds of Spotted Lanternfly. No infestation present.

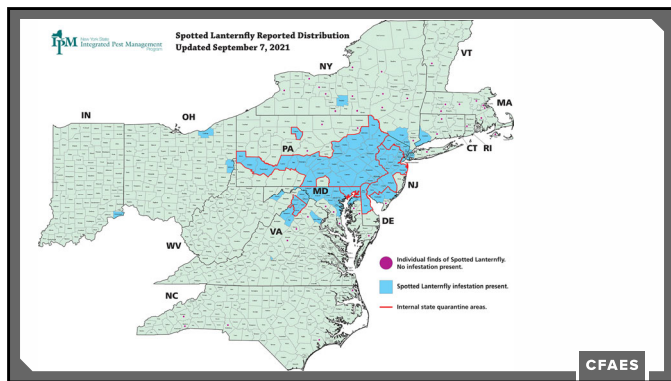
Spotted Lanternfly infestation present.

Internal state quarantine areas.

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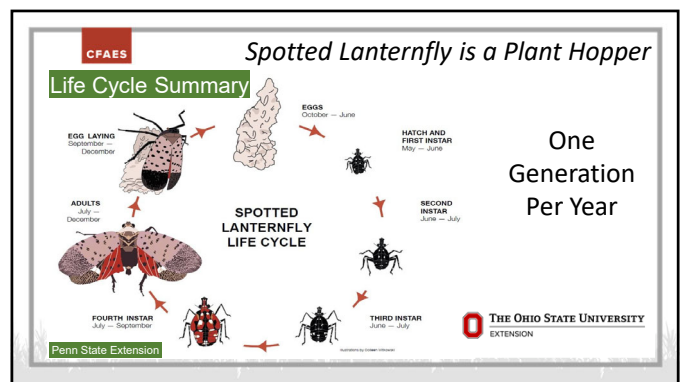
What Can I Do?

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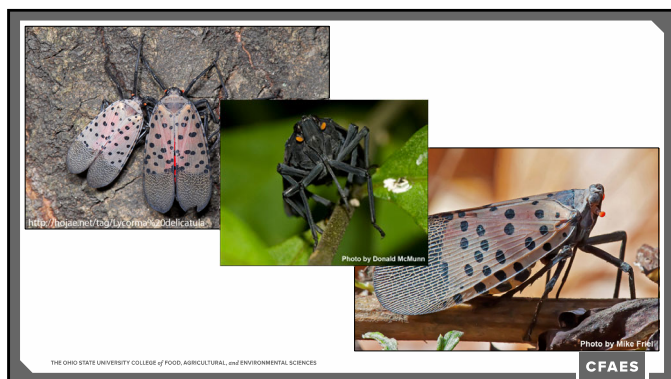
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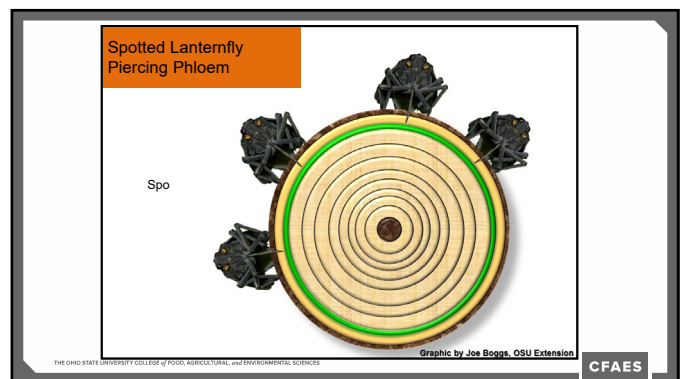
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Adults:

- Aposomatic coloration: advertises defense chemicals
- "Flash display" when disturbed
- Poor fliers: described as "fluttering flight"
- Appear "moth-like"
- Hold wings "tent-like"

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<http://hojas.net/bug/lyc.com/n/2020/casus>

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Adults are large

- 1 inch long
- 1/2 inch wide
- Females are typically larger than the males

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Adults:

- Appear in late summer
- Feed, mate, and lay eggs





30 - 50 Eggs



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Eggs:

- Laid then commonly covered with waxy coating
- Overwintering stage

Egg Mass:
1 – 1 1/2" long
1/2 – 3/4" wide

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Covered and Uncovered Egg Masses

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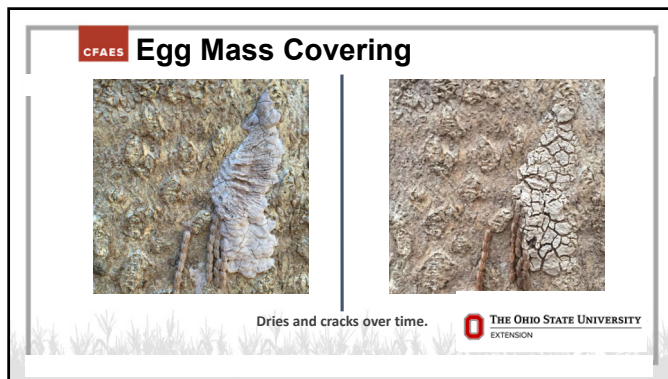


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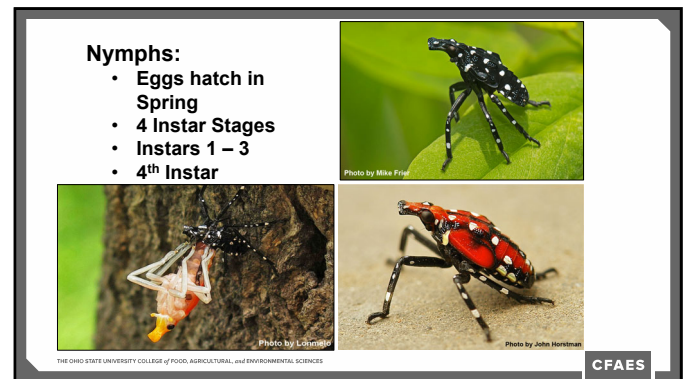
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Lawrence Burfinger
Pennsylvania Department of Agriculture
Harrisburg, PA

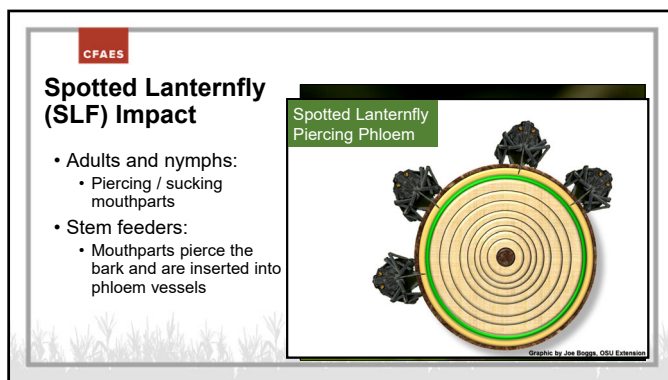
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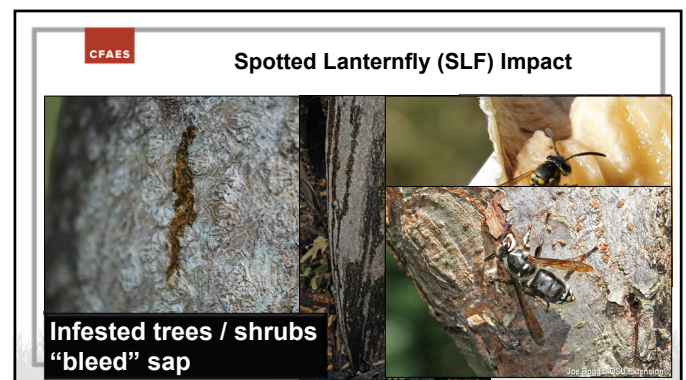
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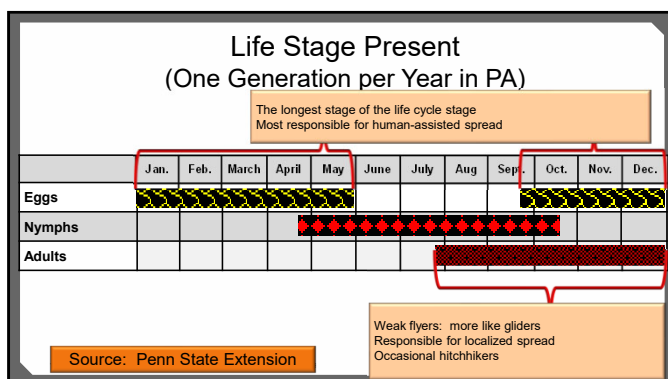
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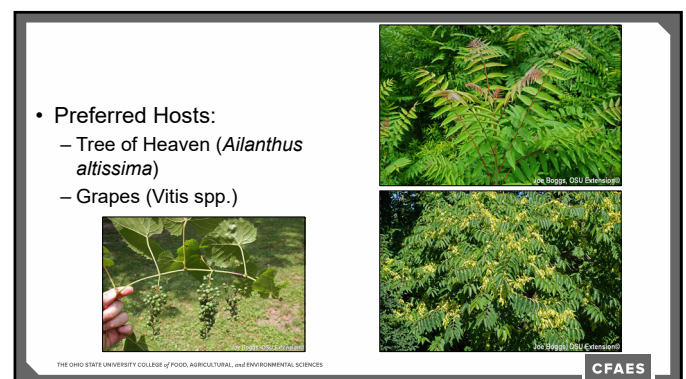
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Spotted Lanternfly Host List: Virginia

Ootheca (eggs) found

- Tree of heaven
- Wild cherry
- Black locust
- Boxelder
- Silver Maple
- Red Maple
- Elm
- Virginia Creeper
- Honeylocust
- Crabapple
- White pine
- Concrete (Jersey wall)
- Metal 55 gal Drum

Feeding; ootheca not found

- Wild grape
- Table grape
- Hackberry
- Multiflora rose
- Poison ivy
- Smooth sumac
- English Ivy
- Bush Honey Suckle
- Japanese Honeysuckle
- Black Walnut
- White mulberry

Source: Eric Day, Virginia Tech Entomology/Virginia Cooperative Extension

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Host	Nymphs			Adults		
	May	June	July	August	September	October
Rose (cultivated, multiflora, etc.)						
Grape (wild and cultivated)						
Tree-of-heaven						
Black walnut, butternut						
River birch						
Willow						
Sumac						
Silver/red maple						

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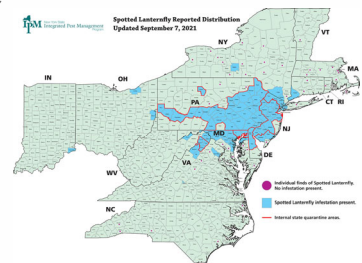
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Spotted Lanternfly, Timeline

2014: Initial infestation found in Berks County, Pennsylvania, in 2014. *Thought to have arrived on a stone shipment in 2012.*

Expansion of infestation in PA and surrounding states

Detections found in Connecticut, Delaware, Indiana, Maryland, Massachusetts, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia

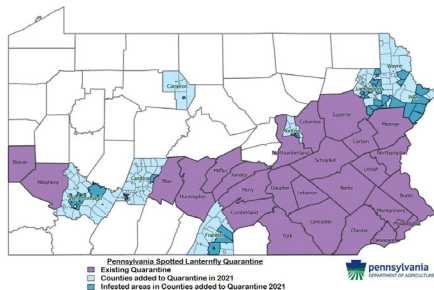


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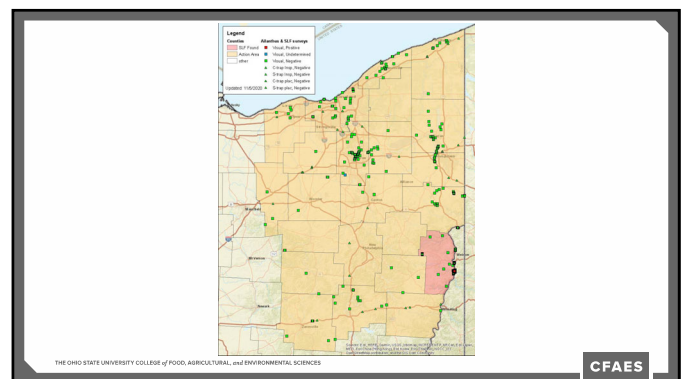
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Pennsylvania Spotted Lanternfly Quarantine
 Existing Quarantine
 Counties added to Quarantine in 2021
 Infested areas in Counties added to Quarantine 2021



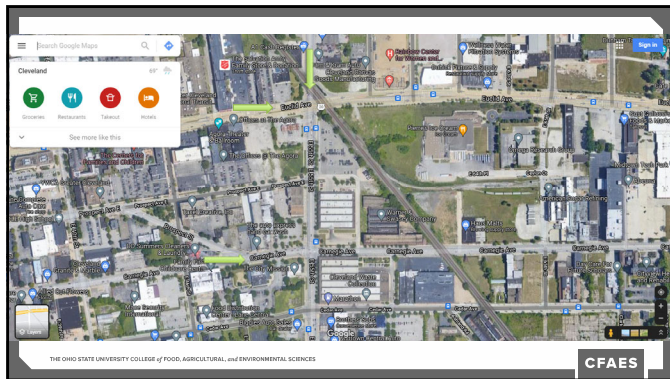
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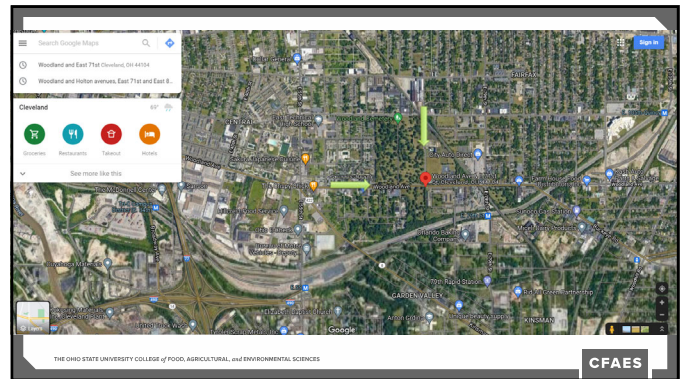
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From One to One Thousand – they can become a nuisance in their numbers

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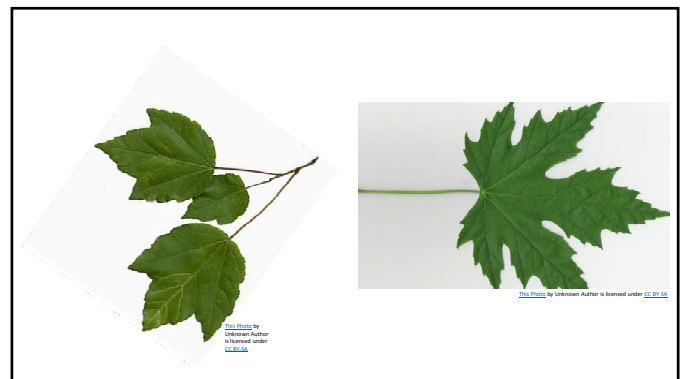
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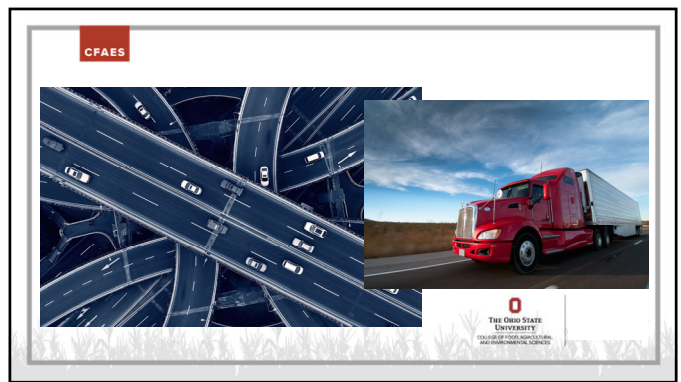
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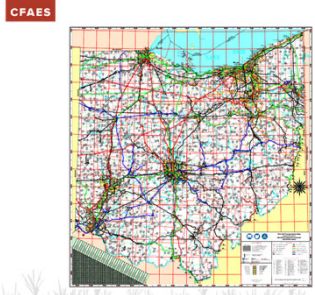


What Is The Spotted Lanternfly?
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Railways

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Road Inventory Type

- Interstate
- US Highway

0 20 40 60 80 100 Miles

The Ohio State University
 1910 University Avenue, Columbus, OH 43210
 614.293.1234

Interstate and US Highways

[illegible]

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Possible Spotted Lanternfly Adult Look-alikes in Virginia

Theresa Dellinger and Eric Day, Department of Entomology, Virginia Tech

The adult spotted lanternfly, *Lycomor delicatula* (Whitlin), has a very distinctive appearance with black spots and bars on the upper wings and red, black, and white on the hindwings. Adults measure about 1.7 long and 0.5" wide. A few other species in Virginia similar color pattern, but a close look will show that spotted lanternfly is easily recognizable. Sizes not to scale. Upper left photo: Eric Day. All others: Reprognosis.org.

**Spotted
Lanternfly**
Lycomor delicatula

**Spotted lanternfly,
wings extended**
Lycomor delicatula
Department of Agriculture

Ornate bella moth
Lima elegans Reprognosis.org

Allantus webworm
Lima elegantissima Reprognosis.org

Tiger moth
Panthera palaeus
Reprognosis.org

Oak treeshopper
Zoniopoda ruficornis
Reprognosis.org

Buck moth
Hemiokeles caryocarpus Reprognosis.org

Leopard moth
Lima elegantissima Reprognosis.org

Virginia Cooperative Extension
Virginia Tech • Virginia State Government

2018

BREC-2018-001

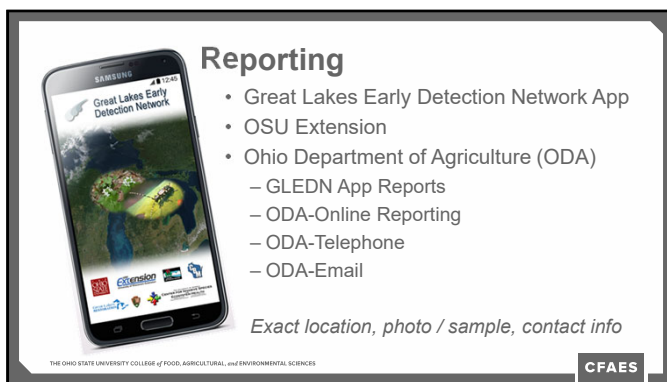
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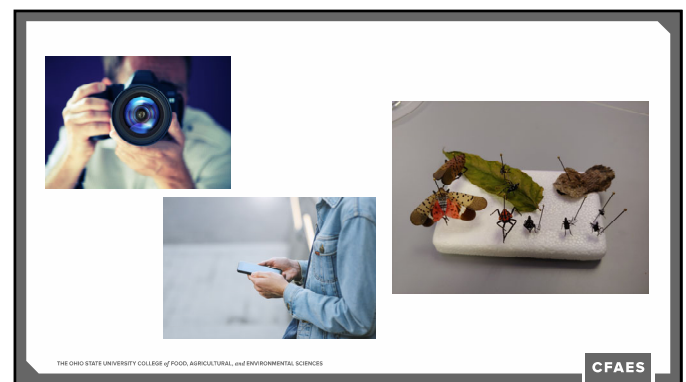
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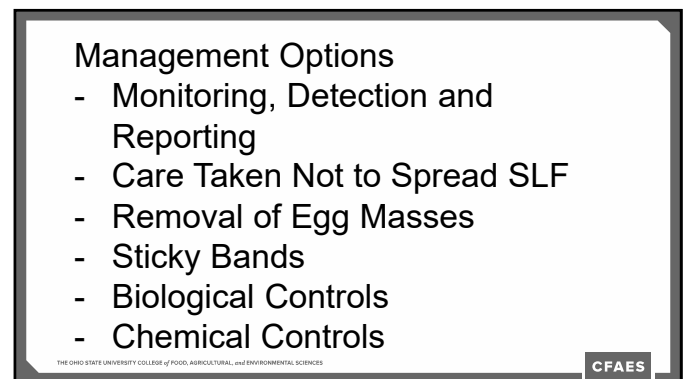
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