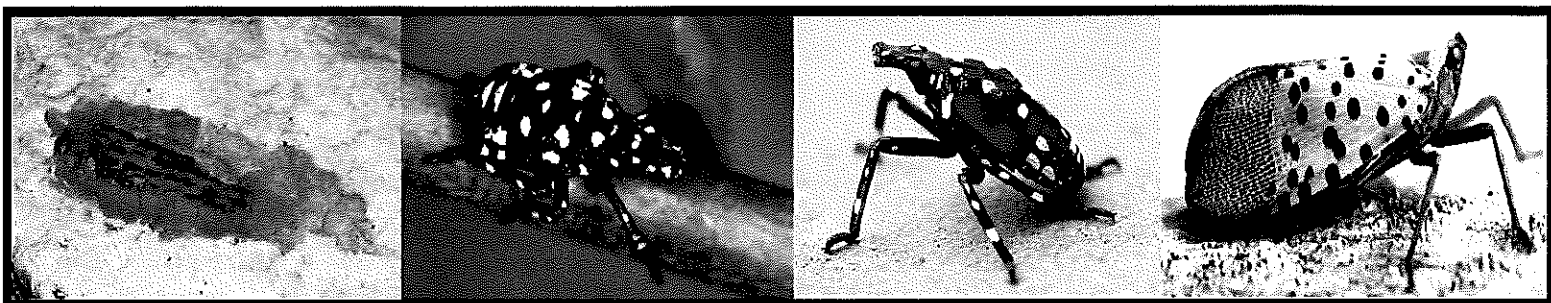


SEE IT, REPORT IT!



Spotted Lanternfly

What to do:

If you see egg masses, scrape them off, double bag and throw away.
You can also place the eggs into alcohol, bleach or hand sanitizer to kill them.

Collect a specimen:

Specimens of any life stage can be turned in to the New Jersey Department of Agriculture's lab for verification.

Take a picture:

With your GPS function turned on your smartphone or a camera with GPS, take a photograph of **ANY** life stage (including egg masses).

Submit picture to: SLF-plantindustry@ag.nj.gov

Report a site:

If you can't take a specimen or photograph, call and leave a message detailing the sighting location/address and your contact information.

NJ Spotted Lanternfly Hotline at 1-833-223-2840 (BADBUG0)





SLF Background

- Detected on September 22, 2014 in Berks County Pennsylvania
- Spotted Lanternfly (SLF) is a plant hopper, *Lycorma delicatula* (white) belonging to the family Fulgoridae in the order Hemiptera (true bugs).
- Makes use of over 70 different plant species, including fruit trees, ornamental trees, woody trees, vegetables, herbs and vines. Including agricultural crops like grapes and hops. Strongly prefers the invasive “Tree of Heaven”
- Grape harvest can be decreased by 75-90%. Growth of sooty mold makes the fruit unmarketable.





Damage

- Like most hemipterans, SLF feeds on plants using their sucking and piercing mouthparts to extract plant sap.
- Adults and nymphs feed on phloem tissues of young stems with their piercing and sucking mouthparts and excrete large quantities of liquid (honeydew).
- Feeding creates weeping wounds
- Honeydew facilitates the growth of sooty mold
- Weeping Sap attracts activity from hymenopteran such as wasps, hornets, ants, bees etc.
- May be toxic to domestic animals because of Cantharidin and toxic metabolites from Tree of Heaven.





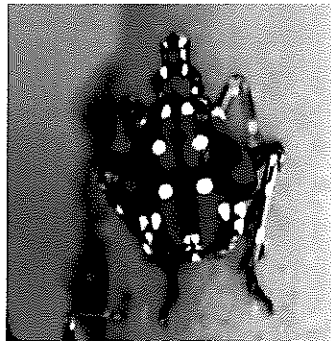
Adults: July - December



**Egg Laying:
September -
November**



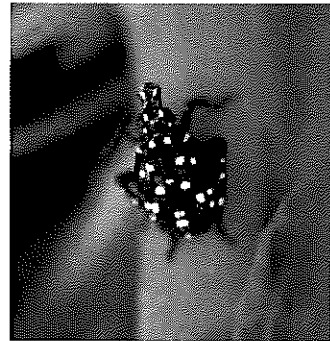
Eggs: October - June



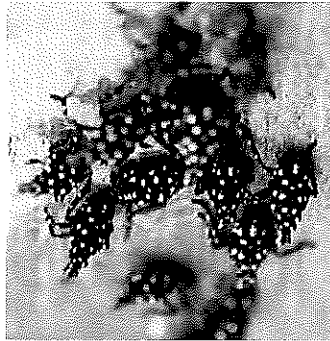
**Fourth Instar:
July - September**



**Hatch and 1st
Instar:
May - June**



Third Instar: June - July Second Instar: June - July



One Generation Per Year



United States Department of Agriculture

All life stages can hitchhike to New Jersey

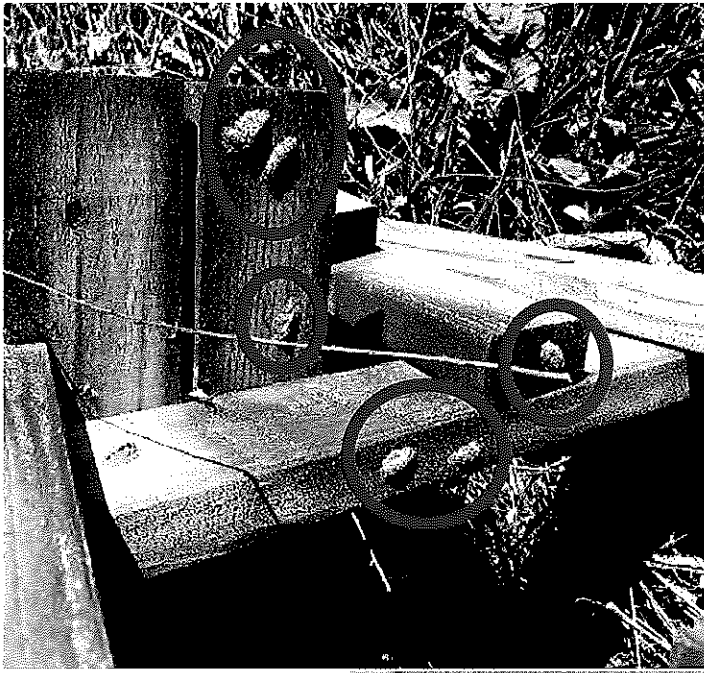
Adult



Nymphs



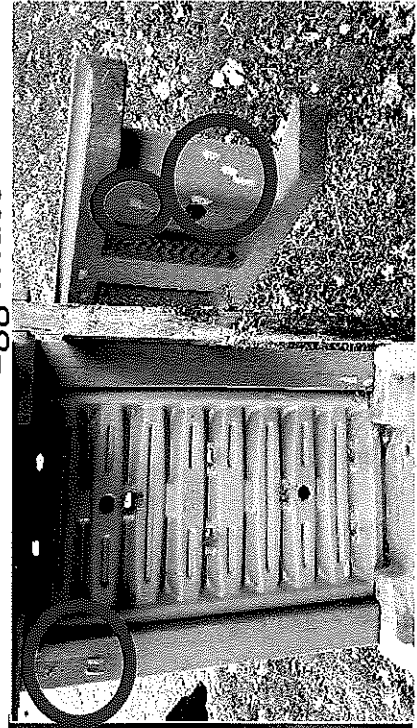
Egg Mass



Egg Mass



Egg Mass



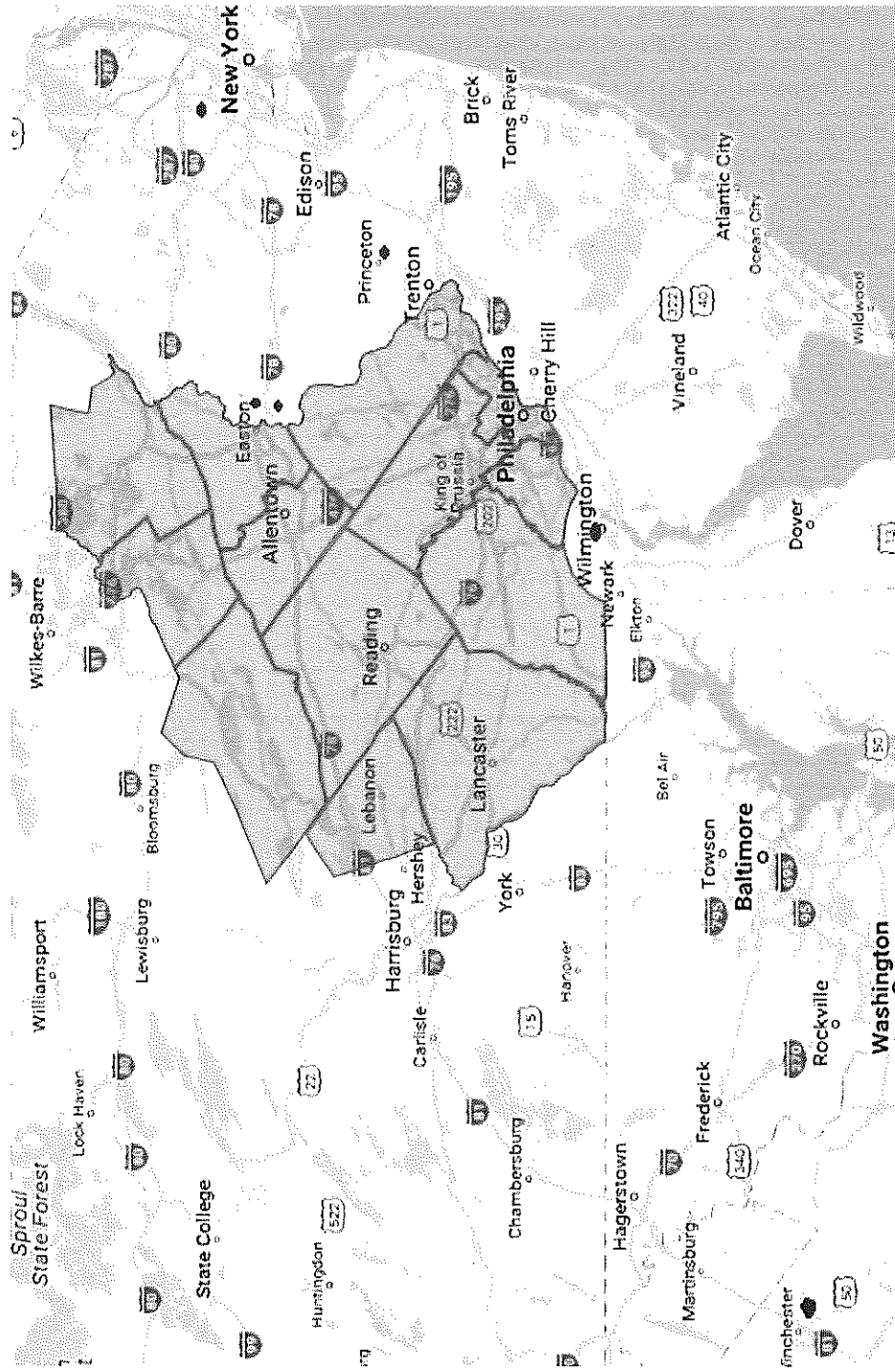
Photos: Pennsylvania Department of Agriculture

4/4/2018



United States Department of Agriculture

13 Counties Quarantined in Pennsylvania by PA Dept. of Ag.



Berks, Bucks, Carbon, Chester, Delaware, Lancaster, Lehigh, Lebanon, Monroe, Montgomery, Northampton, Philadelphia, Schuylkill

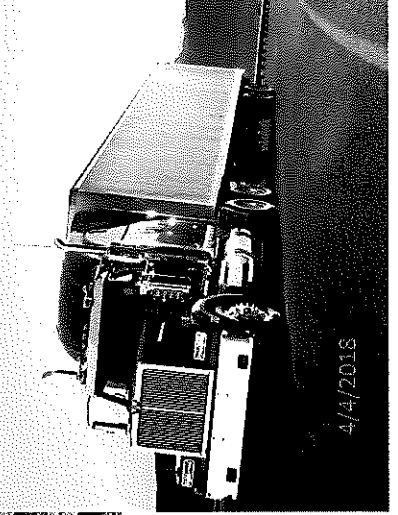
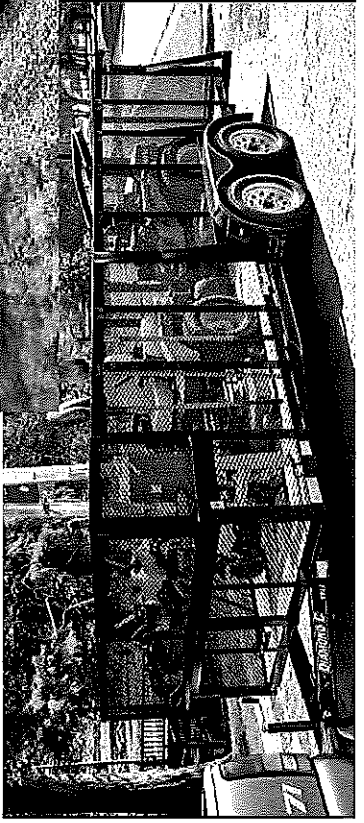
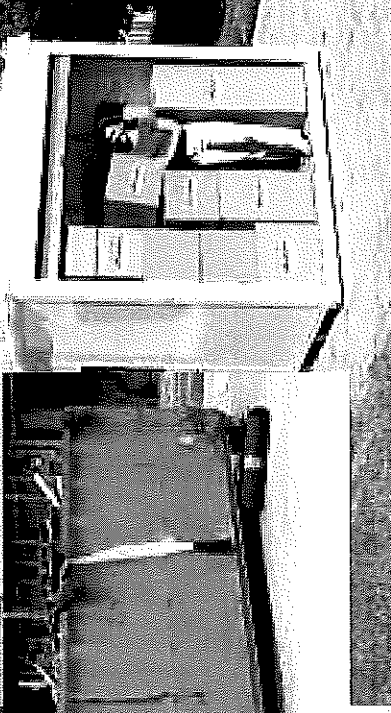
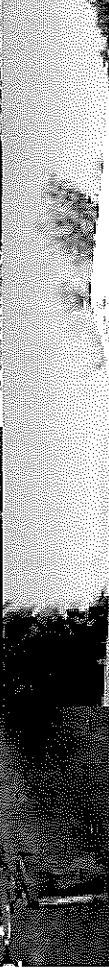
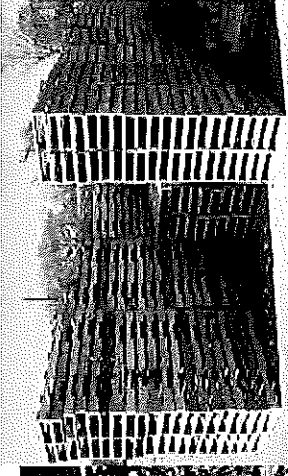
4/4/2018



United States Department of Agriculture

How Does PA Quarantine Impact NJ?

- Limited movement of articles from within the PA Quarantine going outside the PA Quarantine
- This includes ANY means of conveyance
- Inspect all vehicles before leaving Pennsylvania



4/4/2016



What to do

- **What to do:** If you see egg masses, scrape them off, double bag them and throw them away. You can also place the eggs into alcohol, bleach or hand sanitizer to kill them.
- Watch instructional video here:
https://www.youtube.com/watch?v=WoFp_MbDiE8
- **Collect a specimen:** Specimens of any life stage can be turned in to the New Jersey Department of Agriculture's lab for verification.
- **Take a picture:** With your GPS function turned on your smartphone or a camera with GPS, take a photograph of ANY life stage (including egg masses)
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SLF-plantindustry@ag.nj.gov

New Jersey Spotted Lanternfly Hotline at 1-833-223-2840 (BADBUG0)

and leave a message detailing your sighting and contact information.



Pest Alert

Animal and Plant Health Inspection Service
Plant Protection and Quarantine

Spotted Lanternfly (*Lycorma delicatula*)

The spotted lanternfly is an invasive pest, primarily known to affect tree of heaven (*Ailanthus altissima*). It has been detected on many host plants, including apples, plums, cherries, peaches, nectarines, apricots, almonds, and pine. It also feeds on oak, walnut, poplar, and grapes. The insect will change hosts as it goes through its developmental stages. Nymphs feed on a wide range of plant species, while adults prefer to feed and lay eggs on tree of heaven (*A. altissima*).¹ If allowed to spread in the United States, this pest could seriously harm the country's grape, orchard, and logging industries.

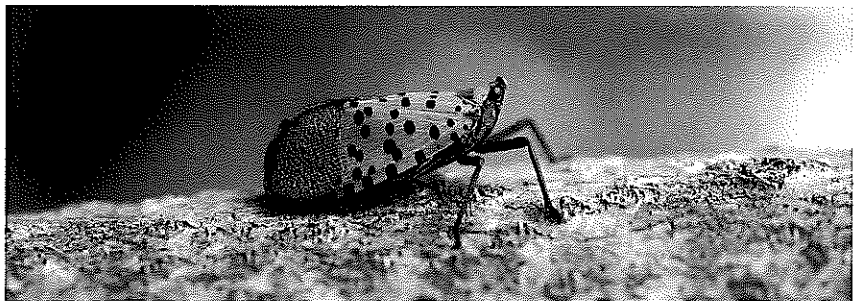
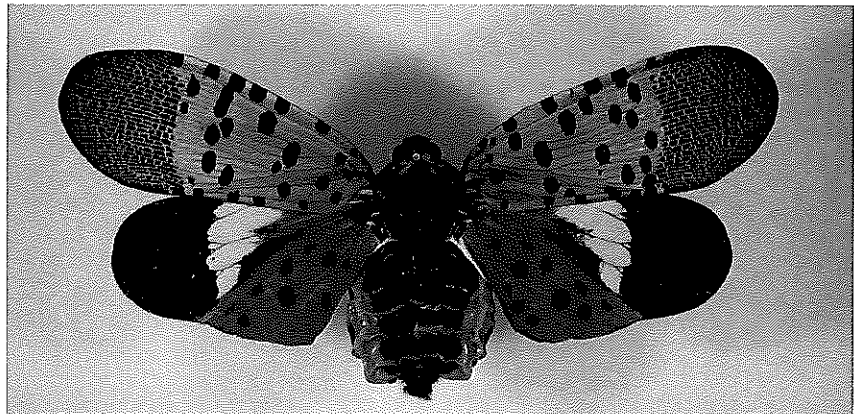
Distribution and Spread

The spotted lanternfly is present in China, India, Japan, South Korea, and Vietnam. The insect was detected in Pennsylvania in September 2014. This was the first detection of spotted lanternfly in the United States.

Spotted lanternflies are invasive and can spread rapidly when introduced to new areas. While the insect can walk, jump, or fly short distances, its long-distance spread is facilitated by people who move infested material or items containing egg masses.

Damage

Both nymphs and adults of spotted lanternfly cause damage when they feed, sucking sap from stems and leaves. This can reduce photosynthesis, weaken the plant, and eventually contribute to the plant's death. In addition, feeding can cause the plant to ooze or weep,



Adult spotted lanternfly

resulting in a fermented odor, and the insects themselves excrete large amounts of fluid (honeydew). These fluids promote mold growth and attract other insects.

Description

Adult spotted lanternflies are approximately 1 inch long and one-half inch wide, and they have large and visually striking wings. Their forewings are light brown with black spots at the front and a speckled band at the rear. Their hind wings are scarlet with black spots at the front and white and black bars at the rear. Their abdomen is yellow with black bars. Nymphs in their early stages of

development appear black with white spots and turn to a red phase before becoming adults. Egg masses are yellowish-brown in color, covered with a gray, waxy coating prior to hatching.

Life Cycle

The spotted lanternfly lays its eggs on smooth host plant surfaces and on non-host material, such as bricks, stones, and dead plants. Eggs hatch in the spring and early summer, and nymphs begin feeding on a wide range of host plants by sucking sap from young stems and leaves. Adults appear in late July and tend to focus their feeding on tree of heaven (*A. altissima*) and grapevine

¹ In Pennsylvania, adult spotted lanternflies have also been found feeding and egg laying on willow, maple, poplar, and sycamore, as well as on fruit trees, like plum, cherry, and peach.

(*Vitis vinifera*). As the adults feed, they excrete sticky, sugar-rich fluid similar to honeydew. The fluid can build up on plants and on the ground underneath infested plants, causing sooty mold to form.

Where To Look

Spotted lanternfly adults and nymphs frequently gather in large numbers on host plants. They are easiest to spot at dusk or at night as they migrate up and down the trunk of the plant. During the day, they tend to cluster near the base of the plant if there is adequate cover or in the canopy, making them more difficult to see. Egg masses can be found on smooth surfaces on the trunks of host plants and on other smooth surfaces, including brick, stone, and dead plants.

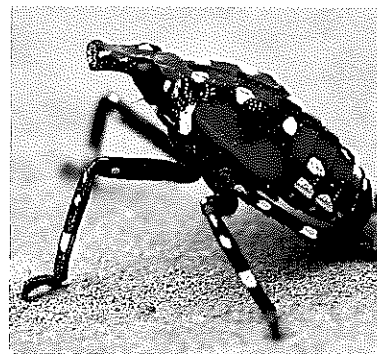
Report Your Findings

If you find an insect that you suspect is the spotted lanternfly, please contact your local Extension office or State Plant Regulatory office or State Plant Regulatory Official to have the specimen identified properly.

To locate an Extension specialist near you, go to the U.S. Department of Agriculture (USDA) Web site at www.nifa.usda.gov/Extension. A directory of State Plant Regulatory Officials is available on the National Plant Board Web site at www.nationalplantboard.org/membership.



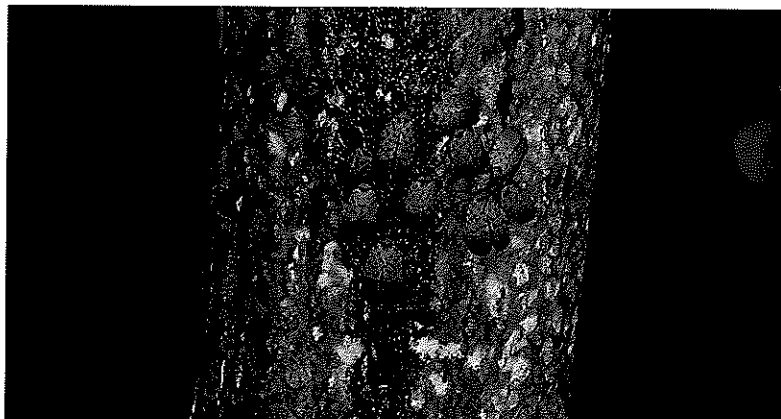
Nymphs are black with white spots in early stages of development. (Credit: Itchydogimages)



Nymphs turn red just before becoming adults. (Credit: Itchydogimages)



Hatched and unhatched egg masses



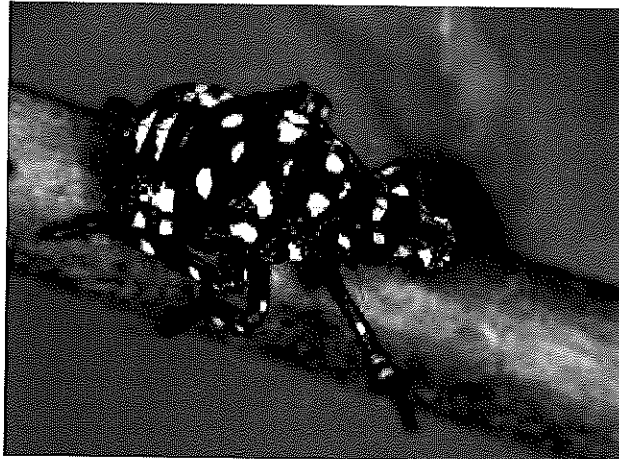
Cluster of adults on the trunk of a tree at night



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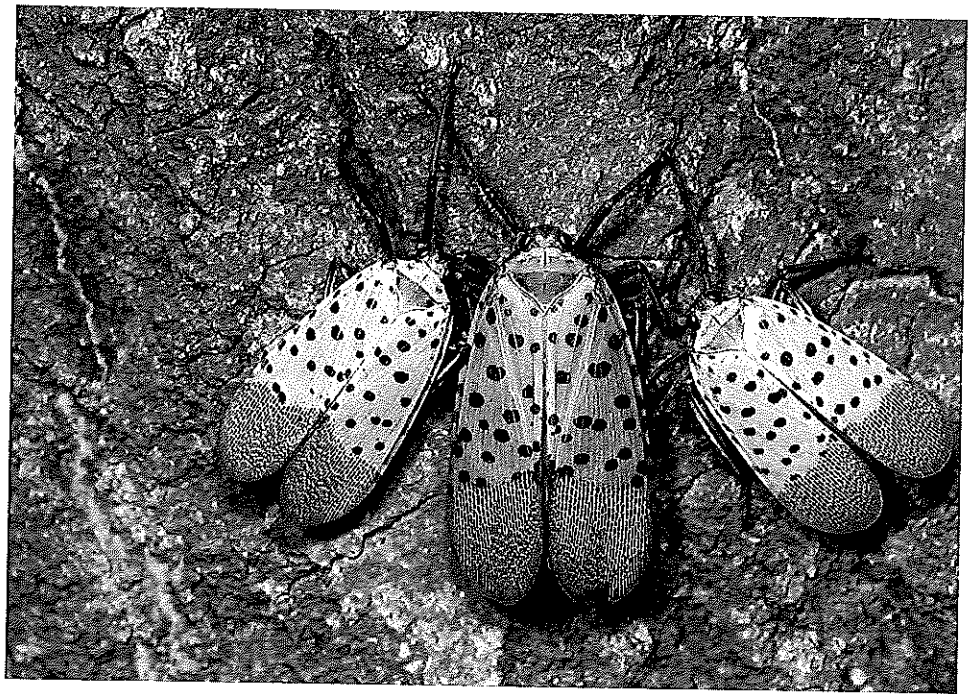
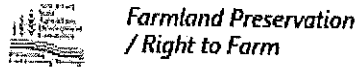
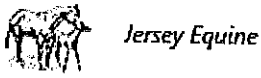
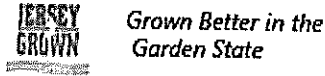
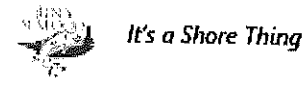
Spotted Lanternfly



- Bee Inspection
- Beneficial Insect Rearing Lab
- Biological Control of Plant Pests
- Emerald Ash Borer
- Gypsy Moth Suppression
- Jersey Grown
- Nursery Inspection and Certification
- Pineshoot Beetle
- Plant Laboratory Services
- Plant Pest Survey
- Seed Certifications and Control

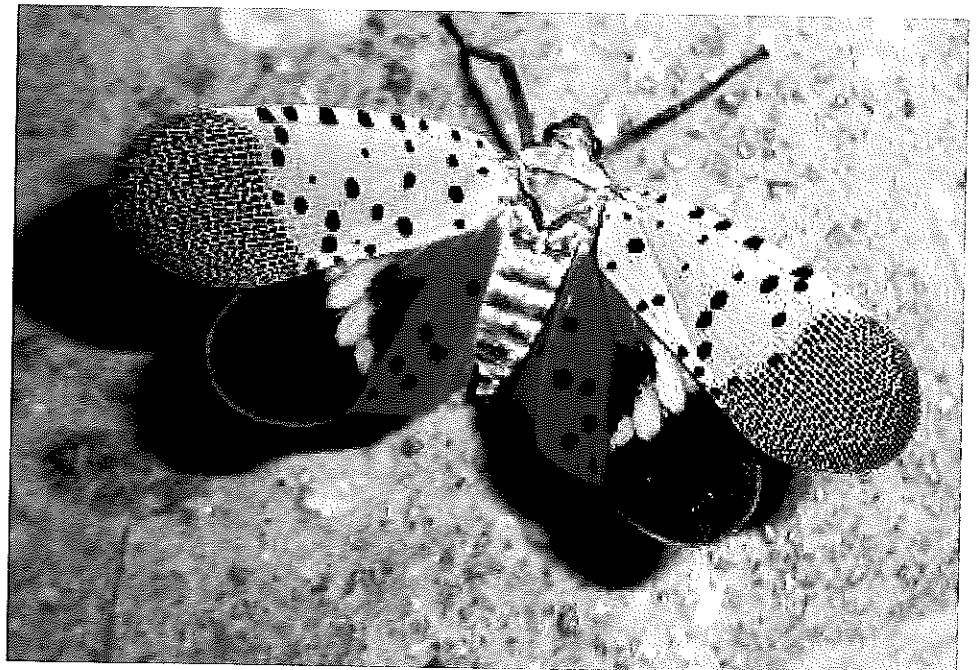
Spotted Lanternfly Background

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- Spotted Lanternfly (SLF) is a plant hopper, *Lycorma delicatula* (white) belonging to the family Fulgoridae in the order Hemiptera (true bugs).
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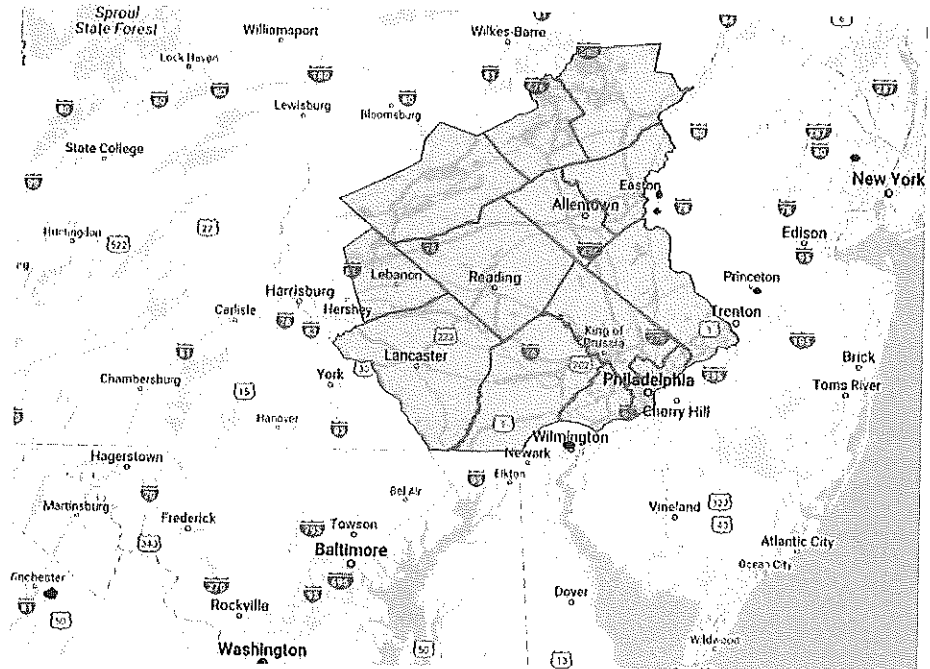


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- Feeding creates weeping wounds
- Honeydew facilitates the growth of sooty mold
- Weeping Sap attracts activity from hymenopteran such as wasps, hornets, ants, bees etc.
- May be toxic to domestic animals because of Cantharidin and toxic metabolites from Tree of Heaven.
- Impacts quality of outdoor life for everyone



Quarantined Counties in Pennsylvania



Berks, Bucks, Carbon, Chester, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Philadelphia, Schuylkill

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- Limited movement of articles from within the PA Quarantine going outside the PA Quarantine
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[Click here for the Pennsylvania Spotted Lanternfly Quarantine Page](#)

[Click here for Pennsylvania Online Permit Instructions](#)

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[New Jersey Spotted Lanternfly Permit Participants](#)

[New Jersey Spotted Lanternfly Quarantine Rule](#)

[New Jersey Spotted Lanternfly Quarantine for General Audience](#)

[New Jersey Residence Checklist \(English\)](#)

[New Jersey Residence Checklist \(Spanish\)](#)

[New Jersey Nursery and Landscape Association informational video](#)

[Reporting Information for Pennsylvania Residents Who See a Spotted Lanternfly](#)

[Spotted Lanternfly Informational Handout \(English\)](#)

[Spotted Lanternfly Informational Handout \(Spanish\)](#)

[Spotted Lanternfly See It Report It Flyer \(English\)](#)

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[Spotted Lanternfly Stages and Trees Where It Can Be Found](#)


[Landscape Treatment Recommendations for Spotted Lanternfly](#)

[Homeowner Treatment Recommendations for Spotted Lanternfly](#)



What to do

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- [Spotted Lanternfly Reporting Guidelines](#)
- [Spotted Lanternfly Industry Guidelines](#)

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