

## Spotted Lanternfly Update

Survey and Response to Detecting SLF in NY



October, 2020 Thom Allgaier, Invasive Species Coordinator Michael Formichelli, Horticultural Inspector 1

## **SLF Response Partners**

- New York State Dept. of Agriculture and Markets (AGM)
- New York State Dept. of Environmental Conservation (DEC)
- New York State Office of Parks, Recreation, and Historic Preservation (OPRHP)
- New York City Dept. of Environmental Protection (DEP)
- USDA APHIS Plant Protection and Quarantine (USDA-APHIS-PPQ)
- Regional PRISM's
- New York State Dept. of Transportation (DOT)
- New York State Natural Heritage Program
- New York City Dept. of Transportation (DOT)
- New York City Parks & Recreation



## Spotted lanternfly (SLF) Lycorma delicatula

- Plant hopper native to China and Southeastern Asia
- Discovered in Pennsylvania in 2014
- Use mouthparts to feed on the sap of more than 70 plant species
  - Prefer tree-of-heaven (*Ailanthus altissima*)
  - Grapes, apples, hops, maples, walnuts, sumac, oaks, pines



Photo: USDA



## SLF impacts

- Feeding stresses plants, making them vulnerable to disease and attacks from other insects
- Excrete sticky honeydew
  - Attracts sooty molds that interfere with plant photosynthesis, negatively affecting the growth and fruit yield of plants
- Impacts quality of life; hinders outdoor activities







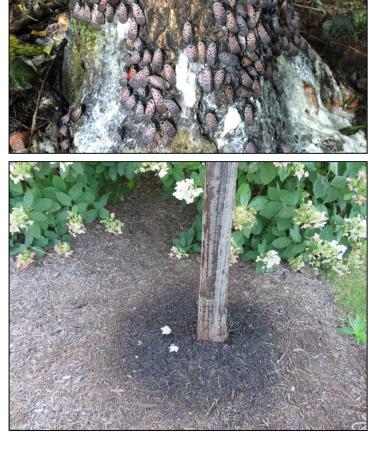
Photos: NYSDEC & PA Dept of Agriculture

# SLF impacts

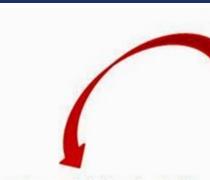
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## Life Cycle



The eggs are laid in the fall. Preferred host is the Tree of Heaven, *Ailanthus altissima*, but any smooth bark tree will do.



Adult forms can be seen as

early as July.

The nymphs have 4 instars and develop red spots in addition to the white spots exhibited in earlier instars.



Nymphs begin to hatch in late April to early May.





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Month	Eggs	1 <sup>st</sup> -3 <sup>rd</sup> instar	4 <sup>th</sup> instar	Adults
August				
September				
October				
November				
December				
January				
February				
March				
April				
Мау				
June				
July				



## Survey



Photo: Penn State



Photo :Lower Hudson PRISM





## Survey

#### Circle Trap



**Bug Barrier** 



Photo: Southern Organis & Supply



Photo: NJ Dept of Ag.

# Eggs



Photo: NYS DOT



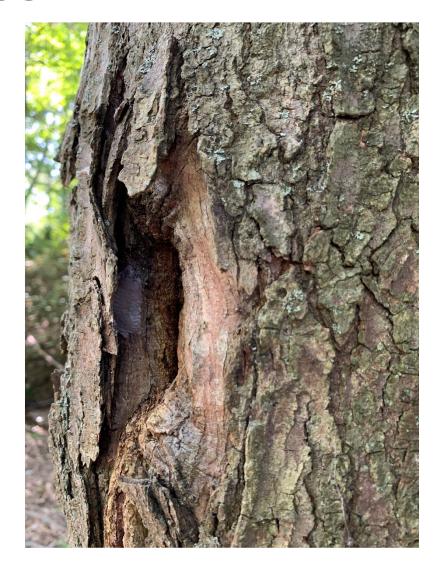
#### Egg Masses - Under and on bark





Photos: USDA

## Egg Masses - Under Bark





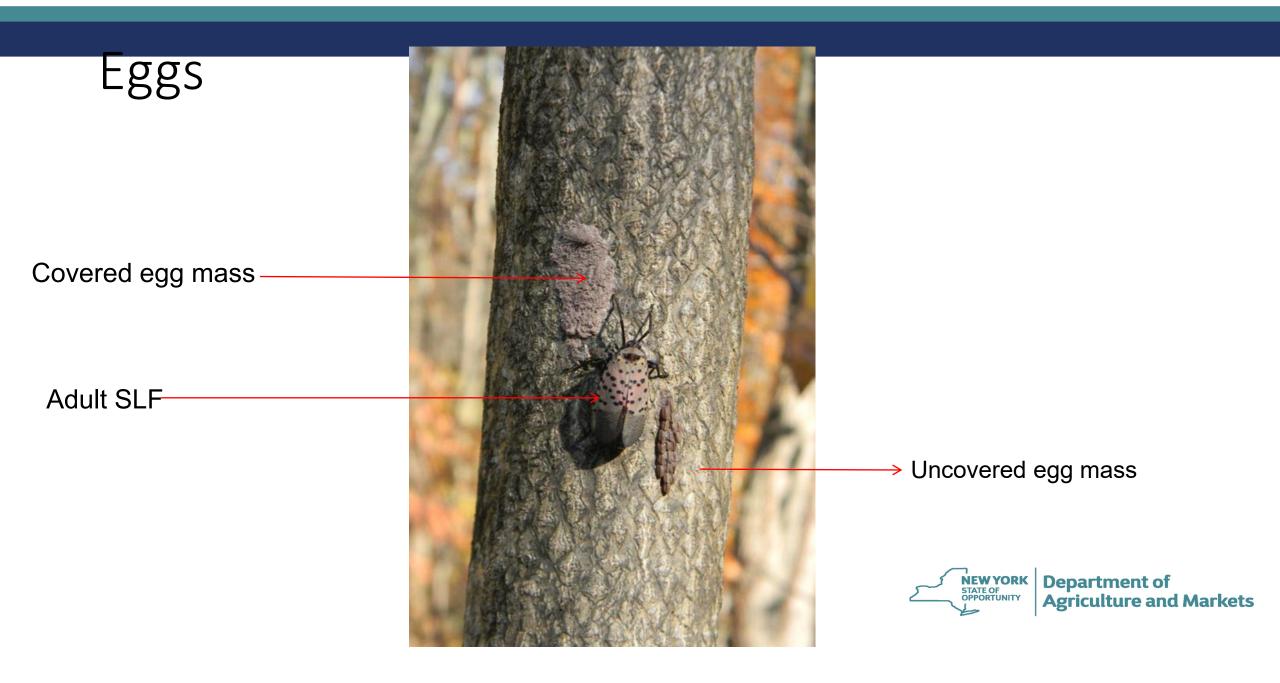
Photos: USDA

# Eggs



Photo Credits: NYSDAM





Eggs

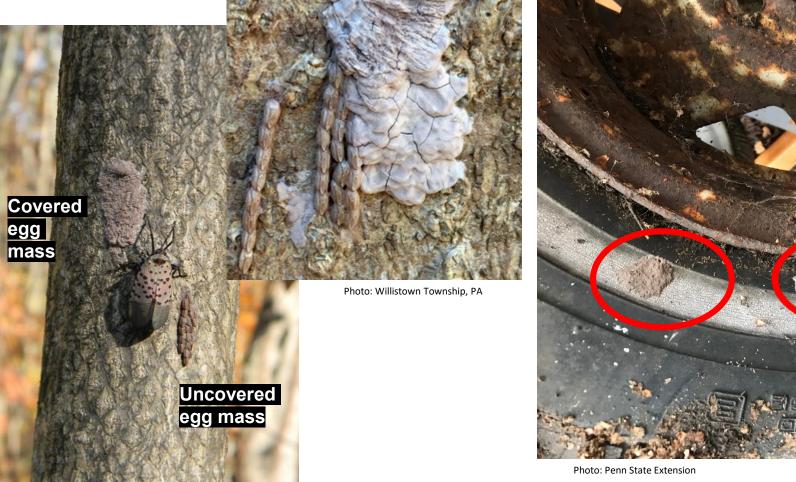




Photo: NYSDAM







Department of Agriculture and Markets

Photo: USDA PPQ

### Unintended Transport



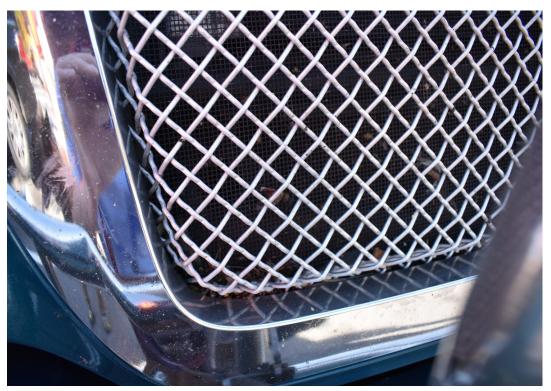
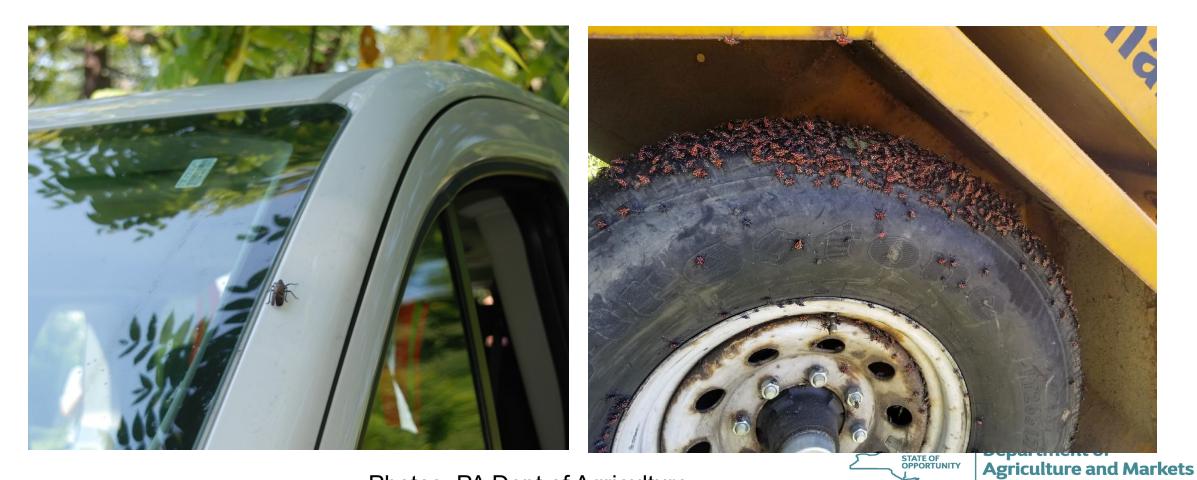


Photo: NYSDAM



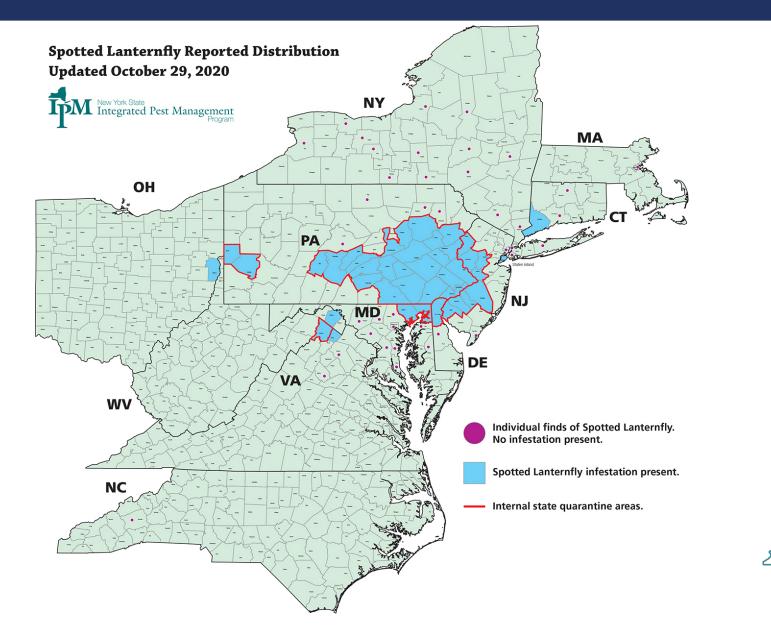
Department of Agriculture and Markets

### Unintended Transport



Photos: PA Dept of Agriculture





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#### §142.2 Quarantine area

- The quarantine area consists of the following counties:
- (a) in the Commonwealth of Pennsylvania, the Counties of Berks, Bucks, Carbon, Chester, Dauphin, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Philadelphia, and Schuylkill;
- (b) in the Commonwealth of Virginia, the County of Frederick;
- (c) in the State of New Jersey, the Counties of Hunterdon, Mercer, and Warren;
- (d) in the State of Delaware, the County of New Castle;
- (e) in the State of Maryland, the County of Cecil.
- Current through March 15, 2020



#### §142.3 Regulated articles

- §142.3 Regulated articles.
- The following articles are regulated when originating from, located within, or moved through the area as described in Section 142.2 of this Part:
- (a) Any living life stage of the Spotted lanternfly.
- (b) Brush, debris, bark, or yard waste.
- (c) Landscaping, remodeling, or construction waste.
- (d) Logs, stumps, or any tree parts.
- (e) Firewood of any species.
- (f) Packing materials, such as wood crates or boxes.
- (g) All plants and plant parts including but not limited to nursery stock, green lumber, fruit and produce and other material living, dead, cut, fallen (including stumps), roots, branches, mulch, and composted and uncomposted chips.
- (h) Outdoor household articles, including, but not limited to, recreational vehicles, lawn tractors and mowers, mower decks, grills, grill and furniture covers, tarps, mobile homes, tile, stone, deck boards, mobile fire pits, and any equipment associated therewith, and trucks or vehicles not stored indoors.
- (i) Any other article, commodity, item, or product that has or that is reasonably believed to be infested with or harboring Spotted lanternfly.

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# §142.4 Restrictions on movement of regulated articles originating from or moved through a quarantine area, into the State of New York

- (a) No person shall move a regulated article that has originated from a quarantine area into the State of New York unless:
- (1) such regulated article is accompanied by a certificate of inspection or will be moved into the State of New York for experimental or scientific purposes, on such conditions and under such safeguards as may be prescribed in writing by the Department; and
- (2) such regulated article has been loaded, handled, or shipped in a manner reasonably designed to prevent it from becoming infested with or harboring Spotted lanternfly; and
- (3) the regulated article is accompanied by a waybill that sets forth its point of origin and intended destination.
- (b) No person shall move a regulated article that has not originated from a quarantine area but has moved through a quarantine area, into the State of New York unless:
- (1) such regulated article is accompanied by a waybill that sets forth its point of origin and intended destination; and
- (2) such regulated article has moved directly through a quarantine area without stopping except for refueling and traffic conditions.

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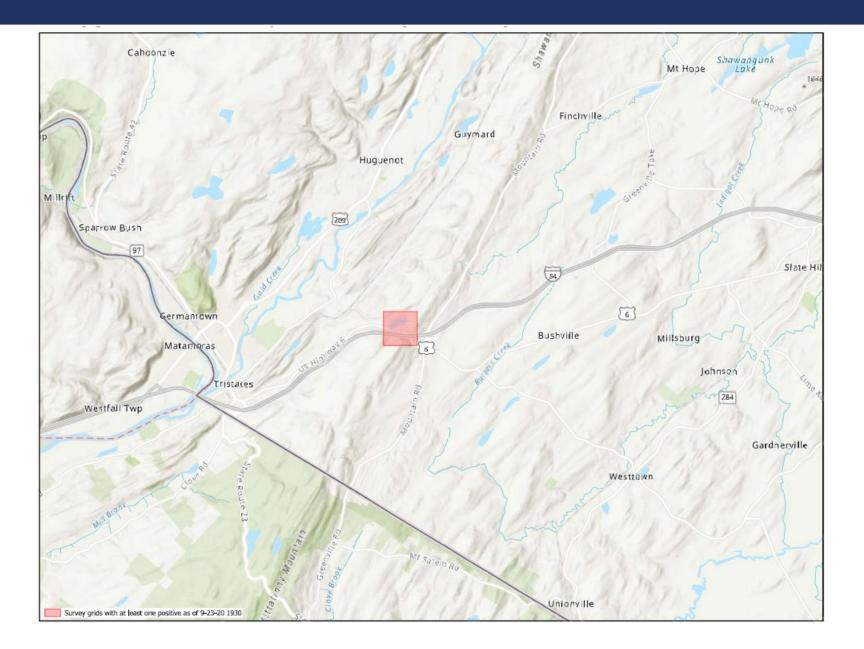
Statewide Positive Traps (7 total)





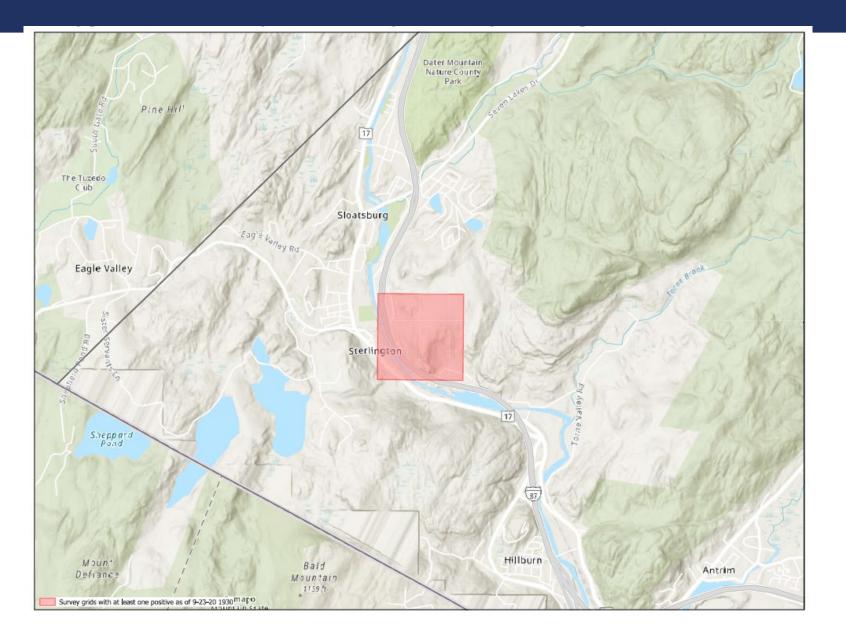
#### Staten Island Positive Traps





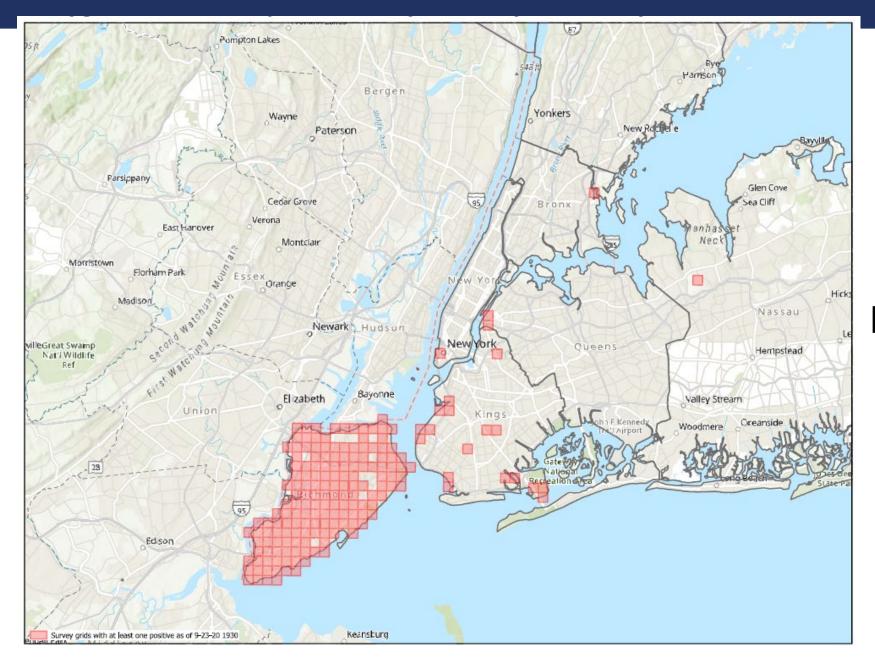
Port Jervis (Orange County) Positive Grid





Sloatsburg (Rockland County) Positive Grid





#### Metro New York Positive Survey Grids



## To Report a Sighting of Spotted Lanternfly in New York State



#### SLF Reporting <u>spottedlanternfly@agriculture.ny.gov</u>

