

# Spotted Lanternfly: A Threat to *Vitis* spp.



*Wine Stopper*

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# Why the concern over SLF?



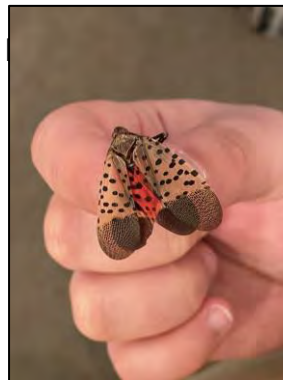
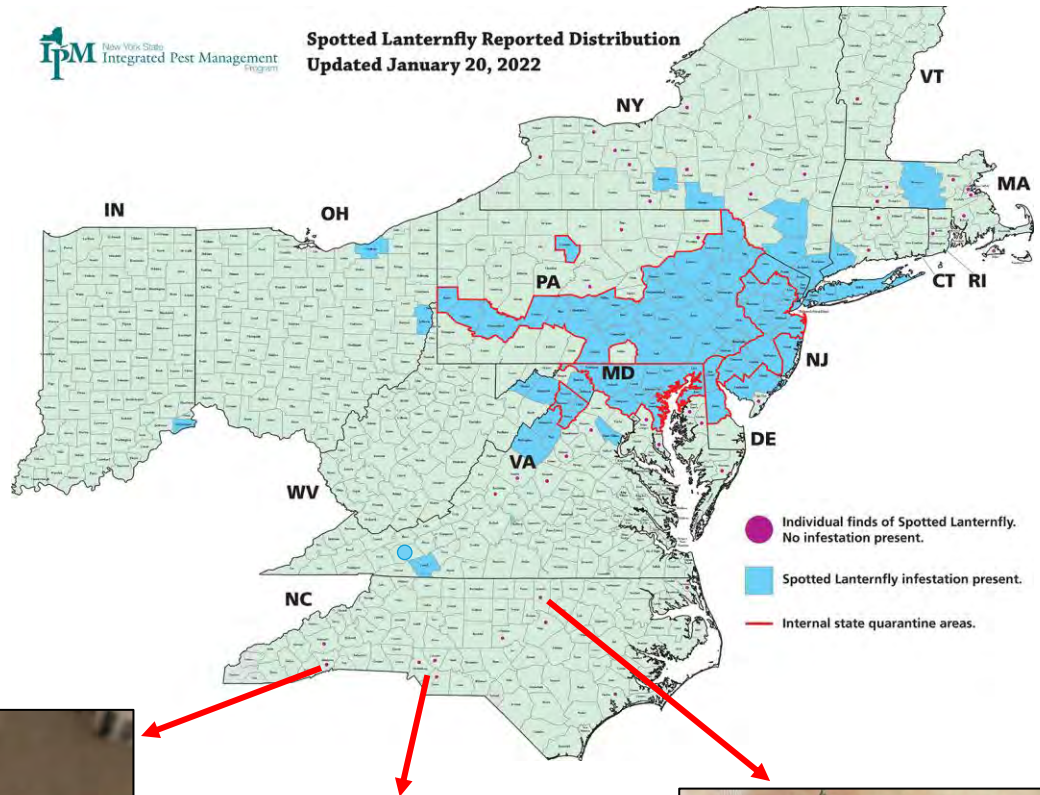
To date, >70 species of plants have been identified as hosts of spotted lanternfly.

**Grapes are the only agricultural commodity affected so far.**

# What is spotted lanternfly?

## *Lycorma delicatula* (White, 1845)

- Planthopper; member of the family Fulgoridae
- Phloem-feeder
- Univoltine
- Native to parts of Asia (northern China, Vietnam, Bangladesh)
  - First detected in Pennsylvania in 2014
- Currently in MA, CT, DE, MD, IN, OH, PA, NJ, NY, VA, and WV
  - 10 interceptions in NC; mostly dead hitchhikers
  - Established populations bordering NC
- Very broad host range





# Why the concern over SLF?

## Hosts:

Apples

Birch

Cherry

Grapes

Hops

Lilac

Maple

Poplar

Stone fruits

Roses

Tree-of-heaven

Walnut

Willow

Chinaberry

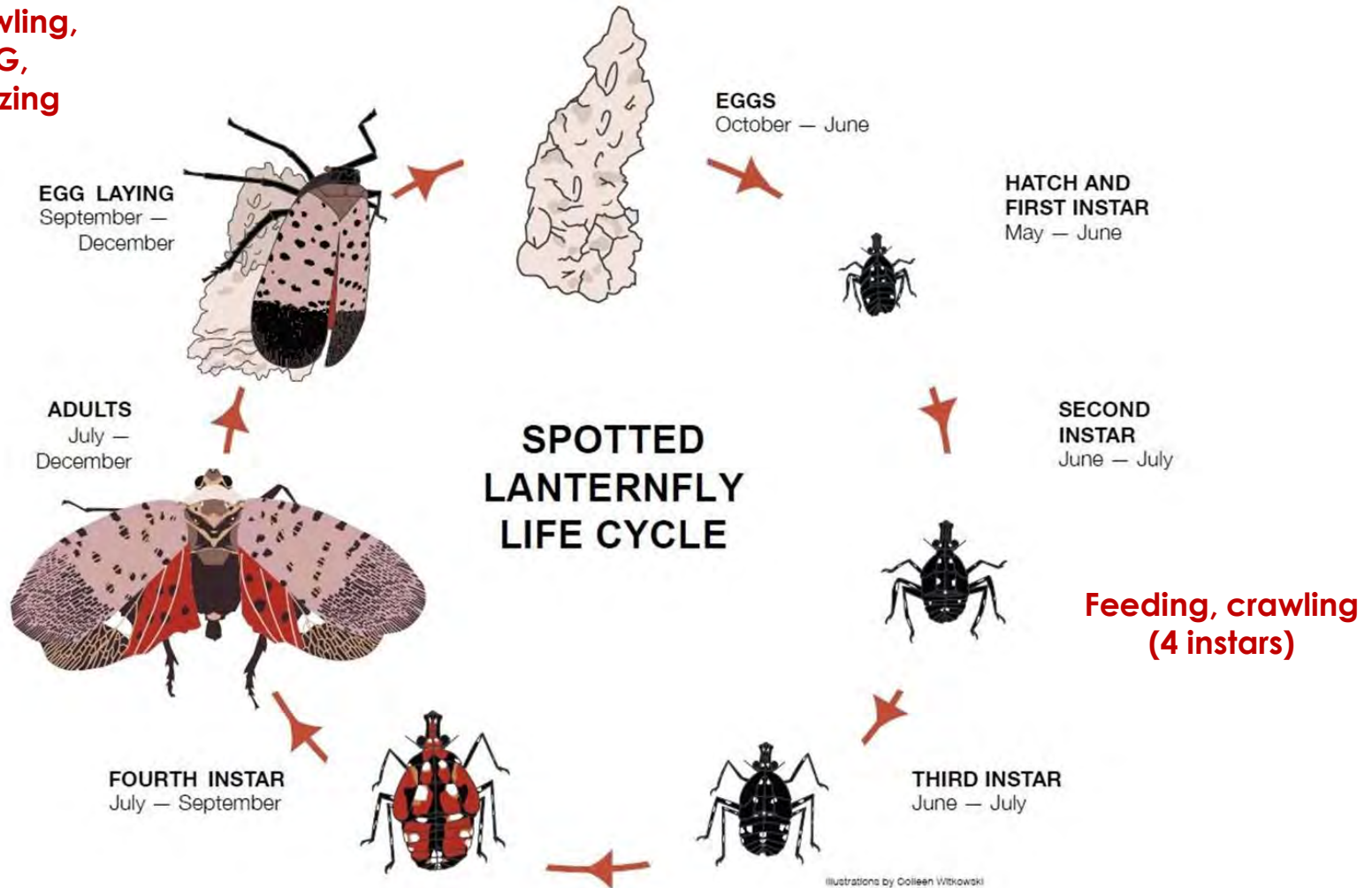


**Hitchhiking SLF will likely have something  
to eat wherever they stop**

# What is spotted lanternfly?

Feeding, crawling,  
**SWARMING**,  
mating, freezing

**ANY Flat Surface**



Please note these dates are based on Pennsylvania and experts predict SLF will hatch 30-60 days earlier in North Carolina due to our warmer climate.

# What is spotted lanternfly?



**Egg Mass**  
(September-June)

**ANY Flat  
Surface**



**Early Nymph**  
(April-June)



**Late Nymph**  
(June-  
September)

**Feeding, crawling  
(4 instars)**



**Adult**  
(July-December)

**Feeding, crawling,  
SWARMING,  
mating, freezing**



# Why the concern over SLF?



Honeydew

# Honeydew and Consequences



Honeydew Buildup



Sooty Mold



Fungal Mats



# Aggregations and Swarms



# Threat to Vineyards

- Impacts of SLF feeding can include ...
  - Reduced sugar content
  - Weakened cold hardiness
  - Lower yields
  - Potential vine death
- Swarming season coincides with the month before harvest

- Vineyards reporting **yield losses and vine death** from SLF (PSUE):
  - >80% of growers managing for SLF with **30% reporting damage** (n=48)
  - Average number of insecticide applications went from **4 to 14** in just two years (2016 to 2018)
  - Average insecticide costs per acre went from **\$54 to \$147**





# Swarm Season Overlaps with...

## Fall Weddings



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## Fall Weddings

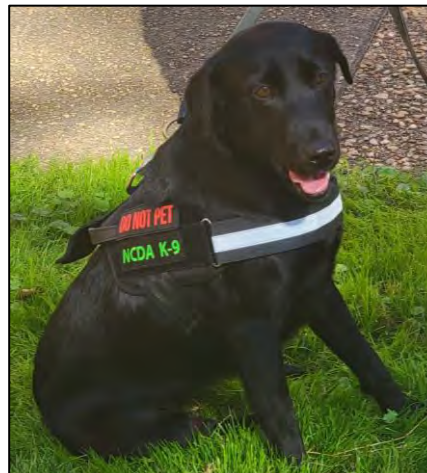




# Protecting Vineyards from SLF

We have an emergency response plan in place to respond to any confirmed populations

- Report suspect SLF to [badbug@ncagr.gov](mailto:badbug@ncagr.gov)
  - Please take a photo and include a size reference (like a coin) if possible
- NCDA&CS Early Detection programs
  - Seeking volunteers for trapping
  - SLF Detector Dogs
- Pick up a Vineyard Preparedness Kit or other outreach items today



Have you seen  
the spotted  
lanternfly?



See it.



Snap it.



Report it.



[badbug@ncagr.gov](mailto:badbug@ncagr.gov)

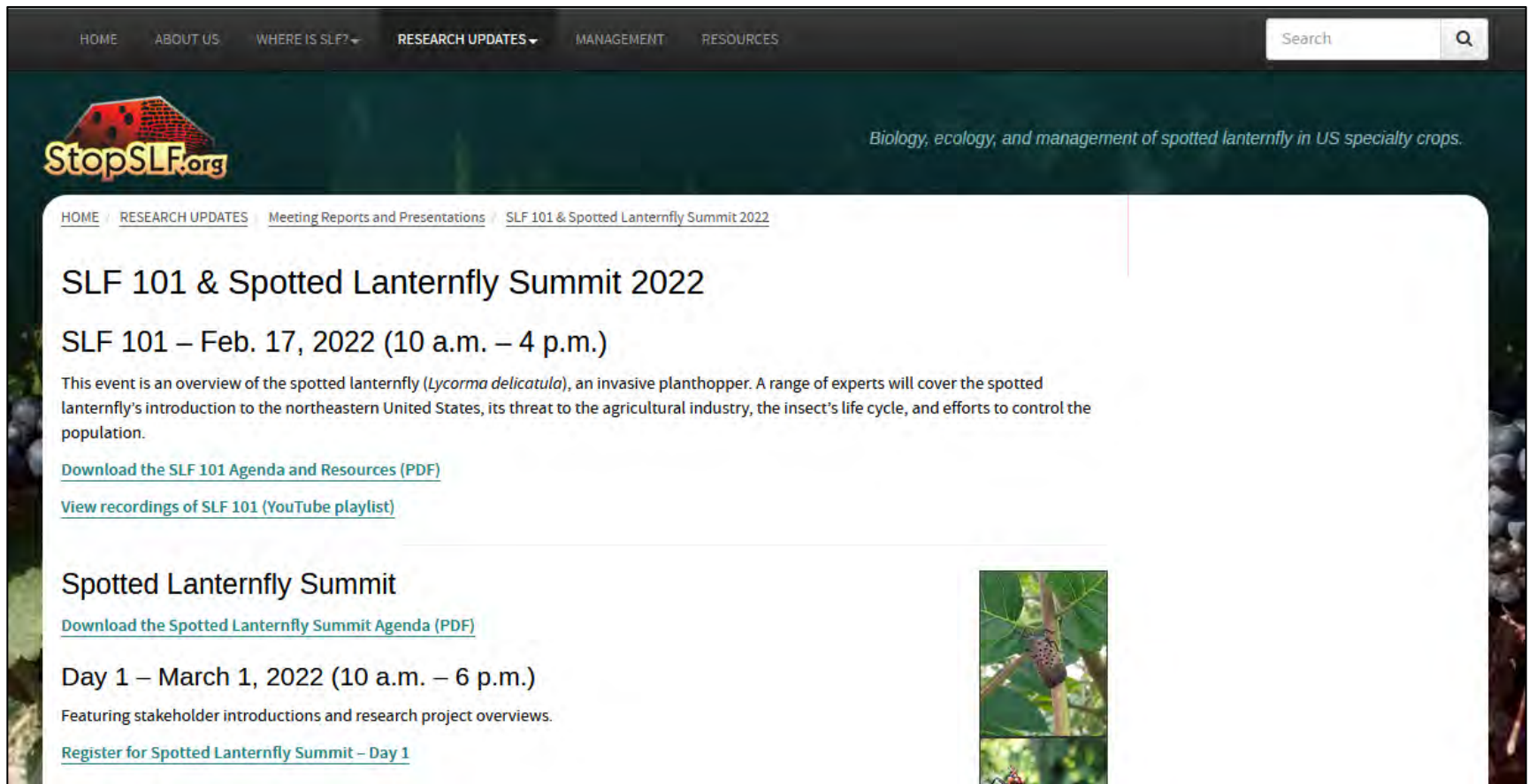


Steve Troxler  
Commissioner of Agriculture

# More Updates and Research

- 2022 Spotted Lanternfly Summit & SLF 101

Visit **StopSLF.org** for recordings and additional resources



The screenshot shows the StopSLF.org website. The header includes navigation links: HOME, ABOUT US, WHERE IS SLF?, RESEARCH UPDATES, MANAGEMENT, and RESOURCES. A search bar is located on the right. The main content area features the StopSLF.org logo and the tagline "Biology, ecology, and management of spotted lanternfly in US specialty crops." Below this, a breadcrumb trail reads: HOME / RESEARCH UPDATES / Meeting Reports and Presentations / SLF 101 & Spotted Lanternfly Summit 2022. The main heading is "SLF 101 & Spotted Lanternfly Summit 2022". The event details are: "SLF 101 – Feb. 17, 2022 (10 a.m. – 4 p.m.)". A paragraph describes the event as an overview of the spotted lanternfly (*Lycorma delicatula*), an invasive planthopper, covering its introduction to the northeastern United States, its threat to the agricultural industry, its life cycle, and control efforts. Two links are provided: "Download the SLF 101 Agenda and Resources (PDF)" and "View recordings of SLF 101 (YouTube playlist)". Below this, the "Spotted Lanternfly Summit" is announced for "Day 1 – March 1, 2022 (10 a.m. – 6 p.m.)", featuring stakeholder introductions and research project overviews. A link to "Register for Spotted Lanternfly Summit – Day 1" is provided. A small image of a spotted lanternfly on a branch is visible on the right side of the page.

HOME / RESEARCH UPDATES / Meeting Reports and Presentations / SLF 101 & Spotted Lanternfly Summit 2022

## SLF 101 & Spotted Lanternfly Summit 2022

SLF 101 – Feb. 17, 2022 (10 a.m. – 4 p.m.)

This event is an overview of the spotted lanternfly (*Lycorma delicatula*), an invasive planthopper. A range of experts will cover the spotted lanternfly's introduction to the northeastern United States, its threat to the agricultural industry, the insect's life cycle, and efforts to control the population.

[Download the SLF 101 Agenda and Resources \(PDF\)](#)

[View recordings of SLF 101 \(YouTube playlist\)](#)

### Spotted Lanternfly Summit

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Featuring stakeholder introductions and research project overviews.

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# Questions?



Contact Amy Michael at [amy.michael@ncagr.gov](mailto:amy.michael@ncagr.gov) or (919)707-3749

Visit [StopSLF.org](http://StopSLF.org) for most up-to-date information about this pest