

Spotted Lanternfly

A Overview by the Monmouth County Park System Matt Ruding, September 2021

History

- Discovered in Berks County in September 2014
- Estimated arrival in PA sometime in 2012
- Native to parts of Asia
- Recently introduced to South Korea







Feeds in swarms



Excretes honeydew

Spotted Lanternfly

Feeds on more than 70 plants, including:

Grape



Apple



Peach



Black Walnut



Maple



Sycamore



**Staghorn
Sumac**



Hops



Vegetables



Blueberry





What is at risk?

\$802 million in tree fruit

\$113 million in grapes

\$110 million in small fruit

\$2.6 billion in ornamental plants

Nationwide: over \$18 billion!



What is at risk?

Hardwood industry worth **\$10s of billions**

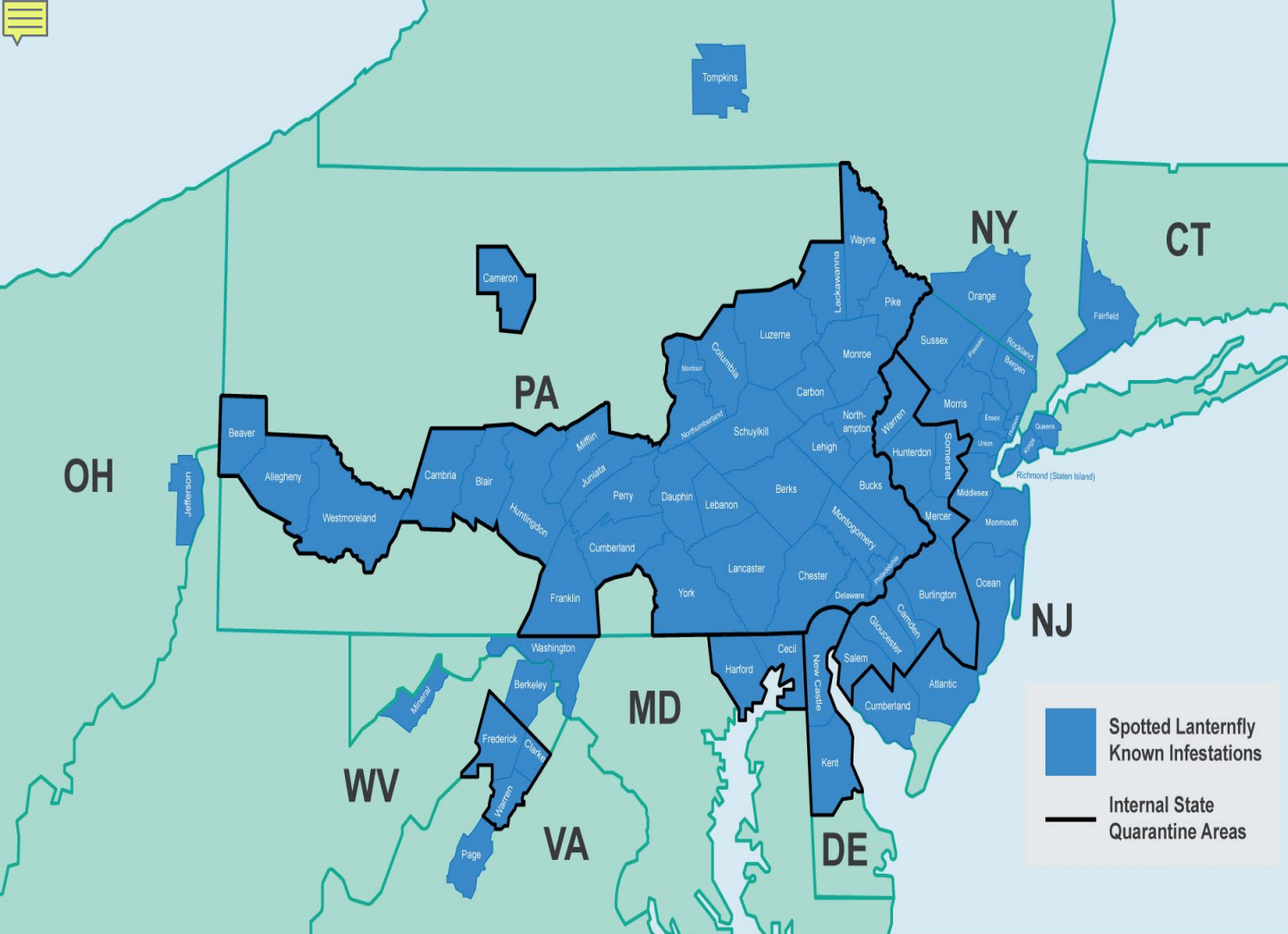
State and national parks

Shipping

Processing

Packaging

Other related services



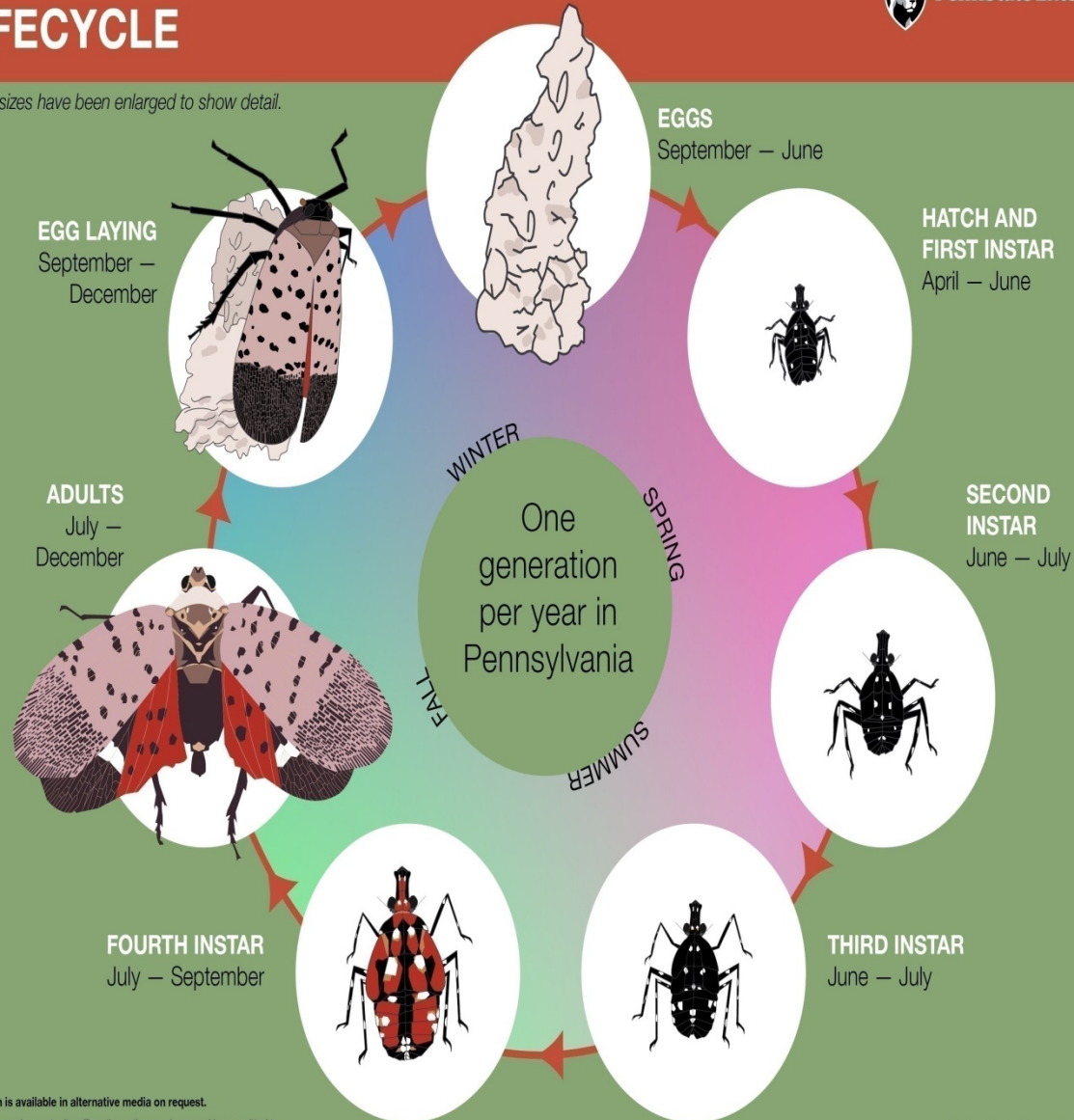
Spotted Lanternfly Infestations and Quarantine Areas (March 2021)

For the latest quarantine information for a state, check the state's department of agriculture website



SPOTTED LANTERNFLY LIFECYCLE

Insect sizes have been enlarged to show detail.



This publication is available in alternative media on request.

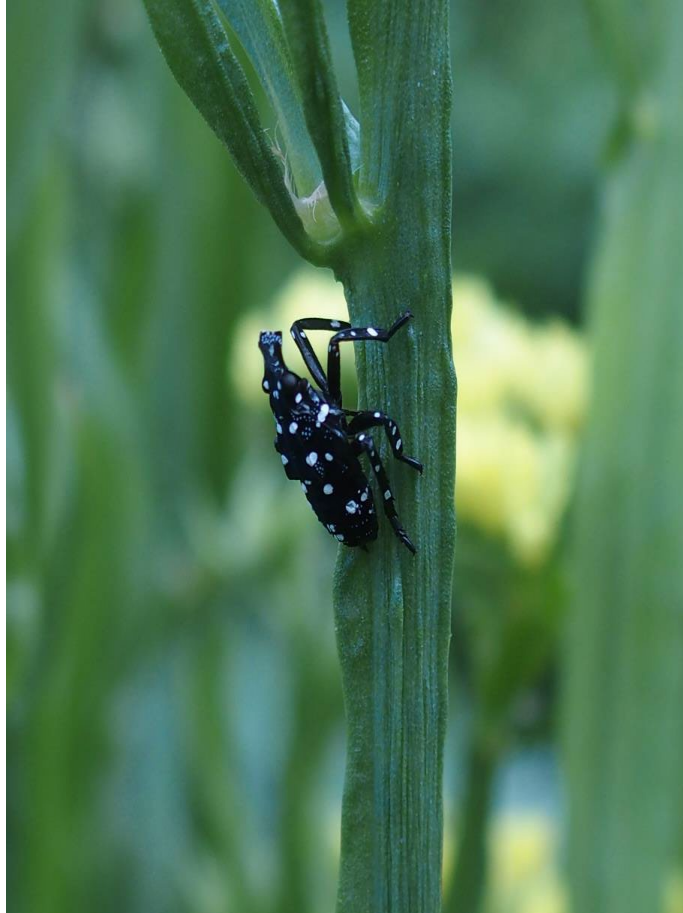
Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.

Illustrations by Colleen Witkowski

Produced by Ag Communications and Marketing

© The Pennsylvania State University 2018

CODE 5506 PEV3/19.pdf



First to Third Instar:
April through July



Fourth Instar:
July through September



Adults:
July through December



Egg Laying:
September through December



Swat or smash as many as you can!



Chip woody debris (1-inch chips)





Before moving equipment and supplies, inspect for insects and egg masses.



Scrape and destroy egg masses.

Egg Masses

- Columns of eggs
- 30 – 50 eggs per mass
- Overall length: usually about an inch





Find the egg masses.





Find the egg masses.





Find the egg mass.





Find the egg mass.





Find the egg masses.





Find the egg masses.



Spotted Lanternfly Management

- Tree banding/ Circle Traps
- Trap tree method using tree-of-heaven
- Insecticides –
Dinotefuran/Bifenthrin





Spotted Lanternfly Management: Tree Banding



Spotted lanternfly and tree-of-heaven



Spotted Lanternfly Management: Trap Tree Method



1. Manage tree-of-heaven on the property.
2. Treat tree-of heaven (the traps trees) with systemic pesticide.
3. Spotted lanternfly feed on the trap trees and die.

Visit

<https://extension.psu.edu/spotted-lanternfly> for information on identifying tree-of-heaven and using the trap tree method.





Source Information

Rutgers University

Penn State University

For additional information

<https://www.nj.gov/agriculture/divisions/pi/prog/pests-diseases/spotted-lanternfly/>