

Spotted Lanternfly

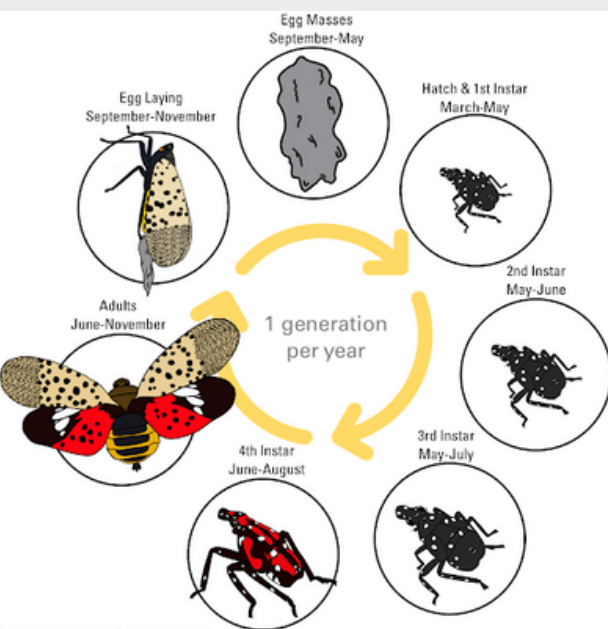
Scouting Guide

What is spotted lanternfly?

Spotted lanternfly (SLF) is an invasive planthopper native to Asia. Like other planthoppers, SLF uses its piercing-sucking mouthparts to feed on sugars being transported in the host plant's vascular system. While it has been found in the United States since 2014, SLF was first recorded in North Carolina in 2022. SLF feeds on over 100 plant species, including multiple agriculturally important plants, but its preferred host is tree-of-heaven, another invasive species. SLF is considered an agricultural, ornamental, and nuisance pest as it often congregates in large numbers and excretes a sticky substance that attracts stinging insects and allows mold to grow.



Adult spotted lanternfly
Photo By: Emelie Swackhamer, Penn State University, Bugwood.org.



Prepared by Abby Ratcliff (NC State Extension)

Where to look:

Egg masses can be attached to almost any surface, such as a car's wheel well or a tree trunk. To help prevent the spread of SLF, check your vehicles before leaving an infested area. Nymphs are most likely to be found on new, green growth on plants while adults and some late nymphs can be found on hard, woody plant material. Find tree-of-heaven ID help at [NC State Extension Forestry](#).

What to look for and when:

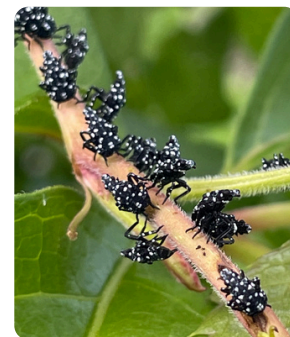
SLF looks drastically different at each life stage:

- **Egg Masses:** roughly rectangular, gray-brown patches of a mud-like substance attached to surfaces
- **Early Nymphs:** wide, black body with white spots and narrow head
- **Late Nymphs:** wide, mainly red body with black and white markings and narrow head
- **Adults:** a large insect (~1 inch long), light gray wings with black dots folded like a tent over the body, a second set of bright red wings folded underneath

Because each life stage is so distinctive, it is important to look for the right stage at the right time (left).



SLF egg masses on a tree
Photo By: Emelie Swackhamer, Penn State University, Bugwood.org.



Early nymphs feeding on a vine. Photo By: Delaney Serpan, NC State University



Later nymph feeding on tree of heaven
Photo By: Richard Gardner, Bugwood.com

What to do if you find spotted lanternfly:

- If you're outside of a known infestation: report it immediately using the [NCDA's SLF Public Report Form](#).
- To protect your plants and help stop the spread: find management recommendations at [NC State Extension Forestry](#).

To report spotted lanternfly: <https://survey123.arcgis.com/share/f99f11163d5b4fdd935d4a95369e55d6>

To find your NC Forest Service County Ranger: <https://www.ncagr.gov/divisions/nc-forest-service/contacts>

To find your county's NC State Extension Agent: <https://www.ces.ncsu.edu/directory/>

For more information, including current range and management recommendations: <https://forestry.ces.ncsu.edu/forestry-health/spotted-lanternfly/>