

Spotted Lanternfly - See the Signs



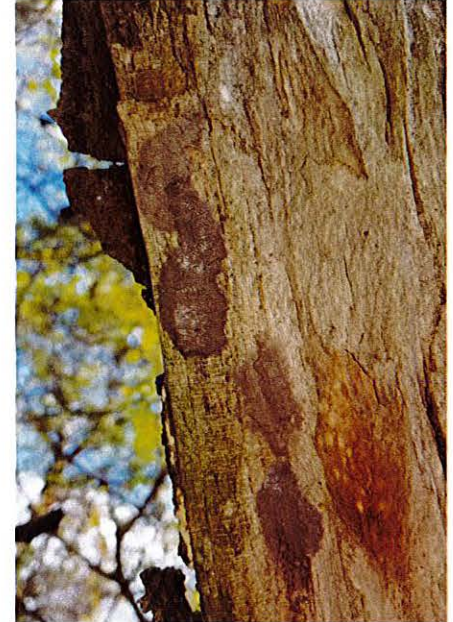
Nymph Stage

1st instar - April to June
2nd & 3rd - June to July
4th instar - July to Sept (red)



Adult Stage

July – December



Egg Masses

September to April
(unhatched)



Staghorn Sumac

Rhus typhina

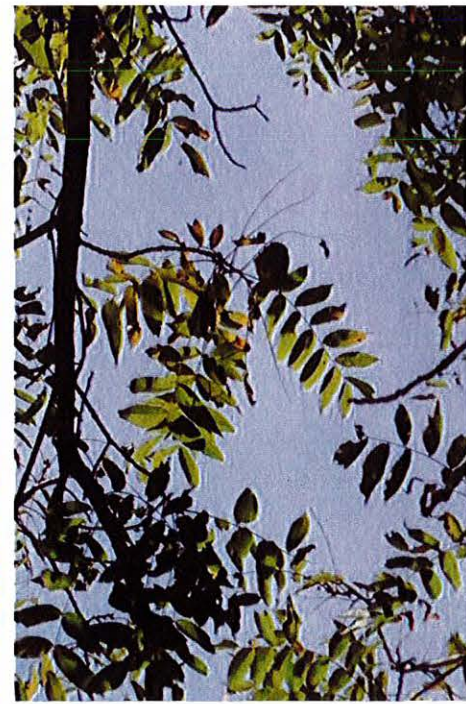
- Toothed leaf edge
- Upright red, fuzzy fruit
- Twigs are fuzzy
- Smooth bark
- Horizontal lenticels on bark
- Grows in clonal colonies



Tree of Heaven

Ailanthus altissima

- Primary host
- Smooth leaf edge
- 1-2 teeth at leaf base
- Strong odor (burnt peanut butter)
- V or heart-shaped leaf scar
- No terminal bud
- Papery seed
- Light gray/brown bark
- cantaloupe bark pattern



Black Walnut

Juglans nigra

- Toothed leaf edge
- Large round fruit
- "Monkey-faced" leaf scar
- Chambered dark pith
- dark, rough diamond pattern bark

2019 SLF Pesticide Recommendations for Homeowners

Active ingredient	Mode of exposure	Available products	Legal use	Activity against SLF	Residual activity
bifenthrin	contact	Talstar P	Ornamental and landscape plants and trees	Excellent	Excellent
carbaryl	contact	Garden Tech Sevin Ready-to-Spray Bug Killer (note: new formulation is sold with the active ingredient zetacypermethrin)	Vegetable and ornamental plants and trees under 10 ft tall	Excellent	Good
dinotefuran	systemic/contact	Safari, Transtect	Ornamental and landscape plants and trees	Excellent	Excellent
malathion	contact	Spectracide Malathion Insect Spray	For use on flowers and bushes, fruit, and vegetables	Excellent	Poor
Neem oil*	contact	Bonide Neem Oil	Flowers, ornamental trees and shrubs, fruit, nuts and vegetables.	Good	Poor
Natural pyrethrins	contact	Garden Safe MultiPurpose Garden Insect Killer, Natria Insect Mite and Disease Control	Vegetables, ornamentals, trees, shrubs and flowers	Good	Poor
Insecticidal soaps*	contact	Garden Safe Insecticidal Soap	Vegetables, fruit trees, ornamentals, shrubs. flowers and gardens.	Good	Poor
spinosad*	systemic	Bonide Captain Jack's Deadbug Brew	Outdoor ornamentals, fruit and vegetables.	Good	Poor
tau fluvalinate, tebuconazole	contact/systemic	BioAdvance 3 in 1, Insect, Disease and Mite control	Non-edible plants only, ground covers, vines, ornamentals, shrubs and trees	Excellent	Good
Zetacypermethrin	contact	Amdro Quick Kill Outdoor Insect Killer Concentrate	Lawns, trees and shrubs, roses and flowers.	Excellent	Excellent



Spotted Lantern Fly (adult)

The following is an article about the Spotted Lantern Fly (SLF), an invasive insect that is just starting to arrive in Watchung. It can (and will) do a lot of damage to our trees and shrubs. Scroll down to see 6 practical steps you can take to keep them from damaging your property.

Also below is a 2 minute video on the SLF's preferred tree, the Tree of Heaven. These trees, as well as the insects, should be destroyed to prevent an infestation. Follow these directions carefully.

<https://www.invasivespeciesinfo.gov/terrestrial/plants/tree-heaven>

Residents here in the Upper Raritan River watershed are at the battlefield for stopping the spread of the spotted lanternfly – a species native to Asia. The spotted lanternfly (*Lycorma delicatula*) is not a species of “fly” at all; it is actually a planthopper that feeds on the sap of trees and grapevines, often resulting in great damage. The spotted lanternfly was first introduced to Berks County, PA, from Asia in 2014 and has since been rapidly spreading.



Egg mass (Sept – June)

Like most invasive exotic species, they have certain key ecological traits: they have few natural predators in their new home; they are very prolific and reproduce quickly; and they are flexible in their ecological requirements such as food, habitat, and temperature

tolerances. Many species invasive to New Jersey come from Europe and cooler regions of Asia because the climate in those places is like ours.



1st to 3rd Instars (May – July)

Once established, the spotted lanternfly can wreak havoc on our native species, which have never had the chance to meet them and evolve to compete or defend themselves against these newly introduced species. Our regions' forest ecosystems and agricultural economy are at great risk from spotted lanternfly and other invasive plants and animals and, in fact, invasive species cost our economy billions of dollars each year. The spotted lanternfly attacks fruit trees (think orchards), grapevines (think vineyards), and our native hardwood and pine trees (the list is at 70+ species and it keeps growing). Its preferred food is another prolific invasive – the tree-of-heaven or *Ailanthus* (*Ailanthus altissima*). We are still learning about the impacts and control of this new insect in our region but we do know we need to take measures now to stop its spread.



4th Instar (July – Sept)

Here is what YOU can do to help stop the spread of spotted lanternfly:

- [Learn](#) how to identify spotted lanternfly in its various life stages and how to distinguish its preferred host, tree-of-heaven or *Ailanthus*, from beneficial native species such as sumacs and black walnut.
- Kill the spotted lanternfly when you find it. If it is just a few individuals that is easy but when you have an invasion you will need to trap and treat them. None of us enjoy

killing things, but this species will result in higher mortality among our native tree species if left unchecked.

- Control their favorite food, tree-of-heaven or Ailanthus, using techniques available [here](#). Just cutting them down will not work because they will sprout many more individual trees from their roots, so be sure to follow this link. Leave a couple of “[trap trees](#)” to attract the majority of spotted lanternfly on your property, then trap and treat them. Homemade [circle traps](#) installed on the trunk of affected trees is one way to efficiently trap and kill spotted lanternfly.
- Find their egg cases in fall-winter, scrape them off and destroy them. Spotted lanternflies overwinter in the egg stage, so this will have a huge impact. Egg cases are grayish-brown and can resemble splotches of mud. They may be found in a variety of locations including tree trunks, cement, wood, and metal surfaces. [Learn more](#) about what they look like and how to remove them so there will not be a hatch of baby spotted lanternfly next spring.
- Your car and other vehicles can spread the lanternfly. During spring, summer and early fall, do not park your car under trees to avoid “hitchhikers” and adults depositing eggs. If you must park there, check your vehicle before departing for an area outside the quarantine zone.
- Plant native species around your home. That includes trees, shrubs, and herbaceous plants. Avoid non-native, exotics. Learn more about native plants and where you may purchase them [here](#).

In the Upper Raritan watershed, Somerset and Hunterdon counties are considered under quarantine for spotted lanternfly and there is no need to report sightings. For additional resources on identifying, reporting, and controlling spotted lanternfly and tree-of-heaven visit the [NJ Department of Agriculture Spotted Lanternfly Program](#).