

# Spotted Lanternfly Frequently Asked Questions

Get the answers to the most frequently asked questions about spotted lanternfly, including their damage to plants, how to manage them on your property, and what you can do to help!

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## Q. What is a spotted lanternfly? Where did it come from?

A. The spotted lanternfly is an invasive planthopper (a type of insect) in the U.S., first found in Berks County, PA in 2014. It is native to certain parts of Southeast Asia.

## Q. Are they a threat here?

A. Spotted lanternflies feed on the sap of a plant and when there are high populations of them, they can cause significant damage. They feed on over 70+ plants, including important forestry and agricultural crops. The most damage to-date has been observed in vineyards, ornamental nurseries, and people's backyards.

## Q. Are spotted lanternflies dangerous to pets?

A. Spotted lanternflies do not bite or sting humans or pets. No known toxins have been found in spotted lanternfly to-date. Pets are naturally curious and often ingest things they shouldn't (especially when unsupervised), meaning there's a possibility your pet will try to taste one. The safest course of action is to keep pets away from living or dead SLF. If the pet does ingest anything outside their normal diet, or is showing signs of injury or illness, consult with a veterinarian right away.

## Q. Do spotted lanternflies kill trees and plants?

A. To-date, we have only seen spotted lanternfly kill sapling trees, sumac, grapevines, and tree-of-heaven. Healthy and established ornamental trees have not been recorded to have died from spotted lanternfly, though canopy dieback and plant health decline has been observed, particularly on some of spotted lanternflies favorite hosts including black walnut and maple. Additionally, sooty mold has been recorded to kill groundcover plants, particularly immediately below large populations of spotted lanternfly in trees. This is a continued area of research.

## Q. Should I treat my tree?

A. There is no catch-all answer to this question, though it is frequently asked. It depends on many factors including what type of tree you have, how healthy it is, and the level of infestation you have. We have developed guides to help you through this decision – see here for more information: [Deciding If and When to Treat for Spotted Lanternfly on Ornamentals](#).

## Q. Why are there so many spotted lanternfly on my building?

A. In the late summer and fall, you may see adult spotted lanternfly on the side of your building, telephone poles, or other structures. While we are still working to research their behavior, this is most likely driven by spotted lanternfly being attracted to tall objects either to have a meal or use as a launching post. Additionally, they may be attracted to the heat of a building. Spotted lanternfly is not a structural pest and we generally do not recommend treating buildings for this insect. Without a food source, they will die.

## Q. Why isn't this insect a problem in Asia?

A. Where spotted lanternfly is native, it has natural predators that keep its populations at steady levels, so it is not considered a pest at the same level it is here in the U.S. Here, there are very few predators and many suitable plant hosts for spotted lanternfly, making its population level very problematic.

## Q. Do I need to scrape egg masses into a container with rubbing alcohol, or can I just scrape them on to the ground?

A. Egg masses need to be permanently submerged in rubbing alcohol to kill them. Eggs that have been scraped on to the ground can still hatch, so it is important to follow all recommended steps of egg removal!

## Q. How do I identify a spotted lanternfly if I see one? What do I look for?

A. Spotted lanternflies go through five stages of growth after hatching from eggs. The first four stages are called nymphs, which are incapable of flight. The young nymphs are black with bright white spots and are roughly the size of a pencil eraser. The next stages of growth are similar, but the nymphs become larger. The fourth stage of spotted lanternflies, prior to adulthood, is vibrantly red with distinct patches of black and equally distinct bright white spots. The adult spotted lanternfly is about 1" long. Adults have grey wings with black spots. When the spotted lanternfly opens its wings, it reveals a bright red underwing. Spotted lanternflies live through the winter only as eggs. Adults lay eggs in masses in the late fall on trees, under bark, posts, lawn furniture, cars, trailers, outdoor grills, and on many other surfaces.

### Additional Resource

- [Spotted Lanternfly: What to Look For](#)

## Q. I think I killed/caught a spotted lanternfly – what do I do with it now?

**A.** If you find a spotted lanternfly or a suspicious looking egg mass in a location where it is not known to exist, you should try to collect it and put it into a container filled with alcohol (rubbing alcohol, hand sanitizer, etc.) to kill and preserve it, or at least take a good picture of it. Report your sighting online to the Pennsylvania Department of Agriculture or call Penn State Extension at 1-888-4BADFLY (1-888-422-3359). Your discovery could add additional municipalities to the quarantined area. If you find any life stage of spotted lanternfly in a municipality where it is already known to exist, you should try to destroy it.

## **Q. Does spotted lanternfly infest Christmas trees?**

**A.** Real trees are part of an outdoor ecosystem, thus there is always a chance that insects may be brought indoors with a tree. Although it is unlikely spotted lanternfly eggs will be on Christmas trees, if they were to hatch indoors the nymphs pose no threat to humans or animals, and will die quickly. Christmas Tree growers follow integrated pest management practices to minimize such threats. If consumers are concerned, they are encouraged to inspect the tree prior to purchase. Spotted lanternfly egg masses are visible on the bark if present and can be easily removed.

## **Q. Can I prevent spotted lanternflies from getting on my property?**

**A.** No. Spotted lanternfly can not be prevented from coming on to your property, particularly as adults when they become more mobile. However, their presence alone does not indicate that you will have plant decline on your property. In some cases, the insects may just be attracted to your building. They do not cause structural damage and may just be seeking this out for warmth, height, or other unknown reasons. The best thing any property owner can do is become informed about spotted lanternflies. In addition, you can reference our [Spotted Lanternfly Management Guide](#) for what management tactics to use, on which trees, and when.

## **Q. What happens if my township/county/borough gets quarantined because of the spotted lanternflies?**

**A.** The quarantine for spotted lanternflies is an important legal designation. The citizens of municipalities under a quarantine order can follow simple directions to ensure that each citizen complies with the law. The Pennsylvania Department of Agriculture quarantine order directs citizens and municipal authorities to follow guidelines to prevent the movement of spotted lanternflies at any stage of development. These guidelines direct citizens to inspect all wood and vegetation that might leave the quarantined municipality. In addition, these guidelines direct citizens to inspect vehicles, trailers, and other mobile equipment prior to moving such equipment out of the quarantine.

## **Q. Why is there a quarantine for spotted lanternflies in some places and not others?**

**A.** The Pennsylvania Department of Agriculture conducts ongoing and careful surveys of all of Pennsylvania. Department crews survey for evidence of spotted lanternflies using detailed visual and trapping methods. Once the department's survey crews find evidence of spotted lanternflies in an area, the evidence is scientifically analyzed by both Pennsylvania Department of Agriculture entomologists and by scientists from the United States Department of Agriculture. After this process, a township, borough, or city can be quarantined by the state department of agriculture.

## **Q. How does the spotted lanternfly feed? What is honeydew?**

**A.** The spotted lanternfly feeds through the bark using a piercing-sucking mouthpart tapped into the plant like a straw. When it feeds, it excretes honeydew, or sugary water on and around its feeding site. This sugary substance encourages the growth of black sooty mold, which is not harmful to humans, but can damage plants and make outside recreation areas unusable.

## **Q. Does the spotted lanternfly bite or sting?**

A. No, the spotted lanternfly does not bite or sting.

## Q. Does the spotted lanternfly have natural enemies here?

A. Some common insect predators such as spiders and praying mantises have been found to attack spotted lanternfly. Recently, birds have also been found preying on spotted lanternfly. More research is currently being carried out, but these predators alone are unlikely to reduce or eliminate spotted lanternfly from an area.

## Q. What is being done?

A. Both the U.S. and Pennsylvania Departments of Agriculture are working on control and eradication measures in the quarantine zone and in new areas of detection. Primarily, this involves removing their preferred host (an invasive plant called tree-of-heaven), and leaving "trap trees", which are trees baited with insecticides to kill the spotted lanternflies. Additionally, Penn State and other Universities and institutions are currently researching this insect to understand more about its biology and behavior and find new and improved ways to control it.

## Q. Are there control options that can be undertaken by residents?

A. There are several control options for residents. In the fall and winter, you can scrape or crush egg masses. In the spring, you can use tree traps to capture the nymphs crawling up the trees to feed. For both nymphs and adults, insecticides can be used, but must be used carefully and legally. Find out more information by downloading our [Resident's management guide](https://extension.psu.edu/spotted-lanternfly-management-for-residents) (<https://extension.psu.edu/spotted-lanternfly-management-for-residents>).

## Q. How are they spreading so fast?

A. Because spotted lanternflies lay eggs on almost any surface, including vehicles like rail cars and trailers, as well as outdoor equipment and patio furniture, the pest is easily spread by people. Before you travel within or out of the quarantine zone, check your belongings, yourself, and your vehicle for spotted lanternfly!

## Q. What about truck drivers and people making deliveries? Do they know about spotted lanternfly?

A. All businesses that are moving material within the quarantine zones or in and out of the quarantine zones in Pennsylvania are required to hold a spotted lanternfly permit. This permit ensures that the businesses and employees are checking for spotted lanternfly before they travel.

## Q. How can I help?

A. Report your sightings of spotted lanternfly using [our online reporting tool](https://extension.psu.edu/have-you-seen-a-spotted-lanternfly) (<https://extension.psu.edu/have-you-seen-a-spotted-lanternfly>), or by calling 1-888-4BAD-FLY. Make sure you are not moving any life stage of spotted lanternfly when traveling within or out of the quarantine zones. And finally, tell your friends, family, and neighbors! The more you can spread awareness about the insect, the better chance we have against fighting it!

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