



Spotted lanternfly (SLF) FAQs

1. *Has SLF been found in Oregon?*

Although SLF is not believed to be established in Oregon, the Oregon Department of Agriculture has found dead adults and a single egg mass in cargo and goods from the eastern U.S. SLF populations are known to occur in 18 eastern states. The insect was first found in Pennsylvania in 2014. The nearest known infestation of SLF to Oregon is in Chicago, Illinois, about 1,400 miles from Oregon. See current range of SLF in the U.S. here: <https://tinyurl.com/SLFmap>.

2. *Will SLF attack and kill Douglas-fir and other conifers?*

Douglas-fir is not one of the recorded hosts of SLF. In the eastern U.S., it mostly feeds on deciduous trees and shrubs as well as grapes and hops. However, in South Korea, SLF has been observed feeding on and causing localized damage to pine trees.

3. *What is the risk of SLF to broadleaf trees in Oregon?*

SLF will lay eggs and feed upon a variety of trees that occur in Oregon. In particular, maples, birch, alder, walnut, oak, ash, poplar, willow, plum, cherry, peach, nectarine and apricots are all known hosts of SLF. Apart from walnut seedlings, SLF does not kill these trees. However, the damage from SLF feeding can cause injuries leading to tree decline. In urban forests, SLF can become a nuisance pest due to sticky excretions from the nymphs and adults called "honeydew" that can attract mold and other insects. Different stages of the insect feed on different plant species.

4. *What are the impacts of SLF in landscaped areas?*

Primary hosts for SLF in urban areas include tree-of-heaven (an exotic weed) and several species of broadleaf trees, like birch, maple, and willow. SLF can damage fruit crops, like grape, apple, cherry and plum. SLF feeding produces seeping wounds on trees and honeydew (sugary excretions from the insects themselves). Plant wounding can reduce the vigor and health of trees and shrubs, which can reduce their visual appeal. Unsightly black sooty mold can grow on honeydew-covered plants and surfaces like patios and decks. The growth of sooty mold can harm understory plants by blocking sunlight. Sooty mold can cause allergic reactions, like sneezing, coughing and watery eyes, in some people. Other insects, such as ants and wasps, can also be attracted to the honeydew.

5. *Does SLF pose any risk to humans, pets, or wildlife?*

Although large groups of adults and nymphs on trees and shrubs can be alarming, SLF does not sting, bite or have irritating hairs like some other insects. Research indicates that SLF can store toxic chemicals after feeding on its preferred host, tree-of-heaven, making them less appetizing to birds.

6. *What is the life cycle of SLF and how would I recognize it?*

Female SLF lay groups of eggs on a variety of surfaces. Eggs are seed-like, brown to cream-colored and are laid in groups of 30-50. The egg masses are coated with a white substance, which resembles a mud smear or lichen. After overwintering as eggs, nymphs hatch in the spring. SLF goes through four nymph stages before maturing into adults. The three younger nymph stages are black with white patches while the fourth nymph stage is red with black and white patches. Adults are mostly cream colored with dark spots except for the back pair of wings, which when exposed, have distinct red patches. Young nymphs are 1/8" (3 mm) while adults are 1" (2 cm) in length.

SLF nymphs and adults change their feeding preference over their lifespan. Older nymphs congregate on grapes and tree-of-heaven while adults congregate on tree-of-heaven and other trees, like maple. For more information on where to find SLF at different stages of its life cycle, see the ODF fact sheet on SLF.

7. *What are some of the common SLF look-alikes?*

SLF has unique body characteristics that set it apart from other insects. Few insects resemble SLF. Cinnabar moth is sometimes mistaken for SLF but it's entirely red and black, appears much earlier in the summer, and does not congregate. SLF has a piercing mouthpart for feeding on plants while cinnabar moth does not. See examples of common look-alikes here:

<https://www.aphis.usda.gov/sites/default/files/fs-slf-lookalikes.508.pdf>

8. *What do I do if I find a suspected SLF?*

Since SLF is not known to occur in Oregon, early detection is important to protect agriculture and urban landscapes. Take clear pictures of the insect, record where it was seen, and make a report using the Oregon Invasive Species Hotline. <https://oregoninvasiveshotline.org/>

9. *Do we know how SLF got to the U.S.?*

SLF is thought to have arrived in 2012 to Pennsylvania as egg masses on a stone shipment from Asia. The first population of SLF was found in 2014 in Berks County, Pennsylvania, in a wooded area of tree-of-heaven (*Ailanthus altissima*). Despite early attempts to eradicate this pest and multiple state-issued quarantines, spotted lanternfly has proved difficult to contain and now includes infestations in 18 eastern and midwestern states.

10. *How does SLF spread to new areas?*

SLF lays egg masses on a variety of surfaces including stone slabs, patio furniture, vehicles, firewood and other products. These materials, and the SLF egg masses that they carry, can be spread long distances through humans moving these items. These egg masses may be hard to detect.

11. *What is being done to prevent SLF from moving into Oregon?*

There is no federal quarantine for SLF, but the USDA Animal and Plant Health Inspection Service has an education and outreach program that aims to prevent the spread of SLF into new areas of

the United States. Several eastern states have their own quarantines on moving commodities like stone slabs and forest products that may be contaminated with SLF egg masses. Given that SLF eggs can be laid on vehicles and other movable items and be easily missed, it may only be a matter of time before it gets into Oregon. That's why some state and local government agencies are monitoring tree-of-heaven (the preferred host of SLF) as well as responding to public reports of SLF in Oregon.

12. *Are there any estimates for how soon SLF might reach Oregon?*

There is no way to know exactly how soon SLF might arrive and establish in Oregon. Since SLF eggs masses can be moved long distances on cars, trucks, trains, moving vans, and interstate commerce, a single shipment could start a new infestation in Oregon and other western states. The Oregon Department of Agriculture has confirmed cases of dead SLF adults as well as a single SLF egg mass in shipments originating from the eastern United States.

13. *Will there be a quarantine if SLF arrives to Oregon?*

The Oregon Department of Agriculture (ODA) is the agency responsible for establishing quarantines for insects and pathogens that can harm the state's agriculture and forest resources. When creating new quarantines, the ODA gathers input from agricultural and forest industries as well as the public and other interested parties. For more information on quarantines in Oregon, see <https://www.oregon.gov/oda/ippm/Pages/quarantines.aspx>

14. *What steps can I take to prepare for SLF in Oregon?*

Get familiar with what SLF looks like. Monitor SLF host plants, in particular tree-of-heaven, birch, maple, grapes and hops, for congregating nymphs and adults. Inspect vehicles and commodities coming from the eastern U.S. for SLF egg masses. Report suspect SLF to the state's Invasive Species Hotline: <https://oregoninvasiveshotline.org/>

15. *Are there traps for SLF?*

There are no pheromone traps available but there are special "circle" traps that can be used to monitor for the presence of SLF on trees. These circle traps should be placed on trees July through October to monitor for nymphs and adults. See how to make your own SLF trap here: <https://tinyurl.com/47h7apth>.

16. *Can pesticides be used to manage SLF?*

Since SLF is not established in Oregon, there is no need to consider insecticide options at this time. If SLF arrives and establishes in Oregon, there are pesticides that can kill large groups of SLF on trees and shrubs. If applications of insecticides are made with soil drenches or direct stem injections (systemic insecticides), it is important to apply these products after trees and shrubs are done flowering to avoid killing pollinating insects. For details on specific pesticide options for SLF, see the ODF SLF fact sheet or this management guide from Penn State University: <https://extension.psu.edu/spotted-lanternfly-management-guide>