

Spotted Lanternfly Threat

Identifying and stopping the spread of a virulent pest

By Douglas H. Fisher, New Jersey Secretary of Agriculture

The Spotted Lanternfly looks lovely, but has a devastating desire. Its outward appearance is easy to admire with its black and red wings when it reaches adulthood. But its life-long quest can lead it to feeding on 70 different types of plant material, including an affinity for grapes and other fruits.



The Spotted Lanternfly (SLF) arrived in the U.S. in Berks County, Pennsylvania, in 2014 and has spread to 13 counties there. This year, it has been found in Warren, Hunterdon, and Mercer Counties in New Jersey. Those counties are under quarantine with the primary purpose of eliminating and restricting the movement of this insect. An additional educational piece of the puzzle is bringing attention to the pest's arrival and having businesses and residents routinely check their vehicles, trailers, or other modes of transportation before leaving those quarantined areas.

"The Spotted Lanternfly is not a great flyer, but it is an excellent hitchhiker," said New Jersey Department of Agriculture (NJDA) Plant Industry Division Director Joe Zoltowski. "It can latch onto any kind of vehicle or trailer, allowing it to be rapidly transported several miles. If someone is in an area where the Spotted Lanternfly is known to be, we ask them to take a minute and check around their vehicle and/or trailer before leaving."

Public assistance in the fight

While we are doing everything we can to eliminate this pest, the public's role in locating the Spotted Lanternfly has already been very helpful. The phone calls and emails will continue to play a key part in our fight against this insect.

The SLF feeds on plants using its sucking and piercing

mouthparts to extract plant sap. Adults and nymphs feed on phloem tissues of young stems and excrete large quantities of liquid. The feeding creates weeping wounds and facilitates the growth of sooty mold. The weeping sap also attracts activity from wasps, hornets, ants, bees etc.

“If you see an egg mass, scrape it off, double bag it, and throw it away. The eggs can also be placed into alcohol, bleach or hand sanitizer.”

This invasive pest, with the scientific name *Lycorma delicatula*, is not a picky eater, but it does prefer to spend time on an invasive type of plant and tree commonly known as the Tree of Heaven. The adult SLFs need to feed on the Tree of Heaven to mature to reproductive potential. One method of killing the Spotted Lanternfly is to eliminate small Tree of Heaven trees and plants leaving only the larger Trees of Heaven, which are treated.

Spotted Lanternfly

This allows the bigger Trees of Heaven to become “Trap Trees,” where the lanternflies are attracted to feed and are subsequently eliminated. This technique has been met with great success in Pennsylvania and is also one of the methods being used in New Jersey.

While the adult Spotted Lanternflies cannot survive the winter, they do lay egg masses that hatch in the spring. Each egg mass can produce between 30 and 50 of the flies. Part of the process of eliminating the SLF from New Jersey is to scrape egg masses off trees, or wherever they may be found and destroy them, so they will not be able to hatch. But finding those egg masses is not always easy.

“They like to lay their egg masses on any kind of surface, so you really have to search for them to find them,” Zoltowski said. “We know they can be found on slabs of concrete and not just on the easily seen places. They can be in places where you might not think to look.

They aren’t too picky about where they lay their egg masses. Any surface will do.”

The egg masses look like mud or wet concrete when they are laid. So, if you see a small patch of mud in an unusual place, like four or five feet high on a tree, it may very well be an SLF egg



Life cycle of the SLF

When the SLF hatches in the spring, it goes through three life stages. First through third nymphal instars: The insects are very small and are black with white spots, then slightly larger, and become red with white spots, eventually reaching adulthood in late July to early August.

mass. Egg masses can be small, maybe 2 or 3 square inches, but often are 4 or 5 inches wide and 7 or 8 inches long. If you see an egg mass, scrape it off, double bag it, and throw it away. The eggs can also be placed into alcohol, bleach or hand sanitizer.

The NJDA will continue to examine all avenues of eradication and containment methods in its efforts to eliminate this pest from our state. 🦋

If you happen to see a Spotted Lanternfly

The NJDA is asking that if you can kill it, do so, and then report the exact location by either emailing information and a picture to **SLF-plantindustry@ag.nj.gov** or calling the New Jersey Spotted Lanternfly Hotline at **1-833-223-2840** (BAD-BUG-0) and leave a message detailing your sighting and contact information.

A checklist of common items and places where life stages of SLF can be found is available at **www.state.nj.us/agriculture/divisions/pi/prog/spottedlanternfly.html**. On the site, there is also additional information about this exotic invasive insect.



The tree of Heaven shown by NJ's Plant Industry Division Director, Joe Zoltowski.