



Spotted Lanternfly

Frequently Asked Questions



What is a spotted lanternfly and where did they come from?

Spotted lanternfly (*Lycorma delicatula*) is an invasive insect native to China, India, and Vietnam, that was first discovered in Berks County, PA in 2014. Since then, it has spread throughout eastern Pennsylvania and western New Jersey, and has been identified as a threat to agriculture, native plants, and quality of outdoor recreation.

Why should I be concerned?

Spotted lanternfly are plant hoppers that feed on plant sap with their piercing mouthparts. As they feed, they excrete waste or “honeydew,” which is a sticky substance that promotes the growth of sooty mold. In large quantities, this residue can blanket agricultural crops and forest understories, as well as peoples’ personal property. So far, spotted lanternfly has been identified to feed on over 70 different species of plants, including grapevine, fruit trees, black walnut, willow, birch, and maple. It is estimated by economists that these pests could cause millions of dollars in damage.

Spotted lanternflies do not pose a stinging or biting threat to humans, pets, or livestock.

How do I identify a spotted lanternfly?



Source: Cornell College of Agricultural and Life Sciences

This figure displays the spotted lanternfly’s lifecycle. They start out as small black and white-spotted nymphs about the size of a pencil eraser, and molt four times. Each phase or “instar” is larger than the last, with the last nymph phase being bright red with black and white spots. After molting for the final time, they emerge as plant hopper adults that have gray wings with black spots, and bright red underwing which is visible when spread. In September, egg masses are laid, which are gray in color and can appear on any outdoor surface.

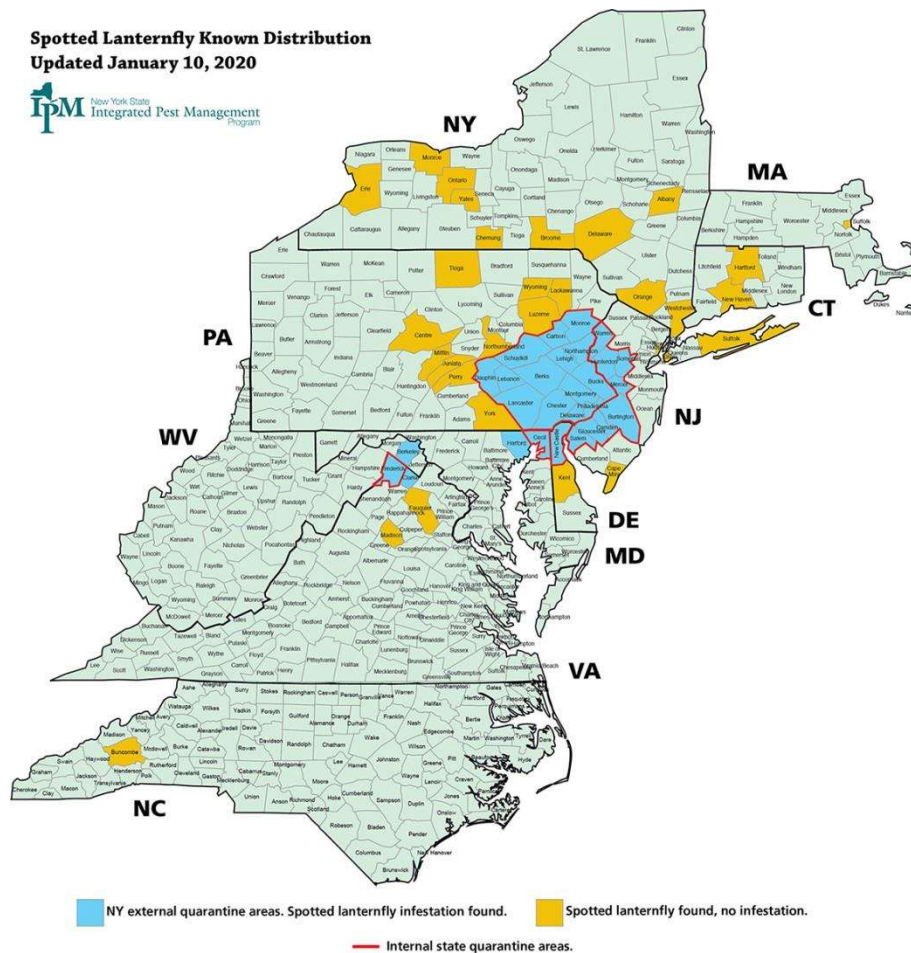
What do I do if I see a spotted lanternfly?

As per the New Jersey Department of Agriculture website: “If you are in one of the quarantined counties of Burlington, Camden, Gloucester, Hunterdon, Mercer, Salem, Somerset or Warren, you do not need to contact the New Jersey Department of Agriculture about Spotted Lanternfly sightings. Spotted Lanternfly locations in unquarantined counties in New Jersey can be reported to the Department by emailing slf-plantindustry@ag.nj.gov or by calling 609-406-6943.”

At this point, we are aware that spotted lanternfly is widespread throughout the County. However, if you notice them congregating in masses in one specific area in our Parks, please report it with coordinates and/or location on a map to lstark@mercercounty.org.

What is the spotted lanternfly quarantine?

The spotted lanternfly quarantine has been issued by the Pennsylvania and New Jersey Departments of Agriculture, and the quarantine areas are pictured on the map below.



Businesses moving within and outside the areas depicted in blue are required to obtain a permit, and residents are required to follow guidelines to inspect goods before travel in order to prevent the movement of spotted lanternflies at any stage of development. This includes moving firewood, outdoor household items, building materials, and even your vehicle outside the quarantine area. Please visit these checklists for further information:

English: <https://www.nj.gov/agriculture/divisions/pi/pdf/NJResidenceSLFChecklist.pdf>

Spanish: <https://www.nj.gov/agriculture/divisions/pi/pdf/NJSLFChecklistSpanish.pdf>

I've noticed masses of spotted lanternfly on certain trees, what is going on here?

Spotted lanternfly's preferred host is tree of heaven (*Ailanthus altissima*), a non-native and widespread tree. They tend to congregate in large numbers on these trees. Spotted lanternfly gather on trees in their adult phase to feed one final time and then mate.

How do I know if I have tree of heaven on my property and what should I do if it is present?

Tree of heaven is a fast-growing deciduous tree that can reach up to 100 feet in height. These trees have pinnately compound leaves and produce light green flowers in April/May. In August, female trees produce yellowseed pods (pictured below) that can aid in identifying tree of heaven. . The plant parts, when broken, can produce a foul smell that has been likened to burnt peanut butter. Two native look alikes are black walnut and sumac, so accurate identification prior to control is important. Watch this video from Penn State Extension to help you identify tree of heaven: <https://extension.psu.edu/tree-of-heaven-native-look-alikes>



If you have a tree of heaven on your property, it can be difficult to remove. Simply cutting it down or mowing it will result in many resprouts and root suckers, and will not effectively control it. Recommended treatments include hand pulling for very young seedlings, and for older individuals, control with systemic herbicides in mid to late summer. If you do not have experience with herbicide use, talk to your local landscaping company or tree expert about getting trees removed properly. For more information on Tree of Heaven Control, visit: <https://extension.psu.edu/tree-of-heaven>.

What is Mercer County doing to respond to spotted lanternfly?

Mercer County has an agreement with the United States Department of Agriculture-Animal and Plant Health Inspection Service (USDA-APHIS) and New Jersey Department of Agriculture (NJDA) to perform spotted lanternfly response on County lands. Due to the vast acreage that these agencies have to cover, the Park Commission has also initiated our own response.

For the past three years, our Stewardship Department has been focusing on eliminating *Ailanthus* populations throughout our Parks through selective herbicide use. In summer of 2020, we began creating "trap trees" in mature populations that are left. The process of creating a trap tree includes eliminating all but two to three mature *Ailanthus* trees (preferably males, who do not produce a seed source), and spraying the bark with a systemic insecticide. This insecticide is taken up by the tree and lethally consumed by the lanternflies as they feed on the sap. All required licenses were obtained prior to performing any herbicide or insecticide treatments.

What are some ways I can manage spotted lanternfly on my own property?

There are many resources available for homeowners to manage spotted lanternfly. Some options include:

- Tree of heaven removal
 - Learn more about tree of heaven control: <https://extension.psu.edu/tree-of-heaven>
 - Hire professional service to remove trees with herbicide treatment
- Herbicide/Insecticide application
 - Follow recommendations from the State and always follow label and safety guidelines <https://www.nj.gov/agriculture/divisions/pi/pdf/SLFHomeownerTreatmentRecs.pdf>
- Manual elimination of nymphs/adults
 - Fly swatters
 - Pay kids to stomp them
- Eliminate egg masses
 - Inspect all outdoor surfaces including tree bark, rocks, and patio furniture.
 - Scrape from all surfaces, put in rubbing alcohol or secure bag, and dispose.
- Create your own tree traps
 - Sticky band (with chicken wire to prevent bycatch): <https://extension.psu.edu/using-traps-for-spotted-lanternfly-management>
 - Circle traps: <https://extension.psu.edu/how-to-build-a-new-style-spotted-lanternfly-circle-trap>

Check out this video from Penn State Extension with more tips for homeowners:

<https://www.youtube.com/watch?v=-rvAUftHvv4>