

September 12, 2018

Finger Lakes Vineyard Update

Spotted Lantern Fly Found in Finger Lakes & Eastern NY

Hans Walter-Peterson



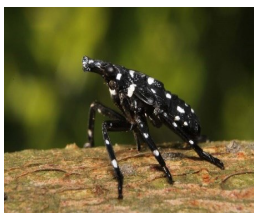
Adult Spotted Lanternfly

We found out earlier this week that the spotted lanternfly (SLF) was positively identified in both Yates and Albany Counties. In both places, just a single individual was identified. We do not have any idea so far about whether any other individuals have been found. Personnel from the DEC and Department of Ag & Markets are setting up surveys

in the area to see if a population has developed in that area or if it was just a lone "hitchhiker". We will be in communication with these teams and will share any further

information we find out from them.

We discussed SLF several times this year at our various meetings, but now that it's here, I wanted to be sure to include some of the information that is out there about this pest. The biggest thing we want to do right now is to increase awareness of the pest and have people keep their eyes open for it. I have included a couple of fact sheets about SLF in the Update this week. Please review them and ask anybody else who works in vineyards to look them over as well, particularly the information about how to identify SLF. Adults will still be active into the fall, so they can still be found at this point in the year. The more eyes that can look for this thing, the better chance we have of finding them.



Early nymph of spotted lanternfly

Any potential sightings of SLF adults, nymphs, egg masses or signs of infestation (e.g., large amounts of sooty mold at the base of a tree) should be reported to the DEC at spottedlanternfly@dec.ny.gov. Try to take a photo or even capture the individual or egg mass if at all possible. Be sure to note the location of where it was found (address, GPS coordinates, landmarks, etc. The more specific, the better).

There are a few insecticides that are labeled for use with plant hoppers (which is what SLF is) in New York currently, but they are probably new materials to most of us. All of them are biologicals containing spores of a fungus called *Beauveria bassiana*, and two of them contain a small amount of pyrethrin as well.

- Botanigard 22WP
- Botanigard ES
- Botanigard MAXX (includes 0.75% pyrethrin)
- Botegha ES
- Mycotrol ESO
- Mycotrol WPO
- Xpectro OD (includes 0.75% pyrethrin)

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Spotted Lantern Fly Found in Finger Lakes & Eastern NY

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There is also an ongoing effort to obtain 2(ee) approvals for several other “conventional” materials that will hopefully mean there will be other options available to us next season.

There will be more information to come, but for now the best thing to do is be sure that everyone who is associated with the vineyard or winery is aware of this pest and knows what it looks like. Any potential sightings of SLF should be reported to DEC at spottedlanternfly@dec.ny.gov.

I have included links to some other resources to check out as well.

Other Resources:

NY DEC Spotted Lanternfly website: <https://www.dec.ny.gov/animals/113303.html>

Penn State University Spotted Lanternfly website: <https://extension.psu.edu/spotted-lanternfly>



Department of
Environmental
Conservation

Agriculture
and Markets

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DEC AND DAM ANNOUNCE CONFIRMED FINDING OF SPOTTED LANTERNFLY IN ALBANY AND YATES COUNTIES

State Agencies Encourage Public to Report Findings of [Invasive Pest](#)

The New York State Departments of Environmental Conservation (DEC) and Agriculture and Markets (DAM) today confirmed that spotted lanternfly (SLF), an invasive pest from Asia, has been found in Albany and Yates counties. A single adult insect was discovered in a vehicle in the Capital District. In addition, a single adult insect was reported on a private Keuka Lake property in Penn Yan, Yates County.

“DEC and our partners at the Department of Agriculture and Markets are closely tracking the spotted lanternfly, a destructive invasive pest, as part of our ongoing efforts to prevent its establishment and spread in New York. This pest has the potential to severely impact our state's agricultural and tourism industries,” **DEC Commissioner Basil Seggos said**. “We are encouraging the public to send us information to bolster our efforts—they are our eyes on the ground.”

Following both reported cases, DEC and DAM immediately began extensive surveys throughout the area. At this time, no additional insects have been found. DEC and DAM urge New Yorkers to report potential sightings to spottedlanternfly@dec.ny.gov.

State Agriculture Commissioner Richard A. Ball said, “It’s critical that we monitor for and control this invasive species, which can weaken plants and have a devastating impact on our farm crops and agricultural production, especially apples, grapes and hops. Since our farmers are among those facing the greatest potential impact, we ask them to join us in helping to watch for the spotted lanternfly, and signs of infestation, and report any sightings immediately.”

SLF (*photo attached*) is a destructive pest that feeds on more than 70 plant species including tree-of-heaven (*Ailanthus altissima*), maples, apple trees, grapevine, and hops. SLF feedings can stress plants, making them vulnerable to disease and attacks from other insects. SLF also excretes large amounts of sticky "honeydew," which attracts sooty molds that interfere with plant photosynthesis, negatively affecting the growth and fruit yield of plants. SLF also has the potential to significantly hinder quality of life due to the honeydew and the swarms of insects it attracts.

SPOTTED LANTERNFLY

Lycorma delicatula

What is the spotted lanternfly?

The spotted lanternfly (SLF) is an invasive pest from Asia that primarily feeds on tree of heaven (*Ailanthus altissima*) but can also feed on a wide variety of plants such as grapevine, hops, maple, walnut, fruit trees and others. This insect could impact New York's forests as well as the agricultural and tourism industries.

Identification

Nymphs are black with white spots and turn red before transitioning into adults. They can be seen as early as April. Adults begin to appear in July and are approximately 1 inch long and ½ inch wide at rest, with eye-catching wings. Their forewings are grayish with black spots. The lower portions of their hindwings are red with black spots, and the upper portions are dark with a white stripe. In the fall, adults lay 1-inch-long egg masses on nearly anything from tree trunks and rocks to vehicles and firewood. They are smooth and brownish-gray with a shiny, waxy coating when first laid.

Where are they located?

SLF were first discovered in Pennsylvania in 2014 and have since been found in New Jersey, Delaware and Virginia. As of spring 2018, New York has no infestations, though it's possible they are present in low numbers and have not been detected yet. Given the proximity of the Pennsylvania infestation, it is expected to be found in New York eventually.

What is the risk to NYS?

SLF pose a significant threat to New York's agricultural and forest health. Adults and nymphs use their sucking mouthparts to feed on the sap of more than 70 plant species. Feeding by sometimes-thousands of SLF stresses plants, making them vulnerable to disease and attacks from other insects. SLF also excrete large amounts of sticky "honeydew," which attracts sooty molds that interfere with plant photosynthesis, negatively affecting the growth and fruit yield of plants. New York's annual yield of apples and grapes, with a combined value of \$358.4 million, could be impacted if SLF enters New York. The full extent of economic damage this insect could cause is unknown at this time.

Although native insects also secrete honeydew, the size of SLF and the large populations that congregate in an area result in large accumulations of it. The sticky mess and the swarms of insects it attracts can significantly hinder outdoor activities. In Pennsylvania, where SLF populations are the densest, people can't be outside without getting honeydew on their hair, clothes, and other belongings.



Adult spotted lanternfly
Lawrence Barringer, Pennsylvania Department of
Agriculture, Bugwood.org



Spotted lanternfly nymph
Lawrence Barringer, Pennsylvania Department of
Agriculture, Bugwood.org

How do they spread to new areas?

While SLF can jump and fly short distances, they spread primarily through human activity. They often hitch rides to new areas when they lay their eggs on vehicles, firewood, outdoor furniture, stone, etc. and are inadvertently transported long distances.

What are the signs of an infestation?

- Sap oozing or weeping from tiny open wounds on tree trunks, which appears wet and may give off fermented odors.
- One-inch-long egg masses that are brownish-gray, waxy and mud-like when new. Old egg masses are brown and scaly.
- Massive honeydew build-up under plants, sometimes with black sooty mold.



New (left) and old (right) egg masses
Kenneth R. Law, USDA APHIS PPQ, Bugwood.org

What is being done?

DEC is working with the NYS Department of Agriculture and Markets and the US Department of Agriculture to address SLF. Since it is less expensive and easier to deal with a pest before it becomes widespread, the goal is to find SLF early or prevent it from entering NY altogether.

A plan has been developed that describes how the agencies will prevent and detect SLF in New York. Extensive trapping surveys will be conducted in high-risk areas throughout the state as well as inspections of nursery stock, stone shipments, commercial transports, etc. from Pennsylvania. DEC and partner organizations encourage everyone to be on the lookout for this pest.

What can I do?

- Learn how to identify SLF.
- Inspect outdoor items such as firewood, vehicles, and furniture for egg masses.
- If you visit states with SLF, be sure to check all equipment and gear before leaving. Scrape off any egg masses. Visit www.agriculture.pa.gov for more information on SLF in PA.

If you believe you have found SLF in New York...

- Take pictures of the insect, egg masses and/or infestation signs as described above (include something for scale such as a coin or ruler).
- Note the location (address, intersecting roads, landmarks or GPS coordinates).
- Email the information to DEC (see below).
- Report the infestation to iMapInvasives at www.NYiMapInvasives.org.



Wounds from SLF feeding are too small to spot without sap oozing out of them.
Pennsylvania Department of Agriculture, Bugwood.org

CONTACT INFORMATION

Bureau of Invasive Species and Ecosystem Health
Division of Lands and Forests

New York State Department of Environmental Conservation
625 Broadway, Albany NY 12233
spottedlanternfly@dec.ny.gov
www.dec.ny.gov

Updated May 1, 2018



Swarm of lanternflies on a tree
Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org

SLF was first discovered in Pennsylvania in 2014 and have since been found in New Jersey, Delaware and Virginia. Given the proximity to the Pennsylvania and New Jersey infestations, New York State is at high risk for infestation. While these insects can jump and fly short distances, they spread primarily through human activity. SLF lay their eggs on any number of surfaces such as vehicles, stone, rusty metal, outdoor furniture and firewood. Therefore, the insects can hitch rides on any outdoor item and be easily transported into and throughout New York.

Jennifer Grant, Ph.D., Cornell University Director New York State IPM

Program said, “Knowing that this pest was likely to arrive, we have been working with our State partner agencies to develop integrated strategies to get the word out and manage SLF in grapes, hops, apples and other susceptible crops. It’s imperative that the public help slow the invasion and spread by reporting possible sightings and acting responsibly when traveling in quarantine areas.”

Adult SLF are active from July to December. They are approximately one-inch long and half an inch wide at rest, with eye-catching wings. Adults begin laying eggs in October. Signs of an SLF infestation may include:

- Sap oozing or weeping from open wounds on tree trunks, which appear wet and give off fermented odors.
- One-inch-long egg masses that are brownish-gray, waxy and mud-like when new. Old egg masses are brown and scaly.
- Massive honeydew build-up under plants, sometimes with black sooty mold developing.

Anyone that suspects they have found SLF is encouraged to send a photo to spottedlanternfly@dec.ny.gov. Please note the location of where the insect was found, egg masses, and/or infestation signs. DEC and DAM also encourage the public to inspect outdoor items such as vehicles, furniture, and firewood for egg masses. Anyone that visits the Pennsylvania or New Jersey Quarantine Areas should thoroughly inspect their vehicle, luggage and gear for SLF and egg masses before leaving and scrape off all egg masses.

A Smartphone application is also available to help citizens and conservation professionals quickly and easily report new invasive species sightings directly to New York’s invasive species database from their phones. For more information, visit <http://www.nyimainvasives.org/> (leaves DEC website).

DEC, DAM, New York State Office of Parks, Recreation and Historic Preservation and the US Department of Agriculture will continue to survey throughout the Capital District and the Finger Lakes focusing on travel corridors and high-risk areas. Extensive surveys will continue to be conducted in high-risk areas throughout the state as well as inspections of nursery stock, stone shipments, commercial transports, etc., from Pennsylvania. DEC and DAM will also continue its efforts to educate the public as well as industry personnel.

For more information on SLF, visit www.dec.ny.gov/animals/113303.html.

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Connect with DEC on: [Facebook](#), [Twitter](#), [Flickr](#), and [Instagram](#)

Interested in trialing sheep grazing in the vineyard?

Seeking growers with hybrids on high-wire or umbrella kniffin for 2-year study

Has mowing got you down? Tired of suckering trunks?

We need growers to help us investigate the possibility of using sheep for these tasks during the growing season.

Background: In a short trial conducted in a mature, high-trained Noiret vineyard in June 2018, sheep successfully suckered the vines and mowed both under-vine and alley vegetation (see figures).



Sheep suckering Noiret vines



Noiret trunks before (left) and after (right) sheep grazing



Noiret vineyard before (left) and after (right) sheep grazing

I'm submitting a grant proposal to Northeastern SARE (Sustainable Agriculture Research and Extension) to fund further studies in this area.

Objective: to develop a workable sheep management program for high-trained hybrid vineyards in the Northeastern U.S. that reduces and/or eliminates the need for herbicides, both alley and under-vine mowing, and hand suckering of trunks without increasing the current cost of production.

What we need: Growers with 5+ acres of high-trained hybrids who are willing to trial sheep in their vineyards for two growing seasons.

What we offer: The grant would cover the financial costs related to the study (sheep rental, electric fence, veterinary costs, etc.). Someone from my program would do most of the moving of sheep, etc. but collaborators would need to commit to checking the animals, communicating spray programs in ample time so that we can move them from blocks, etc.

For more information and to express interest: Please reach out to Justine Vanden Heuvel, justine@cornell.edu.

Finger Lakes Vineyard Update

Finger Lakes Grape Program

September 12, 2018

2018 GDD & Precipitation

FLX Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
9/5/2018	92.9	70.4	0.00	31.7	2545.8
9/6/2018	78.5	67.0	0.01	22.8	2568.6
9/7/2018	73.1	60.9	0.00	17.0	2585.6
9/8/2018	61.8	54.4	0.00	8.1	2593.7
9/9/2018	59.3	50.3	0.00	4.8	2598.5
9/10/2018	60.1	48.3	1.67	4.2	2602.7
9/11/2018	71.2	59.6	0.01	15.4	2618.1
Weekly Total			1.69"	103.9	
Season Total			18.58"	2618.1	

GDDs as of September 11, 2017: 2320.5

Rainfall as of September 11, 2017: 20.49"



Seasonal Comparisons (at Geneva) as of September 11

Growing Degree Day

	2018 GDD ¹	Long-term Avg GDD ²	Cumulative days ahead (+)/behind (-)
April	8.2	65.4	
May	416.3	251.9	
June	472.3	481.1	
July	704.5	640.7	
August	683.3	415.4	
September	199.8	355.2	
October			
TOTAL	2484.4	2198.9	+44

¹ Accumulated GDDs for each month.

² The long-term average (1973-2017) GDD accumulation as of that date in the month.

³ Numbers at the end of each month represent where this year's GDD accumulation stands relative to the long-term average. The most recent number represents the current status.

2018 GDD & Precipitation (continued from page 5)

Precipitation

	2018 Rain ⁴	Long-term Avg Rain ⁵	Monthly deviation from avg ⁶
April	1.92"	2.87"	-0.93"
May	3.15"	3.13"	+0.02"
June	2.50"	3.62"	-1.12"
July	2.98"	3.45"	-0.47"
August	6.40"	3.14"	+3.26"
September	1.65"	3.57"	
October		3.37"	
TOTAL	18.60"	23.16"	

⁴ Monthly rainfall totals up to current date

⁵ Long-term average rainfall for the month (total)

⁶ Monthly deviation from average (calculated at the end of the month)

Additional Information

Become a fan of the [Finger Lakes Grape Program on Facebook](#), or follow us on [Twitter \(@cceflgp\)](#) as well as YouTube. Also check out our website at <http://flgp.cce.cornell.edu>.

Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the [NY Grape & Wine Classifieds website](#) today!

Finger Lakes Grape Program Advisory Committee

Eric Amberg- Grafted Grapevine Nursery

Bill Dalrymple- Dalrymple Farm

Matt Doyle- Doyle Vineyard Management

Eileen Farnan- Barrington Cellars

Chris Gerling- Cornell University Extension

Mel Goldman- Keuka Lake Vineyards

Luke Haggerty- Constellation Brands

Tina Hazlitt- Sawmill Creek Vineyards

Cameron Hosmer- Hosmer Winery

Harry Humphreys- Overlook Farms

Richard Jerome- Jerome's U-Pick

Gregg McConnell- Farm Credit East

Herm Young- Young Sommer Winery

John Santos- Hazlitt 1852 Vineyards

Dave Smith- Smith Brothers Farms

Justine Vanden Heuvel- Cornell University

Derek Wilber- Swedish Hill Winery

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Cornell Cooperative Extension Finger Lakes Grape Program

Hans Walter-Peterson—Team Leader

Donald Caldwell—Viticulture Technician

The Finger Lakes Grape Program is supported, in part, by six county
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