Spotted Lanternflies Are Back. You Should Still Kill Them.

The battle continues against the colorful bugs, which may be coming for your wine. Here's how New Yorkers can help curb the infestation.



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See it, squish it, report it. That was the spotted lanternfly mantra of summers past, and the striking bugs are back this year, despite New Yorkers' best efforts.

Native to parts of Asia, the spotted lanternfly was first seen in the United States nearly a decade ago, when it was found at a Pennsylvania landscaping company that imported stones from abroad. It arrived in New York in the summer of 2020.

At this time of year, the spotted lanternfly is in its early nymph phase, which occurs right after hatching. The tiny black insects are dotted with white spots during this stage, before they develop their iconic gray and red coloring as adults in July.

Why it's important to kill lanternflies

The Department of Agriculture strongly encourages people to stomp, squash or swat lanternflies when they see them. Officials have been recruiting residents along the Eastern Seaboard to join the effort for years.

That's because while spotted lanternflies are harmless to humans, they are an invasive species that can cause widespread economic harm, primarily by damaging plants.

Julie Urban, an evolutionary biologist in the entomology department at Penn State, has studied lanternflies for decades.

She said a 2019 report from the Penn State College of Agricultural Sciences, which estimated that the bugs could cause \$325 million in economic losses annually in Pennsylvania alone, had turned out to be overblown.

The report analyzed an infestation in South Korea that affected the growth of apple, stone fruit, timber and ornamental trees, whose Pennsylvania counterparts have fared better than expected against the bugs.

But she said that the state's grapevines, another preferred food source for the spotted lanternfly, had been heavily affected, and that growers in Pennsylvania had recorded reduced yields since the bug's arrival.

And the threat to New York's much larger wine industry is even greater.

"The spotted lanternfly is knocking at the doors of vineyards in Long Island and the Finger Lakes region," Professor Urban said. "I'm concerned that if it does get into these vineyards, it'll turn up the volume a notch or two in terms of economic impact."

Bruce Murray, 67, is the owner of Boundary Breaks Vineyard near the Finger Lakes in Lodi, N.Y. He noted that spotted lanternflies had been spotted in Ithaca, a mere 25 miles away, and said his growers were on the lookout for their arrival.

"Everybody's hypervigilant about this, and we have been now for almost two years," Mr. Murray said.

While it's too early for Mr. Murray to break out the insecticide, he has been preparing by cutting down tree of heaven plants, an invasive species from China that lanternflies feed on, whenever he sees them.

How gardeners can fight back against lanternflies

Neal Weissman, 68, is the president of the Roosevelt Island Garden Club and helps oversee the Manhattan neighborhood's large community garden.

A member of the garden's pest mitigation committee, he wanders between plots wielding a hand-held vacuum, sucking up any lanternfly nymphs he comes across, in hopes of keeping the population at bay. The daily vacuuming, Mr. Weissman said, "has started giving me nightmares."

He said he had noticed an "exponential" increase in lanternflies, and that his traps have been catching the same number in a single hour as they did in an entire weekend last year.



Neal Weissman, the president of the Roosevelt Island Garden Club, sets traps and uses a tiny vacuum to suck

Grape growers on Roosevelt Island, which is in the East River, are already seeing a decline in plant health this season, with some gardeners removing their vines entirely to help curb the bug's spread.

Pia Doane, 77, has been gardening on Roosevelt Island for over 30 years. Ms. Doane swears by a plant-oil-based spray called Gronnsape to attack the bug: a cleaner that, like her, comes from Scandinavia.

Still, her languishing champagne grapevines are infested with lanternflies, and she's contemplating throwing in the towel and giving up on grapes altogether this year.

"My poor grapevines," Ms. Doane said. "It's very frustrating."

Mr. Weissman has considered using praying mantises, one of the lanternfly's few natural predators, to control the population. But he said that those available for purchase are nonnative, and that members of his garden's board had opposed introducing another invasive bug.

Known predators also include wheel bugs, spiders and some birds, though none of them seem to put a dent in the population, Professor Urban said.

The club has weighed using sticky tape to catch the lanternflies, but that risks ensnaring helpful insects, like pollinators, and even small birds.

For now, the island's gardeners are sticking to other pesticide-free strategies, including tiny vacuums and special tree traps geared specifically toward lanternflies.

Do lanternflies really need to die?

Those hesitant to kill lanternflies they spot need to know that the choice is either squash or spread, experts say.

Eradication is unlikely to happen at a grass-roots level, so containment is the goal. Killing the ones you see can keep them and their eggs from following you into your car or even onto a plane.

The bugs proliferate easily in the wild, and they have even appeared on cargo flights to California, where an infestation would be economically "devastating," Professor Urban said.

California is home to the nation's largest wine industry, which contributes \$73 billion to the state and \$170.5 billion to the U.S. economy, according to a report commissioned by the Wine Institute and the California Association of Winegrape Growers.

"I think they're beautiful, and I don't like killing them either," Professor Urban said. "But killing them by stomping is better than nuking them with pesticides."

As global supply chains become increasingly intertwined, the ecological impact of trade continues to grow. Invasive species introduced through imports, like the spotted lanternfly, will need to be controlled through means that might feel unseemly to some.

Still, affinity for the spotted lanternfly is real. "These are little freak-show jewels of science," Professor Urban said.