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Where the Tomato Plant Sleeps, the Late Blight Creeps

by Amanda DeMatto



Imagine having to pay five bucks for a pound of tomatoes. Or having to eat sweet potato fries or turnip tots when what you're really hankering for is the good old-fashioned crinkle-cut French fries.

Imagining life without tomatoes and potatoes hit a little too close to home last summer. Among the array of crimson peppers and forest green arugula that adorned John Gorzynski's stand at the Union Square farmers' market in Manhattan last summer, something was conspicuously missing. "I lost all of my potatoes this year," he said behind somber blue eyes and a bushy gray beard.

The same fungal pathogen responsible for the Irish Potato Famine of the 1840s devastated potato and tomato crops throughout all eleven states of the Northeast last summer. It's called late blight. And in all of Gorzynski's 39 years of farming in Sullivan County, NY, he's never seen it so ruthless.

Late blight has already been detected on tomato plants in Connecticut this month. The looming possibility of another outbreak has roused some state government officials to draft and implement preventive strategies lest the

cataclysm repeats itself.

No one knows exactly what escalated late blight, which occurs in small outbreaks every year, into a full-fledged plant epidemic last summer. The weather in the Northeast was unseasonably cool and moist, providing the perfect conditions for a fungus to grow and reproduce, which certainly had a hand in the damages.

But many plant experts think there's more to the story.

Steve Johnson, a crops specialist at the University of Maine, said that late blight infected plants in home garden

stores and nurseries, and quickly spread to neighborhood gardens and commercial farms. He believes the outbreak worsened, in part, because states don't have enough inspectors to enforce agricultural policies and regulate plant distribution. "We have a legislative act [in Maine] that says you can't ship or move diseased plants, but there aren't enough inspectors to enforce it," he said.

Even state officials acknowledge the paucity of horticultural inspectors. "We're not able to be everywhere," said Margaret Kelly, the assistant director of plant industry for the [New York State Agriculture Department](#). "There's no question, if we had more staff we could do a lot more."

She said that anyone who handles tomato and potato plants, whether they're retailers, commercial greenhouse growers, or backyard gardeners, has the responsibility to inspect the material to see if it's healthy.

But in its nascent stages, late blight can spoof the unsuspecting eye. If growers and retailers don't spot the disease, the job is left to state horticultural inspectors, who examine the plants and practices of dealers and nurseries.

In all of New York State's 54,475 square miles, 3,720 nurseries and greenhouses, and 4,640 plant dealerships, the State Agriculture Department employs only 16 [horticultural inspectors](#). "We're kind of like one of the first lines of defense against pathogens and insects getting loose," said Joseph Parent, the lone inspector for Nassau, Kings, Queens, Richmond, and New York counties. With well over six hundred certified plant dealers on his list, he said he has time to check up on each location only once or twice a year.

Home Depot is one of the many retailers under his watch. In the spring, Home Depot sells tomato starter kits provided by the Alabama company [Bonnie Plants](#), the foremost tomato plant supplier in North America. The two companies are bound by consignment, which is a business pact that basically turns Home Depot into a surrogate mother. In exchange for a temporary space on the Home Depot floor, Bonnie retains ownership of its tomato plants and agrees to take care of everything concerning them: delivery, pricing, watering, inspecting for diseases, and so on. The idea is that Bonnie will sell more plants because they're better cared for, said Kelly, the NY state agriculture official.



However, both Johnson, the crops specialist, and Meg McGrath, a plant pathologist at Cornell University, have reason to believe that Bonnie's consignment practices hastened last year's late blight outbreak. According to Johnson, uncertainty about who is responsible for managing diseased plants, either home garden stores or Bonnie Plants, stifled the possibility for a more expeditious termination of the disease.

When horticultural inspectors or home gardeners notice a sickly plant, they send tissue samples to plant researchers, like Johnson and McGrath, for a diagnosis. If the plants are positive for late blight, the researchers often visit the "store of origin" out of concern, to see the condition of the other plants still remaining on the shelves.

Johnson visited some of the 42 stores that Bonnie Plants serves in Maine. "Every one we checked had Bonnie plants that were diseased" he said. "People were buying them at bargain prices and walking out the door with

baskets of sick tomatoes.”

When he warned store employees that the plants had late blight, he got varied responses. “Some of them said ‘Oh my God, we’ll get rid of it!’” he recalled. “Some of the others said, ‘I can’t throw them away. Bonnie Plants has to...they’re on consignment.’ That was a conundrum.”

For a disease that can spread easily from plant to plant on store shelves via air currents and wet leaves, a rapid response is crucial. McGrath found diseased plants on the shelves of New York retail stores and was frustrated with what little she could do to remove them.



Plant pathologists like McGrath aren’t legally authorized to remove diseased plants, even though they’re the ones who make the diagnosis to confirm the infection. If a state inspector detects late blight at these stores, she pointed out, he or she would immediately quarantine and remove the diseased plants in keeping with standard protocol.

McGrath is wary of what this summer has in store for tomatoes and potatoes. She said that the pathogen dismantled so many crops last year that it should be dealt with more seriously.

This April, NY State Agriculture Commissioner Patrick Hooker announced a concerted [strategy to prevent late blight](#) from decimating crops this season, and other state initiatives may follow suit. “The Department will be surveying plants at the retail level in stores as well as in commercial greenhouses, while Cooperative Extension will follow up with any suspect cases in the field from commercial growers or home gardeners,” said Hooker.

The first step to preventing large-scale outbreaks is to become familiar with late blight’s symptoms and routinely examine tomato and potato plants for these telltale blemishes. If you notice the [signs of late blight](#) on plants in your backyard this summer, promptly contact your [local university cooperative extension](#) and follow these [guidelines](#).

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