

WOODSIDE

A new form of sudden oak death takes root in San Mateo County

Experts say limiting the spread is imperative



by Magali Gauthier

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Debbie Mendelson examines a bay laurel for possible symptoms of sudden oak death along Todo El Mundo in Woodside on Dec. 13, 2024. Photo by Magali Gauthier.

This November, researchers discovered an aggressive new lineage of the pathogen that causes sudden oak death in Woodside and Burlingame.

The previously discovered form of the disease, which has killed about 50 million trees in California since the 1990s, typically emerged at low temperatures and during wet winters. The spread slowed during droughts.

However, this new genetic lineage thrives in dry, warmer weather. Experts worry that with the warming climate, the two forms can work in tandem, and even more trees could die across the state.

Matteo Garbelotto, a University of California, Berkeley adjunct professor and the forest pathologist specialist for the entire UC system, led the team that discovered the new lineage, also known as NA2. He's not surprised they found it in San Mateo County.

“San Mateo County is a whammy,” he said. “We’ve got both high use of ornamentals and the weather is very favorable.”

The pathogen *Phytophthora ramorum*, which causes sudden oak death, is believed to have first arrived in Santa Cruz County on “ornamentals” — plants grown and displayed for decoration — coming from Asia. The disease was then observed in local wildlands before Garbelotto identified it in 2000. The new lineage was also

found in Alameda and Contra Costa counties.

“We caught it pretty early, so now is the time to do something about it,” said Garbelotto. “We can’t get rid of it, but we can slow it down.”

Tanoaks, California black oaks, Shreve’s oaks and coast live oaks, among others, are all susceptible to sudden oak death, but it’s other local plants that carry and pass on the disease to the trees — notably the bay laurel.

To diminish the likelihood that oaks catch the disease from bay laurel trees, experts [recommend](#) trimming the latter. Bay laurels should be cut back to no closer than 30 feet from oaks. That distance increases if the oak is larger.

San Mateo County’s tree [ordinance](#) also allows bay laurels and tanoaks smaller than 38 inches in diameter to be removed without a permit, if they’re within a 100 feet of a habitable structure or 30 feet of an evacuation route. Larger trees can qualify for an expedited tree removal permit, up to three per parcel per year.

But San Mateo County arborist Natalie Krug said it’s important to keep potentially infected plants at the site where they are cut. Residents, landscapers, gardeners and contractors should be aware that moving infected material risks spreading the disease.

Vulnerable oak species can also be treated with sprayed or injected phosphonate to help prevent infection.



Debbie Mendelson examines a bay laurel leaf showing symptoms of sudden oak death along Todo El Mundo in Woodside on Dec. 13, 2024. This is the kind of leaf she would collect and send back for testing during the “SOD Blitz,” she said. Photo by Magali Gauthier.



A bay laurel, left, grows right up against an oak tree, right, along Todo El Mundo in Woodside on 2024. Photo by Magali Gauthier.

Krug said that trees infected with sudden oak death can catch secondary pathogens and infestations — from insects like bark and ambrosia beetles — which continue to weaken the structure of the tree.

“So we see trees become more susceptible to damage and rain and wind events,” said Krug and, ultimately, there’s “lots of trees falling over.”

If there are weakened trees in the vicinity of high-use public areas or near structures, the county will fell the trees, cut them into smaller pieces and scatter them across the forest floor. The fragments are cut to Cal Fire approved size for fuel management and for faster decomposition, Krug said.

At Filoli Historic House and Garden in Woodside, trees showing signs of infection have been removed from the garden for safety. But there are pockets of sudden oak death among the thousands of oaks on the 654 acre-property where the trees die and fall, said Jim Salyards, Filoli’s director of horticulture. That’s a fire hazard, he added.

“We are working toward getting a FEMA grant that will help with fire suppression,” said Salyards.

Krug also said it’s difficult to tell if a symptomatic tree is infected with sudden oak death.

“The disease response that oaks have are just a disease response, pathogen response,” said Krug. “So it’s going to be similar to the characteristics of when other pathogens are impacting the tree — so we can’t definitively say.”

To help diagnose sudden oak death, Garbelotto's team runs [a program](#) for licensed tree professionals to collect samples from symptomatic oaks and to send them back to the lab for testing.

Both the county and Filoli also participate in Garbelotto's annual "[SOD Blitz](#)" to help identify affected areas. Krug recommends residents do so as well.

During the annual event, volunteers identify and collect samples across the state from symptomatic trees, particularly bay laurels. The materials are sent back to Garbelotto's lab for testing. That's how NA2 was discovered.



Debbie Mendelson points to a bay laurel growing near an oak tree on Todo El Mundo in Woodside on Dec. 13, 2024. Photo by Magali Gauthier.



Jim Salyards. Courtesy Filoli.

Debbie Mendelson has publicized and managed [the project](#) in parts of San Mateo County, including Woodside and Portola Valley since 2007. She said it typically takes place over a weekend in May.

"It takes the lab all through summer to test results and usually the best time is early November to actually present the results," said Mendelson. "So people that did the survey — whether they did it for an organization or just did three trees on their own property, it doesn't matter. All are welcome and all are needed."

[This year](#), around 300,000 acres were surveyed across 18 counties and scientists estimate a 5.7% statewide infection rate. That's up 3% from 2023. In the sampling location that includes most of San Mateo County and parts of Santa Clara County, a 10.8% infection rate was found.

"Trees ask nothing of us," said Mendelson. "They're real givers, ... I just wish a lot of people would understand what a threat it is if we lose [them]."

Garbelotto said that the discovery of NA2 would not have happened last year without the citizen science project.

"It's a large-scale program — we surveyed the entire state," said Garbelotto. "There's not enough money for any lab to do that survey with grant money. This is a really wonderful example of citizen science in action."