Marin residents asked to help collect data in oak death epidemic

 A Marin Municipal Water District ecologist examines the bark on a fallen oak at Lake Lagunitas. The tree was killed by Sudden Oak Death. (Frankie Frost/IJ archives)

By Megan Hansen, Marin Independent Journal

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Scientists tracking the spread of the Sudden Oak Death disease in Northern California are renewing their campaign to involve the public in spotting outbreaks, and Marin residents are being asked to participate.

A community meeting about the disease will be held at 10 a.m. May 30 in the Joseph R. Fink Science Center at Dominican University in San Rafael. Marin is one of 20 coastal California communities from San Luis Obispo to Mendocino County researchers are seeking help in identifying the scourge.

First discovered in Mill Valley in 1995, the invasive disease kills tan oak, coast live oak, California black oak, Shreve's oak and canyon live oak trees in California. It is the primary cause of tree mortality in coastal California, with more than 3 million trees having died in 15 counties,

including Marin, Alameda, Contra Costa, Monterey, Napa, San Mateo, Santa Clara, Santa Cruz and Solano since its discovery, according to the California Oak Mortality Task Force.

The disease pathogen Phytophthora ramorum "is a moisture-loving organism that tends to be more active in the fog belt," said project spokeswoman Katie Harrell.

Early detection by volunteers throughout Northern California is essential for containment, and possibly local eradication of the pathogen, said Matteo Garbelotto, a forest pathologist with the University of California at Berkeley Forest Pathology and Mycology Laboratory and one of the foremost experts on sudden oak death.

In 2008, Garbelotto began enlisting the help of volunteers to survey trees and collect samples in their locales. He's asking people to volunteer to help out again. Their findings will be digitized so it can be viewed using a free smartphone application.

"We simply couldn't generate the necessary people power without them," Garbelotto said. "The app can be used to determine the risk for an oak to be infected."

In 2014, a survey of 172 trees in Marin showed about 12 percent of the trees had symptoms of the disease. Of the 24 trees sampled, 21 tested positive for the disease, according to the map.

California bay laurel leaf infections generally precede oak and tanoak outbreaks, and volunteers will be trained to identify and collect symptomatic bay leaves and record sample locations during the training. Timely detection of the disease on bay laurel leaves is crucial, researchers say, as the risk of infection is highest if infected bay trees are within 200 yards of oaks.

"We have to think of an infected bay laurel as an infected mosquito carrying an infectious disease like malaria," Garbelotto said.

New volunteers are encouraged to bring their iPhone or Android smartphones to upload the free "SODmap mobile" app, which will help fill in distribution maps of the disease. Information about the app can be found at www.sodblitz.org.

The Bay Area News Group contributed to this report. Follow Megan Hansen's blog at http://blogs.marinij.com/bureaucratsandbaking.