

Marin Voice

I saved my trees from sudden oak death; you can, too

By William Binzen

In the April 14 Marin Master Gardeners feature, "How to get involved in the annual sudden oak death survey," Martha Proctor wrote, "There are no known methods to arrest the spread of the disease once trees become infected." She added: "Applying a preventative phosphonate to oaks at risk in the fall is currently the recommended treatment."

I agree with the second sentence. But regarding the first, that there's no way to save infected trees, I beg to differ. The answer has long been hiding in plain sight. For more than 20 years I've had considerable success saving coast live oaks and tanoaks infected with the fungus (*Phytophthora ramorum*) that causes sudden oak death, or SOD — trees with the characteristic cankers oozing dark, blood-like sap — as well as preventing healthy trees from becoming infected.

This is what I do. First, I

strengthen the immune system of trees with yearly applications of a sprayable potassium phosphite fertilizer like Reliant or Agri-Fos. Second, I amend the pH of soils under tree canopies with calcium, lime, oyster shell dust or related alkaline minerals.

It sounds pretty easy. And it is. So, why do we have this epidemic of SOD killing trees all around us? While there could be many reasons, including global climate change, I believe there is an underlying thread that binds them all together. Could it have something to do with pH change in our soils?

Since the beginning of the Industrial Revolution humans have been lacing the atmosphere with acidic compounds and nasty chemicals, leading to acid rain, eutrophication of lakes and ponds, and weakened trees across the country and around the globe. In short, soils have become ever more inhospitable to native plants. Heightened acidity levels leach calcium from soil, weakening

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the roots and then the tree. Not only can a non-diseased but weakened tree die long before its time, but it's also more susceptible to sudden oak death, bark beetles and all other pathogens and pests.

By amending soils we move the pH needle from acid to base, and by spraying with fertilizer we feed the tree with nutrients. These actions enhance the immune system, helping trees ward off SOD and other diseases, and insect pests. I recommend spraying at least twice-yearly for trees that exhibit significant decline due to SOD, and at least yearly for the others. It's best done in fall and

spring, following rain.

To spray trees, you'll need a backpack sprayer and the "right stuff" to spray. There are two liquids to mix, the potassium phosphite fertilizer and a penetrant that helps the solution get through tree bark into conductive tissues. You'll want to spray a damp-wet coat from root crowns (where tree roots meet the ground) up to about 6 feet, all around the tree. Then spread an alkaline soil amendment on the ground from root crowns out to the drip edge of the canopy.

For many years Marin has missed the opportunity to save vast numbers of our native trees. The reasons are complex — and buried under old, misguided legal actions once taken against the individual who discovered the efficacy of potassium phosphite in saving trees. These actions are the reason why the very fertilizer that can save trees is now erroneously labeled a fungicide — which it is not! In effect, a few key officials stood by and

watched as Rome burned without intervening to put out the fire.

Matteo Garbelotto has a well-organized research project ("SOD blitzes") that sends people into the field to collect samples. While collecting data about tree mortality is useful, why not train and equip platoons of willing citizens to go to affected zones and literally blitz the trees — that is, spray them! Additionally, the county should consider using aircraft to broadcast granular potassium phosphite and calcium over remote, forested areas to slow the geographic spread of the disease.

If you would like more details about what has worked so well for me, please feel free to email william@williambinzen.com.

I say, let's save our oaks — while there are still a few oaks left to save!

William Binzen, of Woodacre, is a photographer, artist and environmentalist.