Background

Sudden Oak Death (SOD), caused by the non-native pathogen Phytophthora ramorum, kills highly susceptible tree species, such as tanoak and California black oak, by causing lesions on the main stem.

It also causes leaf blight or shoot dieback on a number of other hosts, including rhododendron, evergreen huckleberry, Douglas-fir, grand fir, and Oregon myrtle. In Oregon forests these hosts are only infected when growing very near infected tanoaks. P. ramorum spreads during rainy periods when spores produced on infected leaves or twigs are released into the air and are either washed downward or transported in air currents.

Tanoak trees have been found infected with the sudden oak death pathogen 21 miles northwest of the existing quarantine area for the tree disease. In April 2021, an OSU researcher driving back from Brookings noticed dying tanoaks along Highway 101 just outside Port Orford. The OSU Forest Pathology Lab in Corvallis confirmed the trees were positive for Phytophthora ramorum, which causes sudden oak death. The pathogen can infect many plants but kills tanoaks. Further lab testing at OSU showed the pathogen strain to be NA2. This is the first time it had been identified in trees in the wild and is believed to be a new introduction into Oregon’s forests.

Since 2001, an interagency task force and affected landowners have worked to slow the spread of SOD in Curry County. The Oregon Department of Forestry has worked closely with landowners on the management of sudden oak death and relies on their cooperation for the success of Oregon’s SOD Program.

Maximum distance of natural spread appears to be 3 to 5 miles per year. The pathogen can survive for months or years in soil or plant parts. The disease also can be spread by humans transporting infected plants or infested soil.
Initial SOD eradication in Oregon

When first discovered, the objective of Oregon’s SOD program on forestland was eradication. Treatment of an infested site consists of cutting, piling and burning all infected plant material and nearby host plant material within a specified radius (aka treatment buffer) surrounding infected plants. Monitoring studies show that treatment within a 300-foot buffer conducted promptly after detection can eliminate the pathogen from the site and slow the spread.

Quarantine regulations

Spread of *P. ramorum* on state, private, and federal lands is managed by the designation of a SOD quarantine area under the authorities of the Oregon Department of Agriculture (map left, ORS 603-052-1230). The quarantine requires infested sites to undergo eradication treatment, prohibits the movement of infected material outside of the quarantine area, specifies the best practices to apply when moving non-bole host plant material from infested sites and sets forth requirements for disease-free certification when moving uninfected host material to areas outside the quarantine. In 2012, the program designated a Generally Infested Area where no treatment is required. Since 2001 the quarantine area has expanded seven times. In 2015, the quarantine area was expanded to 515-square miles. Quarantine boundaries are subject to change. Please visit ODA’s website for current boundaries (www.oregon.gov/oda).

Current slow the spread program

Early detection is critical to the current slow-the-spread program. The program uses a three-pronged approach of aerial detection, water sampling, and ground-based surveys. Oregon and our federal partners continue to slow the spread of SOD by cutting and burning infected trees and those in the surrounding area. The program places higher priorities on treatments on outlying new sites to provide the greatest return on investment. The infestation in Port Orford is the highest priority for Oregon’s SOD Program. Landowner cooperation is key to the success of treatments.

References and further reading


OSU Extension Sudden Oak Death Guide: https://catalog.extension.oregonstate.edu/em9216

OAR 603-052-1230
http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_603/603_052.html

More information

Current SOD Information for the Port Orford area and SOD Program contacts: https://blogs.oregonstate.edu/suddenoakdeathworkshops/

Oregon Dept. of Forestry
Forest Health Unit
https://www.oregon.gov/ODF/ForestBenefits/Pages/ForestHealth.aspx