

S U D D E N O A K D E A T H

in California

An Introduction to Sudden Oak Death

Sudden Oak Death is a forest disease caused by the pathogen *Phytophthora ramorum*. It is killing tanoaks and some species of oaks in coastal California, while also infecting many other plants. The effects of this pathogen may include adverse economic impacts, decreased water quality and wildlife habitat, increased risk of fire, and tree failure.

Oak and Tanoak Trunk Symptoms



An early symptom is bleeding or seeping of dark thick sap from areas of infection on the lower trunk. Infection results in a canker or dead area within the bark and outer tissues.

As Sudden Oak Death progresses, cankers spread and interrupt the flow of food and water. Weakened trees are susceptible to attack from beetles and decay fungi, which may hasten the tree's demise.



www.suddenoakdeath.org

Help Control the Spread!

- Comply with State and Federal regulations: Do not move host plant material, including leaves and small twigs, out of infected areas.
- Hikers, bikers, equestrians, campers, and other recreational users should always clean dirt and mud from shoes, clothing, equipment, their animals, and cars when leaving an infested area to minimize the chance of accidental spread of the disease to uninfested areas.



- Contact the California Oak Mortality Task Force at www.suddenoakdeath.org to learn more about this pathogen - where it is found, what plants are susceptible - and how you can get involved.



California
Oak Mortality Task Force

Other Host Symptoms

Many other hosts have symptoms that are generally limited to leaf spots and twig dieback. These plants are not usually killed by the disease. Spores of the pathogen can build up rapidly on these plants' leaves and help spread the disease to other host plants through rain splash.



Infection on bay leaves (left) and on a rhododendron leaf (above).

Identifying the pathogen *Phytophthora ramorum* is not easy because other organisms and injuries can produce similar symptoms, so laboratory testing is required for confirmation.



The disease is most commonly found in forests that have a mixture of oaks and California bay laurel trees, and in tanoak/redwood forests.