

WHAT CAN I DO TO GET INVOLVED?



Volunteers can work outdoors (top) or in the lab (lower). Rhododendron leaf baits after exposure to stream water (inset).

STREAM MONITORING PROGRAMS have been found to be effective at detecting the spread of invasive *Phytophthora* species in the environment and allow for eradication efforts to be directed at high risk areas. Because *Phytophthora* is a microscopic pathogen, it must be detected by indirect methods, such as baiting streams with leaves of susceptible plant hosts and then culturing symptomatic material back in the lab. We are looking for volunteers who can place and retrieve bait bags in selected streams, or who want to do diagnostic lab work at WSU Puyallup.

Sudden Oak Death Research Program

Protecting our natural resources and helping industry respond through research, education, and monitoring.

To volunteer, go to <http://www.puyallup.wsu.edu/ppo/sod/monitoring/stream/stream%20monitoring.htm> and take our quick survey. Your name will be added to a mailing list and you will receive notifications of volunteer and research opportunities.

Or contact Dr. Marianne Elliott
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Monitoring Streams for Invasive *Phytophthora* Species in Western Washington



Volunteer Information

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WHAT IS PHYTOPHTHORA?

Phytophthora is a microscopic, fungus-like plant disease that is commonly referred to as a “water mold”.

While some *Phytophthora* species are non-lethal, a number of *Phytophthora* species cause serious plant diseases such as potato late blight and sudden oak death (SOD).



Rhododendron infected with *P. ramorum*. (Photo by M. Elliott)



Tanoak damage in California (Photo by John M. Randall)

HOW DOES IT SPREAD?

Invasive *Phytophthora* species like *P. ramorum* spread through the movement of aerial- and water-borne spores, infected plants, and contaminated soil and water.



P. ramorum can move from an infected nursery into the environment via infested run-off water (above and below). Spores of *P. ramorum* forming on Rhododendron foliage (inset).



WHAT ARE THE RISKS IN WASHINGTON?

Western Washington is considered to be a “high risk” area for the spread of invasive *Phytophthora* species due to favorable environmental conditions and native plant hosts.

Until recently, *P. ramorum* had only been found in ornamental plant nurseries in Washington, but since 2004 it has been detected in waterways near four infected nurseries.



Kitsap stream found to be positive for *P. ramorum*. (Photo by M. Elliott)

If released into the environment, invasive *Phytophthoras* can trigger quarantines that would have significant economic impact on the horticulture and forest products industries.



Native vegetation removal along a stream infected with *P. ramorum*. (Photo by M. Elliott)