Sudden Oak Death Surveys

USDA Forest Service Northeastern Area State and Private Forestry



Description: Sudden Oak Death (SOD) is an introduced disease of oaks and other plant species caused by the fungal pathogen *Phytophthora ramorum*. Infected trees develop bleeding stem cankers followed by crown dieback and death. SOD was first reported in central coastal California in 1995 and has since spread to parts of Washington and Oregon, where it has killed tens of thousands of oaks. The fungus was probably introduced by infected European nursery stock; its spread along the Pacific coast has been linked to transport of infected rhododendron from contaminated nurseries. All 20 States served by the Northeastern Area (NA) have received shipments of nursery stock from contaminated nurseries in California and Oregon. In 2004, plant regulatory officials confirmed the presence of the SOD pathogen in several northeastern nurseries. Unfortunately, many of the plants from these nurseries had already been sold; the locations are unknown. While no infected plants is a major threat to our oak forests.

Key Issues:

- Oak forests located near infested nurseries have been exposed to the SOD fungal pathogen.
- Regional climate conditions and vegetation are favorable to the pathogen.
- Detection monitoring of oak forests outside of retail nurseries needs to be maintained.
- Laboratories that analyze plant samples with SOD symptoms need support.
- Field and laboratory efforts need to be coordinated with the USDA Animal and Plant Health Inspection Service (APHIS).

Accomplishments:

- Helped develop a National SOD Risk Map to target monitoring to high-risk locations.
- Conducted SOD early detection surveys in Pennsylvania and West Virginia in 2003.
- Expanded SOD early detection surveys to all 20 NA States in 2004 and 2005.
- Improved the efficiency of field sampling techniques using stream-based sampling methods.
- Coordinated the collection of field samples followed by laboratory testing.
- Coordinated monitoring efforts with APHIS surveys in commercial nurseries.

Budget History:

SOD Survey Funding (\$ Thousands)					
	FY 2003	FY 2004	FY 2005	FY2006	FY2007
Totals	\$20	\$408	\$470	\$465	\$120

Future Direction:

- Replace ground-based surveys with stream-based watershed surveys in 2007.
- Target surveys to 13 moderate-to-high risk States.
- Maintain good coordination with plant pest regulatory officials to conduct SOD surveys.
- Align monitoring with new research information.

Kathryn Maloney, Director Newtown Square, PA 19073 610-557-4103 (4177-FAX) kmaloney@fs.fed.us Jerry Boughton, Assistant Director Newtown Square, PA 19073 610-557-4139 (4200-FAX) jboughton@fs.fed.us Jim Steinman, FHM Coordinator Newtown Square, PA 19073 610-557-4139 (4136-FAX) jsteinman@fs.fed.us



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