The Nature Conservancy
Protecting nature. Preserving life.™

Funding Request for Sudden Oak Death

The Nature Conservancy requests $10 million for the USDA Animal and Plant Health Inspection Service's (APHIS) Emerging Plant Pest program to contain and suppress Sudden Oak Death in FY2009. The Administration requested $6.6 million in FY09 funding for this activity.

What is Sudden Oak Death?

Sudden Oak Death (*Phytophthora ramorum*) is a plant disease of unknown origin; many scientists suspect that it originated in Asia. Sudden Oak Death probably entered the United States on plants imported for horticultural use.

Where is Sudden Oak Death established?

In North America, Sudden Oak Death is now established in 14 California counties and a small area in one southern Oregon county. In 2004, Sudden Oak Death was also detected infecting plants in more than 200 nurseries nation-wide and in Canada. Regulatory actions reduced that number to about 20 in 2007. A number of infected plants found in gardens have been destroyed. Federal and state officials as well as Master Gardeners and other volunteers are diligently searching for any signs that the disease has spread. Sudden Oak Death is also found in nurseries across Europe and has spread to gardens and forests in the United Kingdom and the Netherlands.

Dying Oaks in California. © Paul Svirhae, UCCE Marin County, California Oak Mortality Task Force.

Ecological Threats from Sudden Oak Death

At least 40 North American tree, shrub, and herb species are susceptible to Sudden Oak Death disease. More than one million trees in California have died; millions more are at risk along a 1,500 mile stretch of the Pacific coast. Eastern trees at risk include chestnut oak, white oak, northern and southern red oak, black walnut, and sugar maple. Also at risk are numerous shrub species, including rhododendrons and mountain laurel.

Oaks are highly important components of forest ecosystems. Nearly 200 kinds of birds and mammals feed on various parts of oak trees. For example, in the Ozarks of Missouri, acorns comprise 37% of the diet of wild turkey and 54% of the diet of white-tailed deer. Acorns are an important food for many forest birds and cavities used for nesting. Nine species of terrestrial vertebrates on the Endangered and Threatened species list occur in the oak-hickory forest type. The Nature Conservancy and its partners have invested hundreds of millions of dollars in the conservation of these and other significant forests across the continent.

Economic Consequences of Sudden Oak Death

- Tree removal and replacement in rural urban and suburban communities -- Infested street trees must be removed to maintain public safety. In California, the state, cities, and private property owners have paid more than $3 million to remove thousands of trees. Failure to contain Sudden Oak Death will expose communities across the country to similar costs.

- Severely threaten the timber industry -- If Sudden Oak Death spreads north into Oregon and Washington, the impacts will be severe. While Sudden Oak Death does not kill mature Douglas-fir, regulations aimed at preventing its spread could hinder movement of seedlings for replanting, and -- possibly -- logs. If Sudden Oak Death spreads to the Midwest and East, it threatens large numbers of oaks. Oaks comprise 38% of the total hardwood saw timber volume in the United States, with a timber value estimated to be $3 billion annually.

- Harm to the nursery industry -Host plants include such staples of the nursery industry as camellias, rhododendrons, and viburnums. Trade in these plants is worth more than $250 million annually. Trade in Douglas-fir Christmas trees is worth nearly $150 million annually. California nurseries lost an estimated $25 million in spring 2004 when millions of infected plants had to be destroyed and garden centers across the country became wary about buying plants and potential losses.

Benefits of significantly increased funding

If Sudden Oak Death is not effectively contained, it threatens forests and suburban areas across much of North America, potentially causing immense ecological and economic damage. It could also disrupt domestic and international trade in forest products and nursery stock. The most likely way in which Sudden Oak Death might be spread is as a disease on nursery stock. In 2004, more than 2.2 million host plants were shipped throughout the country from infected West-coast nurseries. An unknown number of these plants actually carried the disease. More than 200 nurseries in 22 states received infected plants.

APHIS is responsible for preventing a repetition of this situation. To meet this responsibility, APHIS regulates interstate shipments of a huge variety of plants from nurseries in California, Oregon, and Washington, including:

- annual certifications of hundreds of nurseries in the three states.
- annual inspections of millions of plants in nurseries throughout the three states.
- oversight of state nursery inspection and certification programs; of compliance agreements with individual nurseries; and of laboratories testing plants with suspicious symptoms.
- enforcement - including trace forward/trace back when infected plants are found.

While the stringent regulations have reduced significantly the numbers of infected plants being sent through the nursery trade; however, the problem is not yet solved: in 2007, 20 nurseries were found to have plants infected by the Sudden Oak Death pathogen.

The proposed funding increase would allow APHIS to continue rigorous enforcement of the regulations and work with the nursery industries in California, Oregon, and Washington to support development and testing of clean stock programs that will utilize cultural practices, fungicides, and improved production technologies to prevent continued spread of this disease. The requested funding would facilitate implementation of needed pilot programs to ascertain the effectiveness of these techniques.

APHIS must also adopt and enforce additional stringent regulations to prevent introductions of the Sudden Oak Death pathogen from Europe, Canada, or other foreign countries. These foreign nurseries should be required to meet the same conditions as are nurseries in California, Oregon, and Washington.

The USDA Forest Service has a complementary program in which it surveys high-risk wooded areas near nurseries and works with Master Gardeners and others to detect infected plants bought by homeowners. The USDA SOD plan ensures that agencies are not duplicating efforts.

Funding History

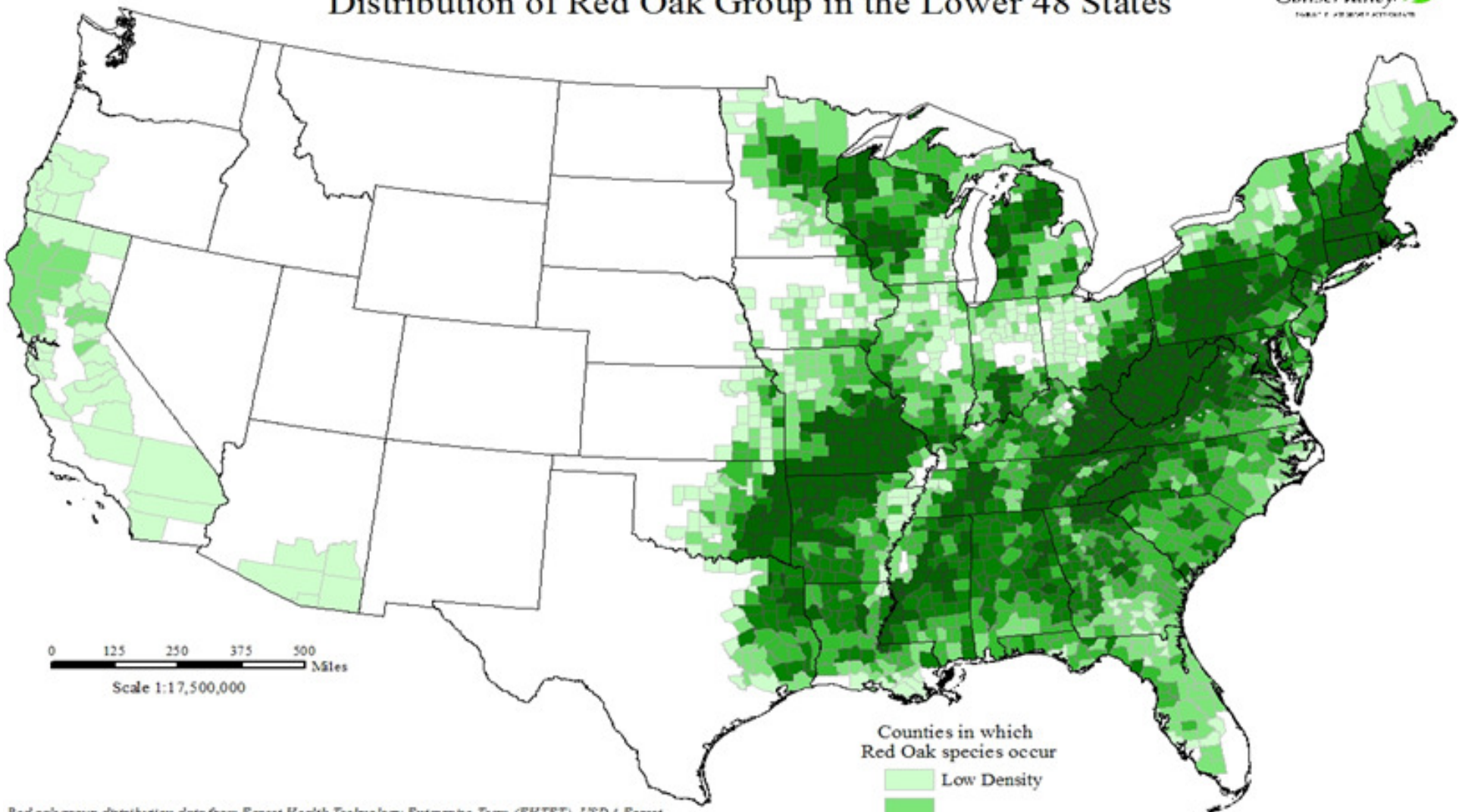
	FY05	FY06	FY07	FY08	FY09 Budget
Sudden Oak Death Total	$12,444,000	$3,055,000	$3,062,000	$5,290,000	$6,556,000
Appropriated	$2,976,000	$3,055,000	$3,062,000	$5,290,000	$6,556,000
CCC	$9,468,000	-------	-------	-------	-------

The Nature Conservancy Worldwide Office

Tom Cassidy
Director of Federal Programs
703/841-4527
tcassidy@tnc.org

Faith Campbell, Ph.D
Senior Policy Representative
703/841-4881
fcampbell@tnc.org

Distribution of Red Oak Group in the Lower 48 States



Red oak group distribution data from Forest Health Technology Enterprise Team (FHTET), USDA Forest Service, Fort Collins, Colorado; 2006
Distribution data derived from Forest Inventory and Analysis (FIA) plots (USDA-FS)-- basal area measurements were interpolated to cells in a 1000 meter grid. Information was summarized by county, and distribution classes were defined based on area-weighted basal area sums

Map produced by ECS-ERO, 2/07

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