

# Oak Wilt Detection and Data Management Database Application



Photograph by: Ronald F. Billings, Texas Forest Service



Photograph by: D. W. French, University of Minnesota



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Photograph by: Paul A. Mistretta, USDA Forest Service

## Overview

Oak Wilt, *Ceratocystis fagacearum*, is a serious exotic pathogen of Quercus species, especially red and black oak. It is slowly but constantly spreading throughout the oak resources of many states, and killing thousands of oak trees in forests and urban landscapes in the Lake States and Texas every year. It is a manageable disease; however such efforts are hindered by a poor understanding of the distribution of oak wilt and a poor understanding of the magnitude of the impacts of oak wilt.

A standardized oak wilt confirmation protocol is needed for swift and accurate diagnosis of this disease. A national oak wilt database that is based on the standardized confirmation protocol will benefit not only decision makers and policy makers, but also foresters, municipalities, property managers and private landowners to develop plans to prevent, detect and manage this potentially devastating disease. [www.foresthealth.info/oakwilt](http://www.foresthealth.info/oakwilt)



## Objectives

This project proposes to populate this national oak database using the newly developed confirmation protocol. States would use a combination of aerial imagery, aerial and ground surveys, and laboratory culturing to detect and confirm the disease. Results would then be used to populate the database. The National Risk Mapping process is an integral part of this effort.

The resulting oak wilt database will serve two needs:

- An impact analysis needed to project expected short and long-term resource losses given different management response scenarios.
- Provide quality data on distribution and impact to foresters, property managers and landowners concerned with prevention, detection and monitoring, and management/mitigation of the disease.

## Collaborators

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