

RECOMMENDED OAK WILT PREVENTION*

Edited by Dr. Ronald Billings, Ph.D.;
Manager of Forestry Health, Texas Forestry Service

It is documented by current research that more than 95% of the spread of Oak Wilt from tree to tree in live oak groves occurs underground via roots (Minnesota research by Juzwik, 1983). However, above-ground infection is the means by which new oak wilt centers originate. New infection centers begin when insects carrying oak wilt fungal spores visit fresh, open wounds** on susceptible hosts (usually red oak or live oak trees). Wounding mechanisms can include wind, hail, vehicle damage, construction activity, squirrel activity, bird activity, or tree pruning. Numerous research references indicate that initiation of new oak wilt centers can be minimized by taking extra precautions when pruning oak trees, especially when climatic conditions are most conducive to both the production of oak wilt fungal mats on diseased trees and the movement of the insects that carry disease spores. In Central Texas, these climatic conditions are most likely to occur during the Spring. Because temperatures vary widely with seasons in Texas, pruning recommendations based on calendar dates (February 1 through June 30) provide a low-risk alternative.

Insects (primarily of the family Nitidulidae) are believed to be the primary factor in spreading the disease above ground, and these insects are most common during the Spring months. The ideal pruning season is the coldest months (November through January) when growth is dormant and the carrier beetles are inactive. Property owners can plan ahead and work with certified arborists to develop long range tree management plans. It is inevitable, however, that some trees may require care and pruning during “non-recommended” pruning times, and when oak pruning is done during these times, it should only be performed by certified arborists fully trained and experienced in proper pruning and oak wilt prevention techniques. These techniques include sanitizing tools between trees and properties, making proper pruning cuts, and immediately covering any wounds with a thin coating of low-toxicity wound or latex paint.

Should infections develop, property owners should immediately contact Texas Oak Wilt Certified Arborists to develop containment plans to prevent oak wilt from spreading through the interconnected root systems into the neighborhood. Common practice for accomplishing this employs trenching at least 4 feet deep and 100 feet beyond the perimeter of infected trees, and removing infected trees. In some cases, fungicide injections can be used to treat individual trees, but this practice does not stop the spread of the disease from tree to tree.

* Reference: How To Identify and Manage Oak Wilt in Texas, US Forestry Service HOW-TO SR-1, June 2005.

** Wound is used in this context to mean any cuts or damage to live tree fiber and/or bark either intentionally (pruning) or inadvertently (damage by storms, vehicles, machinery, or animals).