

Oak Wilt = Bad News

OAK WILT is a lot like a tornado: sometimes it takes out huge areas, while other times it seems to hit at random. Just as a tornado can destroy historic old buildings, so can Oak Wilt destroy lovely trees hundreds of years old. Tornadoes can bring death and destruction; so can Oak Wilt. The sight of a once beautiful stand of Live Oaks, dead and dying, or a fine old specimen Red Oak felled by Oak Wilt is a bleak one.

Unfortunately, this scene may become all too familiar here in Central Texas. Oak Wilt has already been detected in sixty-four Texas counties, most of them along Interstate 35 and westward, with doubtless many more to come. Renee Burks with the Texas Forest Service reports that she has visited 68 sites of documented Oak Wilt infestation in McLennan County alone. And the worst fact of this fungal disease is that, so far, there is no cure. The person who discovers a cure, if there is one, is likely to become quite disgustingly rich.

Readers of this magazine probably already know that Oak Wilt and Oak Decline are two entirely different conditions. The former is the deadly fungal disease; the latter is caused by several environmental challenges, including the widespread and pernicious use of “weed and feed” products under the driplines of oaks, and the addition of soil in the same areas. Oaks have shallow roots, quite close to the surface and thus are extremely sensitive to grade changes. Just a few inches of topsoil can spell disaster for many species of oaks, especially when added close to the trunks or over the entire area of the drip line.

While there is no available cure for Oak Wilt, there are preventive measures we can learn to practice in order to slow the spread of the disease. The good news is that while no oak tree is immune, some are more resistant than others. White oaks, such as the Bur Oak (*Quercus macrocarpa*), the Post Oak (*Q. stellata*), and the Chinkapin Oak (*Q. muhlenbergii*) are quite resistant.

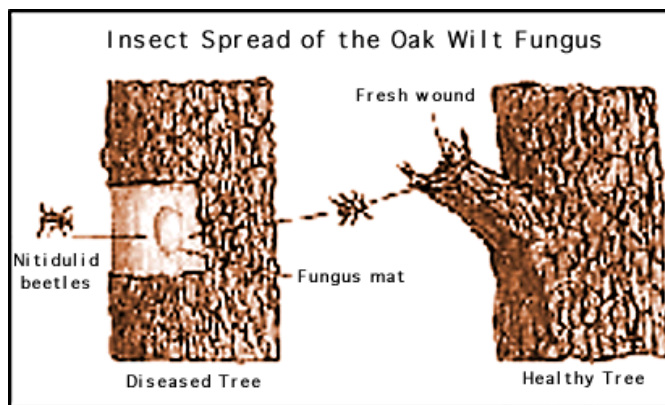
The red oaks—Texas Red Oak, Shumard Oak, Spanish Oak, and Blackjack Oak, and others—are highly susceptible and, according to the U.S. Forest Service, may play a unique role in the establishment of new Oak Wilt infections. It appears that new infections require the presence of a red oak in the area, among other factors. Live Oaks (*Q. virginiana* and *Q. fusiformis*) are seriously affected by Oak Wilt because of their habit of growing in clumps or *motts*, with shared root systems.

Oak Wilt is spread in two ways—through shared root systems and by the Nitidulid Beetle, which is a sap-feeding insect attracted to the fungal mats which form beneath the bark of infected red oaks. They feed mostly on standing trees, but they can also feed on logs, stumps, and fresh firewood. If the beetles feed on one of these fungal mats and then fly to open wounds on other oaks, they may transmit the disease.

Keeping in mind these two means by which Oak Wilt is spread, it is easier to understand the basic preventive measures we should all take—

- 1) Prune all oak trees *only* during the months that the Nitidulid Beetle is not active—December and January, July and August—that is, in the dead of winter and the hottest part of summer. These are the only safe times to prune. Winter is the better choice since summer presents additional stresses for the trees.
- 2) Seal all wounds of oaks, no matter when or how acquired. Use pruning paint, latex paint, spray paint. You can even use Elmer’s Glue if you have to, but do get the wound sealed immediately.
- 3) Before making any cut on an oak, disinfect the cutting blade. Duncan Brooks, a Certified Arborist and Oak Wilt expert living in McLennan County, says that he and his crew spray cutting blades on chain saws, etc. with a disinfectant such as Lysol.

One more word about pruning: If you want to avoid having your trees pruned by the utility companies—and I’m sure most of us do want to avoid that—then, by all means, do it yourself, or hire it done, before overhanging branches become a problem. That way you have control of when the pruning is done, how it is done, and by whom.



Another way we can all help control the spread of Oak Wilt is by the proper storage of our firewood. It is best to buy only firewood that has been seasoned, that is, kept for at least one year. If you cut your own, or if you are not sure where yours came from or how well seasoned it is, then be sure to encase it completely in clear plastic and bury the ends of the plastic for a period of a year. (Be sure to use clear plastic, according to McLennan County Agent Donald Kelm.) You want to be sure that no insect gets in or gets out. Remember that blasted little beetle is our nemesis!

The other ways of managing the spread of oak wilt are a) the isolation of vulnerable trees by means of trenching, and b) macro-infusions of certain high-value oaks with a chemical. Both of these methods are beyond the scope of this article. Because of their complexities, you should hire experts and should certainly get in touch with your county extension agent, who can tell you when and where the next Oak Wilt Seminar will be held. Your agent can put you in touch with certified arborists, people from the Texas Forest Service, and others who specialize in Oak Wilt management.

Now that you know the basics and know the ways the average homeowner can help stop Oak Wilt, spread the word. After all, if you are doing everything perfectly but your neighbors are not, well, you can see how Oak Wilt can be invited into your neighborhood. This is a *neighborhood* problem. Maybe you and your neighbors can help develop a neighborhood solution. At the very least, you will be getting the word out.

It is surprising how few people are aware of this disease that threatens to change the landscape of Central Texas and harm the beauty of our homes, towns and cities. If you are a member of a group of gardeners, use a meeting to present this problem and the ways of preventing it. Share the information with your newspaper, city council, and parks department.

Our native oaks, especially our Live Oaks, are some of our most valuable assets. They beautify our land, they shade us from our extreme Texas summers; they are our legacy from previous generations. Let's all give them the care and the respect that they deserve.

-Judy Tye
McLennan County Master Gardener