Balcones Civic Association Oak Wilt Guide Summer 2006

Oak wilt is one of the most destructive tree diseases in the United States. In Central Texas, we must constantly look for oak wilt disease and must take precautionary steps each year to prevent its spread. This guide is an attempt to educate our residents about oak wilt and to present practical steps that all of us can take to protect our grand and valuable oak trees.

Background

This is the 8th edition of BCA's Oak Wilt Guide. The guide was first distributed in Jan. 1992, during an oak wilt epidemic in Texas. The second, third, and fourth editions came out in Sept. 1992, 1993, and 1997, and 2003, respectively. <u>The Balcones Civic Association grants blanket</u> <u>permission to reproduce and distribute this Oak Wilt Guide</u>, in hopes of attaining greater public awareness and knowledge of the disease and how to defend against it.

Facts About Oak Wilt Disease*

- 1. Oak wilt is a disease caused by a fungus (Ceratocystis fagacearum) that clogs the water conducting vessels of an infected tree, causing the tree to wilt and die.
- 2. There is no cure for oak wilt disease, so prevention is our main weapon to fight it.
- Most types of oak trees in Central Texas are affected by oak wilt, including live oaks and members of the red oak group, which includes Spanish, blackjack, pin, Shumard, and water oaks. Post oaks seem to be somewhat resistant to the disease.
- 4. Oak wilt can spread in two ways: 1) underground, from an infected tree to a healthy tree through connected root systems (affects live oaks primarily); and 2) above ground, by the sap-feeding nitidulid beetle (sap beetle), which carries the fungus from an infected tree to fresh wounds on a healthy tree.
- 5. Members of the red oak group are particularly susceptible to oak wilt and play a large role in spreading the disease. In the late fall and early spring, infected red oak trees contain special structures just beneath the bark called <u>fungal mats</u>. The fungal mats are covered with spores that can be carried by sap beetles to infect new trees. **Peak time for sap beetle infections is February through May.**
- 6. Fungal mats can also form on firewood from diseased Spanish or blackjack oak trees while the firewood is in storage. Infected firewood should be carefully burned.

*Information taken from: 1) an Austin Parks and Recreation bulletin entitled "Oak Wilt: A Guide to Identification and Management:" 2) a USDA Forest Service bulletin of Jan. 1990 entitled "How to Identify and Manage Oak Wilt in Texas," published by the Southern Forest Experiment Station in New Orleans, LA; and 3) the oak wilt information page on the Texas A&M Univ. Dallas Research & Extension Center's web site, http://dallas.tamu.edu/oakwilt/

Preventing the Spread of Oak Wilt Disease*

- 1. Cut/prune oak trees <u>ONLY</u> during July through September or in January. The sap-feeding beetle is not as active in extremely hot or cold weather.
- 2. <u>DO NOT</u> cut/prune oaks from Feb. 1 through June 30, or during October through **December**. These are the most active times for the sap-feeding beetle.
- 3. Use only clean/disinfected tools for pruning oak trees. Disinfect tools with Lysol spray, or a 20% bleach/80% water solution. Dry each tool thoroughly before using.
- 4. **Immediately after pruning, paint all wounds with a standard asphalt-based wound dressing**. It only takes one wound contact by a contaminated sap beetle to introduce oak wilt into our oaks, so paint all pruning cuts, regardless of the size.
- 5. Be observant. Watch for wounds or storm damage and take immediate action to prune and seal the wounds. Alert your neighbors to the problems of oak wilt. Give a new neighbor a copy of this guide.
- 6. Do not let unqualified people prune your trees during the months when the sap beetles are most active. Disinfected tools and wound dressing <u>MUST</u> be used during these periods of the year, and should be used at all times.
- 7. Purchase or harvest uninfected firewood. The easiest way to do this is to not purchase or harvest, oak firewood. Favor instead firewood from elm, pecan, mesquite or ash trees.
- 8. Limit the amount of firewood stored at home, stack firewood away from oak trees, and cover with clear plastic, tucking in and covering all edges with soil. Do not use black or colored plastic to cover firewood, as any sap beetles accidentally brought in with the firewood can identify holes in the dark plastic to escape from.
- 9. Burn all firewood by March 1st of each year to prevent your wood from becoming a possible source of infection. The sap beetle begins to be active in mid-late February.

Additional Resources

- A. City of Austin oak wilt web page: <u>www.ci.austin.tx.us/oakwilt</u>
- B. Travis County Agriculture Extension Service office, ph. 512-854-9600
- C. Texas Forest Service/LCRA oak wilt hotline: 512-473-3517
- D. Texas A&M Univ. Dallas Research & Extension Center oak wilt information page: <u>http://dallas.tamu.edu/oakwilt/</u>

Disclaimer: The information in this guide was compiled and edited by Susan Joiner, BCA newsletter editor. While she believes that the resources used and information compiled are reliable and accurate, the Balcones Civic Assn. makes no representation, implication, or guarantee, that the procedures suggested in this guide will absolutely prevent oak wilt disease.