

Controlling Oak Wilt Disease in Wisconsin

LEADER TRAINING



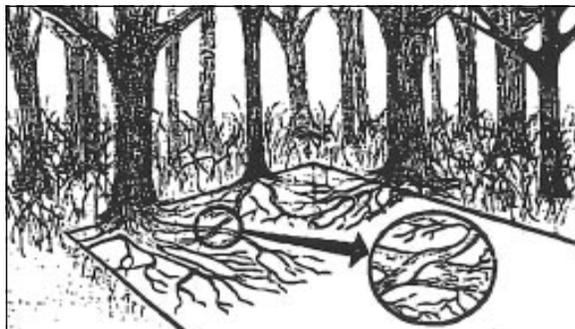
Presenter:

Objectives

- To recognize leaf and bark differences.
- To recognize signs of Oak Wilt.
- To become familiar with the causes and symptoms of Oak Wilt.
- To become aware of how Oak Wilt is spread.
- To become aware of methods for controlling Oak Wilt.

Before your club meeting

- Obtain the 35 minute videotape and the 19 minute video production from your UW Extension Office.
- View the two videotapes.
- Make arrangements with the host/hostess of your club meeting to use a TV and VCR.
- Read the three publications available from your County Extension Office titled:
 - *Oak Disorder: Oak Wilt* by G.L. Worf and M.F. Heimann (A1693)(1993)
 - *Oak Wilt Management -- What are the Options* by Jane Cummings Carlson and A. Jeff Martin (G3590) (1994)
 - *Root Graft Barriers for Oak Wilt Control* (August 1989)[From: Minnesota Department of Agriculture, 90 West Plato Blvd., St. Paul, Minnesota 55107(612)296-3349]
- Gather a leaf from both a white and red oak (see pictures in publications) and a picnic beetle, if possible.



Oak roots often fuse (graft). The oak wilt fungus can spread from infected to healthy oaks through these root grafts.

Teaching outline

I. Introduction

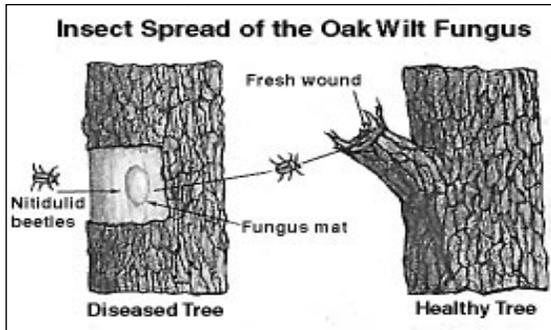
- What is Oak Wilt?*
Oak Wilt is caused by a fungus that kills thousands of oaks every year in Wisconsin.
- Why all the concern?*
Since there is no cure for Oak Wilt, prevention is the key to controlling it. If we become aware and educated about the symptoms, causes and control, we will be better able to control its spread.
- Show the first segment of the videotape titled "Oak Wilt in Wisconsin."*

II. Discussion

- What oak trees are most affected by Oak Wilt?*
Red and black oaks are more vulnerable than white and bur oaks (show a leaf from each tree).
- How can we detect Oak Wilt?*
Leaves become brown (wilted) from the top to the bottom of the tree and within one to two weeks the tree may lose all of its leaves.
- How does Oak Wilt kill a tree?*
A fungus clogs the vascular system of the tree and stops its ability to take up water from the roots.
- How does Oak Wilt spread?*
 - Underground: 90 percent of the fungus spreads through the roots. (Underground oak roots often fuse or graft, forming a common root system. The Oak Wilt fungus can spread from infected to healthy oaks through these root grafts.)
 - Overland or long distance: 10 percent of the fungus spreads through inoculation from a nitidulid (or picnic) beetle. (Show beetle if you have one.)

Coordinator:

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3. NOTE: The disease must spread from red oak to red oak or white to white. If same species trees are within 50 feet of each other, they will probably be infected.

- a. Do not take firewood from a diseased tree to an area not infected.
- b. Speed the drying of firewood by keeping it dry, covered and off the ground.
- c. Clean saw blades before moving from an infected tree to a healthy tree.

F. Optional: Show the second videotape segment titled "Oak Wilt in Wisconsin." It shows a historical perspective on the disease. Also, view Illinois videotape as a review.

III. Conclusion

Becoming knowledgeable about Oak Wilt will help prevent its spread in Wisconsin. Whole communities and neighborhoods must work together in controlling it. If you would like more information on Oak Wilt contact the Extension Office for the three brochures (or other resources):

- *Oak Disorder: Oak Wilt*
- *Oak Wilt Management—What are the Options?*
- *Root Graft Barriers for Oak Wilt Control*
- or call your district DNR representative.

After the meeting

Forward the videotape to a club in your district that will be using it next or return it to your county Extension Office.

Also see . . .

The Steenbock Library at the University of Wisconsin-Madison maintains a World Wide Web site about Oak Wilt at:
 <http://.....>

E. *How do you control Oak Wilt?*

1. Do not prune oak trees after buds break, which may be as early as April 1, nor at any time throughout the growing season to Oct. 15 or until hard frost.
2. If a tree becomes injured, make sure the injury is painted or sprayed with an asphalt base paint or similar tree paint immediately after the injury. (Available at hardware stores).
3. Sever root grafts.
 - a. Mechanically cutting the roots with a vibrating plow or trencher.
 - b. Chemically severing the roots with a fumigant like Vapan.
4. Use proper procedures for removing diseased trees.
 - a. Do not remove diseased tree right away. It may accelerate the movement of fungus to healthy trees via root grafts.
 - b. Sever root grafts before dead or infected trees are removed.
 - c. Girdle diseased trees. This speeds up the drying that reduces or prevents fungus mat formation.
 - d. Wait until winter to remove the diseased trees. Have diseased trees removed by April 1.
 - e. Apply herbicide to the cut.
5. Use proper procedures for using firewood from Oak Wilt infected trees.