

Got Oaks?

Submitted by the North Oaks Natural Resources Commission

Oak wilt is a devastating disease for our beautiful oak trees, and is a distressing experience for you if it happens to the oaks on your personal property.

Oak wilt, caused by a fungus, is responsible for killing oak trees in North Oaks every year. The oak wilt fungus spreads in two ways. Most new infections are the result of the fungus moving from infected to healthy oaks through their root systems. Oak roots from neighboring trees grow into one another and become fused or grafted together. Trees as much as 50 feet apart may be grafted together. Infections can also occur when sap-feeding beetles pick up the fungal spores on their bodies and travel to a fresh wound on another tree. The beetles transfer the spores to the open wound, causing another infection center.

While all species of oak (there are four in Minnesota) can be affected, oaks in the red oak group (oaks with pointed leaves) are by far the most susceptible. Northern red and pin oaks can die within two to three months of infection. White and bur oaks are more resistant and may survive for years after infection. When a tree is infected, it will wilt from the top down, a few branches at a time. Leaves begin to drop at a rapid rate. The fallen leaves may be brown, green, or a combination of brown and green.

What is a homeowner to do?

- **Prevention** is the most efficient and cost-effective means of oak wilt control. Because of the close relationship between wounds and infection, it is important not to wound oak trees during the primary infection period—April, May, and June. There is an adage "Never wound or prune in April, May, or June." However, evidence in recent years indicates that we may have to add the month of March to this list as well!

- **Diagnosis** of infected trees is also critical. Contact our City Forester, Mark Rehder, at 651-307-1120 if you suspect a tree is infected.

- **Control** existing infected areas. (1) Arrange for the proper **removal** of infected oaks. If you plan to keep the downed tree for burning in your fireplace, the infected wood must be wrapped and sealed in very thick plastic (4-6 mil) until July 1. **DO NOT MOVE THE WOOD TO AREAS WHERE OAK WILT IS NOT PRESENT.** (2) **Fungicide injections** (performed by a qualified arborist) are good for treating white and bur oaks therapeutically. However, red oaks should only be treated preventatively and only if they are significant trees. (3) Oak wilt **trenching or plowing** is about 85% effective in preventing the spread of oak wilt. It is still the best tool in the toolbox and in the long run is much cheaper than injections and re-injections. Trenching stops the spread of the fungus through common root systems by mechanically creating a barrier using a vibratory plow. Residents who want to find out if trenching is an option on their lot should contact the City Forester.

- **Replant** with the right trees. When replanting, be sure to select a species that meets site needs and sustains diversity. For information on selecting trees, check with our City Forester.

For more information about oak wilt, visit the following on-line

resources: www.myminnesotawoods.umn.edu; www.extension.umn.edu/environment/trees-woodlands/oak-wilt-in-minnesota/; http://dnr.state.mn.us/treecare/forest_health/oakwilt/index.html