

Oak Wilt — A Growing Concern

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Oaks are some of our most valued shade trees. While some scientists believe oak wilt has been in Wisconsin for over 150 years, it has really gotten established in SE Wisconsin during the last decade and is now responsible for killing many oaks annually in our area. The most outward sign of oak wilt is a rain of leaves falling from the tree.

The oak wilt fungus spreads in two ways. One way it can travel some distance is by *picnic beetles*, which carry fungal spores on their bodies and implant them into a tree wound site. These beetles cannot wound trees themselves, but are attracted to wounds less than a few days old to feed on the sap. This is why it is essential to only prune oaks between mid-September and mid-April.

Sanitation is very important to help reduce the spread by beetles. They feed on and pick up spores from spore mats produced exclusively under the bark of red oaks. The spore mats are produced in May on red oaks that died the previous year. Thus, it is important to remove recently killed or dying red oaks before May. If the wood is to be saved, remove the bark or seal completely with plastic sheeting to prevent beetle activity.

The second and most common way oak wilt spreads is through grafted root systems, which are very common and occur mostly in the same group. The fungus can spread by graft from infected trees to healthy ones over great distances. **Stopping this spread is most important for protecting trees.** Root grafts can be broken by trenching or vibratory plowing, to five feet deep, depending on soil type. Oaks, which cannot be trenched, are in small groups, or considered infected inside the trench line, are good candidates for *macro-infusion* with the systemic fungicide Alamo.

The most susceptible oaks are in the red oak group (northern red, black, pin). Infected red oaks usually drop most their leaves; many of them still green, and die in a couple of weeks. Once a red oak is infected, there is no way to save it. However, oaks in the white oak family (white, swamp white, bur) are less susceptible to oak wilt and many times, when the disease is caught early, can be saved. To diagnosis oak wilt in white oaks may require a laboratory analysis. White oaks exhibit a more scattered wilting and leaf drop, which often takes place over several years. These symptoms can also be caused by other problems such as Anthracnose, a common leaf disease, or Two-Lined Chestnut borers.

Alamo fungicide will protect symptomless red and white oaks from contracting the disease through root grafts for up to 2 years. Alamo can also be used therapeutically to save white oaks that are less than 20% infected.

If you suspect you or your neighbors have oak wilt, contact Wachtel for one of our Certified Arborists to visit for a diagnosis and oak wilt management plan.