

Oak wilt is a fungus that can infect the water-conducting tissues of all oak tree species, but some oak species are affected more than others.

- Red oaks (ex: blackjack, Shumard, and Texas red oak) are highly susceptible to oak wilt. Live oaks are intermediate in susceptibility. White oaks (ex: post oak and bur oak) are less susceptible to the fungus.
- It can be carried by a sap beetle, which deposits the spores into recent, open wounds on trees.
- Once a tree is infected, the fungus moves through interconnected roots, usually in live oak roots, from tree to tree with an average spread of 75 feet a year.
- Oak wilt-infected trees can reduce property values up to 20%.

Prevention

- Do not prune or wound your oak trees February 1 – June 30.
 - The beetle that carries the oak wilt fungus is particularly active during this period, and oak trees are more susceptible at this time.
- ALWAYS paint your pruning cuts, regardless of time of year, immediately after cutting. Also, paint any wounds that may occur to your oak trees (ex: wind damage, animal damage, branches rubbing together).
 - Any paint will do, even the spray paint that costs one dollar.
 - Do not wait to paint your pruning cuts once you are finished with all of your pruning; rather, you want to cut, paint, cut, paint, and so on.
 - Clean pruning tools between trees, or at least between properties, with a disinfectant spray or a 10% bleach-water mixture to prevent other tree disease spread.
- Do not bring in firewood from an unknown source, especially if it is not dried.
 - Infected red oak firewood can carry the fungus.



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Infected live oaks

- Leaves typically exhibit veinal necrosis when infected, seen here, where the veins turn yellow or brown. There are other leaf symptoms, however veinal necrosis is most commonly observed.
- Two options for management: fungicide injections or trenching
 - Injections: works best as a preventative treatment, must inject each tree you want to save, does not stop the movement of the fungus through the roots, goal is to save individual high-value trees.
 - Trenching: digging a trench to sever all the root connections between infected trees and healthy trees, goal is to stop the movement through the root system and save a stand of uninfected trees before the fungus reaches them in the roots.
 - Both management options are expensive, so prevention is key.
 - 10-20% of infected live oaks may survive without treatment.
- Infected live oak firewood is safe to use because live oaks cannot form the fungal mats under their bark. Live oak firewood should be stored away from healthy oak trees or it can be covered with clear plastic with the edges buried if stored near healthy oak trees.

Infected red oaks

- Some infected red oaks can produce fungal mats under the bark if conditions are right – usually the cool and moist conditions of spring.
 - The beetle is attracted to the fungal mat for breeding and feeding where it will pick up more fungal spores to carry to fresh wounds on other oak trees and possibly infect.
 - If your red oak leaves turn red/brown within 4-8 weeks (not during autumn) it may have oak wilt.
 - If so, destroy the red oak by chipping, burning (if permitted), or burying (on-site).
 - Infected red oaks have a 0% chance of survival.
 - Do not use infected red oaks for firewood. If you are unsure of what the tree died from, exercise precaution and do not use it.



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