

Managing Infected Trees & Wood

- Decide overall management of disease before cutting down wilting or wilted trees.
- If vibratory plow is chosen option—do this before removing wilted oaks
- Remove wilted trees *BEFORE* the coming spring when spore mats will form in April, May and June.
- Herbicide stump to prevent stump sprouting (stumps left untreated can keep disease active on the property)
- If keeping wood on property or within 1/4 mile of healthy oaks—Cover *EFFECTIVELY*:

4 mil plastic over ENTIRE pile—seamlessly

Plastic trenched into soil 6” around the entire perimeter of the pile—no beetles or spores get in or out!

Leave covered for 1 entire growing season (until end of following summer)

- Alternatively—haul wood and debris to compost site or burn over winter.

QUESTIONS?

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OAK WILT
MANAGING TO SLOW THE SPREAD



Oak Wilt

What it is:

- Fungal Disease
- Attacks the vascular system of red, pin, white and bur oak trees
- The tree respond by exuding sap and tannin into its own vascular tissue to try to fight off the fungus
- The sap and tannin obstructs the flow of water and nutrients in the xylem and phloem and kills the tree.

Symptoms:

All oak species wilt from the top of the tree down.



Red Oak Leaves Wilting



Bur Oak Leaves Wilting

RED & PIN OAK

- Wilt rapidly (7-10 days)
- Dead within a matter of weeks
- Olive drab, brown color
- Hangs like wet rag
- Produces spore mats following spring.

BUR & WHITE

- Wilt slowly
- Can survive for several months or years with disease
- Wilt from top and edges toward center vein
- Rarely to never produces spore mats.

Spread:

OVERLAND

- Vector (carrier): picnic (nitidulid) beetle
- Feeds on fungal spore mats—picks up fungal spores on abdomen
- Feeds on sap of fresh wounds from pruning or storm damage
- Fungal spores transferred from abdomen



UNDERGROUND

- Through grafted roots
- Red oaks only graft with red, white oak only graft with white
- Rate of spread variable



Options:

- Vibratory Plow disrupts grafted roots to stop underground spread
- Vibratory plow needs to be done every 4 years—due to regrafting
- In high value white oaks, systemic injection with propiconazole may prevent infection of non-symptomatic trees that are adjacent to symptomatic trees.
- Propiconazole treatment of symptomatic white oaks with less than 30% crown wilt may prevent further disease development for at least 2 years