

Overnight Flagging of Oaks

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Weather conditions in 2021 have been hard on Arkansas's trees. Many hardwoods, especially oaks, rapidly turned brown this summer. Here are some things to consider with this issue.



Many have noticed the sudden browning of leaves on hardwoods over the last few weeks. This may be called "overnight flagging" since many have described the issue to occur, seemingly overnight. This appearance, more commonly known as "scorching," can occur when a tree has experienced multiple stress events. Events such as the winter snowstorm in February, extreme flooding in late spring to early summer, and extreme fluctuations between wet and dry growing conditions during the summer. Post oaks appear to be chiefly affected.

Now in the hottest weeks of the summer, trees experience a great amount of transpiration, which is the process of water movement through the tree, escaping into the air through the leaves. Coupled with the demands of transpiration, expenditure of stored carbohydrates can cause rapid scorching.

This condition does not actually occur overnight, but takes several months, if not years, to appear. This is known as a decline syndrome. Trees are resilient and attempt to overcome stressors. During normal conditions, those individual events would not likely kill the trees. However, with continued stressful events and changing climatic conditions, we may see an increase in mature hardwoods dying seemingly overnight.

So what does that mean for the current flagged trees? Some may survive if the roots were able to capture enough energy for next spring. A professional arborist or forester should be consulted for a tree health assessment. When advanced decay is observed, the tree may be recommended for removal if considered a hazard to person or property.

Some clarity about this decline event:

- Oak decline is a chronic dieback with no single identifiable cause. A decline event may be described by several predisposing, inciting, and contributing factors. E.g., late freezes are inciting and fungal infections are contributing.
- The term "sudden oak death" does not describe this event. That common name is associated with a specific fungal infection (*Phytophthora ramorum*) that is not present in Arkansas.
- "Oak wilt" describes a fungal infection (*Ceratocystis fagacearum*) that can kill oak trees, especially red oaks. However, oak wilt has not been found in trees this year. Post oak is known to be highly resistant to this disease.

Other factors that may be associated with this decline event:

- Excess soil moisture and root rot pathogens, such as *Phytophthora* sp. or *Armillaria* sp.
- Pathogens that infect the leaves and branches such as anthracnose, Tubakia leaf spot, and Botryosphaeria canker.
- Twig pruner/girdler longhorned beetles, like *Anelaphus villosus* and *Oncideres cingulata*.
- Gall forming wasps, such as *Neuroterus* spp.

It may be possible to help the surviving trees rebound next year by improving soil aeration, mulching, and crown cleaning. Fertilize per a soil test. Consult an arborist to conduct this work properly.

More information can be found at:

[Overnight Flagging - Texas A&M Forest Service - Facebook](#)
[Rapid Decline of Post Oaks in Texas - Texas A&M Extension Forest Health - Arkansas Department of Agriculture](#)



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