What is wrong with my Oak Trees? Marty Morgan, Ag Agent

We are still having some issues with Oak trees dying or looking bad, some with dieback or thinning, and we have lost several big Post Oaks and Blackjack trees in different areas of Cooke County recently, and for the past 4 years really. Most of the problems encountered are with Post Oaks because that is what we have the most of here. No one wants to lose a big oak around the house that provides shade and improves your properties looks and value. Major diseases of Oaks include Sudden Oak Death, Oak Decline, Hypoxylon Cankers and forms of root rot like Armillaria Root Rot or Phytophthora Root Rot.

So what is the problem and how do we deal with it?

- 1. One problem I see is called Oak Decline(die back) where a tree starts thinning in the canopy, leaves drop odd times of the year and just an overall unhealthy appearance of the Oak tree. This can take a few months to several years to eventually kill the tree depending on the severity of the stress it has been under. This is usually caused by stress like excessive rainfall, or watered too much if you're irrigating your lawn. The opposite stress of excessive moisture is drought which can also put unusual burdens on the trees vascular and immune system.
- 2. The other problem I see is Root rot. One in particular called Phytophthora can survive in the soil for years, as long as moist conditions persist, which we have had all winter and now spring. It can spread through splashing rain, irrigation water, and runoff water. Disease fungi can spread through contaminated soil and garden equipment as well. Root Rots are more likely to spread in early spring and late fall during cool, rainy weather. Flooded and saturated soil conditions are especially conducive to the spread of root rots. And wounds are not required for infection but can spread that way. Pruning paint.

So is there anything we use to treat and possible save our trees:

Well one can use a tree macro-injection system like they use for Oak Wilt but it is expensive to the tune of about \$300 a tree and takes 24-48 hours to treat. Products to use as an injection would be Alamo, Propriconazole, Kestrel and Tebuject. For over 4 years when I see dieback and thinning, of Oak trees, especially post oaks, I have been suggesting to folks a systemic fungicide called Agri-Fos/with Pentra Bark that helps build a stronger immune and vascular system for the sick tree. And we have had amazing results using this product if the tree is not too far gone. There is no proof that this is a cure but I do have proof that after treatment that most of the trees treated did a complete turnaround and some that looked awful are now healthy attractive trees. This product is a much cheaper treatment than the macro-injection system and can be applied with only a handheld sprayer compared to the purchase of an injection system. Agri-Fos is a great product but will not work effectively without adding the surfactant Pentra-bark which drives it into the trees vascular system for maximum effectiveness. Agri-Fos/pentra-bark comes in different sizes but it is usually cheaper buying it in the half gallon size, which usually runs about \$75. In a handheld 1-3 gallon sprayer, mix the half-gallon of Agri-Fos with a halfgallon of water and the 3 ounces of Pentra-bark. This will treat approximately 3-4 trees with a diameter of 10-15 inches by soaking the entire trunk of the tree from the ground up to 10 or 12 feet. It is not necessary to spray the foliage, only the trunk. If you have further questions about managing your Oaks or any tree please contact me at marty.morgan@ag.tamu.edu or call 940-668-5412