

## **Look At The Whole Tree, Not Just The Leaves**

### **AGRI-VIEWS**

by Chuck Otte, Geary County Extension Agent

I have a lot of homeowners who call me concerned about their trees. This is a normal and understandable reaction that I experience myself. We live in the plains. Trees are nearly sacred icons to us, far more than anyone who grew up in the naturally forested eastern US. Leaves seem to be the common focus of a homeowner's attention, probably because they are the most visible. But, perhaps surprisingly, while leaves are an important indicator of tree health, there are other things that homeowners need to be clued in to for early signs of tree issues. As leaves start to fall, these potential defects and warning signs will become more apparent.

First and foremost is poor structure or architecture. This is one of the hardest for "non-plant" people to understand. Each species of tree has a typical structure and variations, especially extreme variations, are an indicator of potential problems. The most common and easily discerned is twin trunks or what we call co-dominate stems. When you have two central trunks trying to grow side by side, it needs to be remedied early on or you'll end up with half a tree splitting out sometime in the future. These structure problems need to be fixed early on while the tree is still young and can recover from corrective action.

Going right along with structure and co-dominant stems are cracks. Cracks showing up in the trunk or larger branches are never a good thing. Co-dominant stems may look like one trunk but the split goes clear to the ground in most cases. Lightning strikes can also cause cracks. These cracks never truly heal. Once the main part of a tree is cracked it will try to grow callous tissue to cover it, but the wood never grows back together. It truly is the beginning of the end and removal is the only real solution.

Decay is a big issue that I see commonly. Many common tree species are very subject to decay issues as they age and mature. Hackberry, silver maple and Siberian elm come to mind immediately but it can happen in any tree. Decay often starts at the point of a large pruning cut often following a wind or ice storm. Almost any time that I see a branch come down in a storm, there is decay involved. Another common cause of decay is the practice of topping a tree. Topping is NEVER an approved pruning technique. It results in large wounds that develop decay and never heal and it creates a proliferation of new growth that is not well attached to the tree.

Weak branch unions is exemplified by the good old Bradford ornamental pear. When branches come out at a narrow angle, usually less than 45 degrees, they are weak. Bark builds up in that crotch and the branch will fail at some point in time. The best branch attachment is basically a 60 to 90 degree angle of attachment. These branches grow in unison with the trunk and are attached to the trunk in a very strong bond.

There are several other concerns I could talk about but I'm going to end with root issues. The base of a tree should flare out into large roots. These root flares should be on all sides of the tree. If one side of a tree is very flat there has been a lack of root development there. But what really grabs my attention is when you start to see mushrooms and fungal growth at the base of trees and on the root flares. These mushrooms indicate that there is dead and decaying wood beneath and the very foundation of the tree is in serious trouble!

As you look at your trees this fall, take a more holistic approach to the tree. Examine the structure and condition of your trees as the leaves fall and if you see things that concern you, give me a call and I'll come out and take a look!