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### Trees Leaf Loss

Mid-summer can be a tough time for our trees. It's hot. It's dry. And they have to adapt to it! Fortunately, they are actually pretty good at doing so. Unfortunately, when they don't adapt, we typically lose an integral – and sometimes expensive – part of our landscape!

Leaf loss in the summer can be due to multiple factors. Herbicide damage is generally the first thing we look to, and while certainly an issue, there are lots of other leaf loss causes that need to be considered.

When you see leaf loss well distributed throughout the tree canopy that causes a general thinning, the problem usually isn't serious. It's not uncommon for trees to set more leaves in spring than they can support in summer. Along comes heat and drought stress and the tree drops leaves it can't support based on the moisture we receive. Falling leaves are characterized by a yellow color with no disease spots. There may be some 'perfectly healthy' green leaves dropped as well. Because the thinning is gradual and spread across the tree, the tree should persist just fine. Just be sure to keep it watered during dry periods (more on that later!).

What really starts to concern us is when we see most all of the leaves drop! Hackberry, for example, is a species that will often drop all of its leaves as it enters summer dormancy. If we get good rains, we may delay dormancy. If not, leaves drop and trees look bad! Watch for this phenomenon if summer weather continues the hot/dry pattern that June exhibited. If leaves do drop, check twigs and buds. Trees should have supple twigs and healthy buds, not dead tissue usually associated with other problems. Healthy trees usually sustain this stress fairly well as long as they have enough stored energy reserves to make it through to next spring. If buds/twigs become brittle and die, at least part of the tree is dead.

One of the more curious issues occurs when a tree has leaves die (sometimes overnight!), but they remain attached to the tree! In these cases, the tree died quickly when it couldn't keep up with moisture demands. Excessive spring rains can damage root systems, limiting their ability to handle summer stress and moisture needs. Again, check the buds/twigs. If they are alive and well, let the tree remain!

As stated before, other causes – physical damage, herbicide drift, etc... - are always a possibility. In many cases, trees can handle a little bit of damage and still live. Healthy trees tend to have a great ability to handle defoliation or damage to trunk or other parts so long as they are well watered and monitored for further decline.

Bottom line: your trees can look a little tough but it isn't necessarily need for panic! Knowing how the tree lost its leaves and whether buds and twigs are still alive can tell you a lot about what the tree is experiencing. In addition to giving the trees some time, ample water is a good practice, too. Watering isn't as 'simple' as it might sound, though. For further information on watering, check out *Watering Established Trees & Shrubs* available from your local K-State Research & Extension Office or online at:

<http://www.bookstore.ksre.ksu.edu/pubs/mf2801.pdf> .