## Summer Tree Leaf Loss

It's been kind of a tough summer for our trees and shrubs. While we expect some winter damage, particularly with evergreen species, the level of winter injury this year has trended towards severe in some instances (boxwood damage has been the worst!) – and it may not be over yet! In deciduous species, there are typically three instances when we see summer leaf loss.

When trees lose leaves on a somewhat even and scattered distribution through the canopy, it's likely because the tree simply set more leaves in the spring than it can support in the summer. It's not uncommon, but some years are worse than others! The leaves the tree can't continue to support during summer heat and drought stress will tend to turn yellow and drop – without any noticeable leaf spotting or other disease characteristics. As long as the thinning is general and gradual, I wouldn't worry too much. Pay attention to watering during lengthy dry periods and the tree should be fine by spring.

In severe cases, a tree may drop all of its leaves. If it's a hackberry, it's not uncommon for it to drop leaves and enter summer dormancy, but for most trees, that would be an exception! Most areas haven't seen the severe hot/dry conditions that necessary to cause this to occur just yet, so these trees deserve further inspection. Check twigs and buds. If they are supple and healthy, and the tree has enough stored energy to make it to spring (healthy trees will), it should survive just fine. If the buds die and twigs become brittle, at least that part of the tree is dead.

If leaves die, seemingly overnight, and remain attached to the tree, the cause is likely an underlying root issue. In some cases, winter drying is to blame. In others, winter cold snaps are the culprit. If buds are alive and twigs are still retaining moisture, the tree is still alive and may well survive. Don't give up on it yet! There have been a number of these cases this year.

There are other potential causes for leaf loss as well. Diseases like anthracnose have been tough on some species this spring due to moisture levels. They typically cause leaf spotting with leaves remaining attached to the tree, though some loss may occur. Iron chlorosis will typically result in severe yellowing, while leaves remain attached to the tree. Scorch will result in browning of leaf margins. Herbicide damage will typically cause noticeable injury to the sprayed portion of the tree first, while other susceptible plants will likely show injury as well. In all cases, proper diagnosis is the first step towards corrective measures to help the tree. If the tree's buds are still alive and twigs are retaining moisture, the tree is still alive. Watch it closely through the growing season and consider supplemental

watering during dry periods. Publications on watering are available via your District Extension Office.

The value of a tree for landscape aesthetics or windbreak protection is long term. Take some time now to evaluate your landscape and windbreak trees to make sure they can survive for the long haul!