Although immediate effect of a drought on hardwood trees is easy to see, the long-range effects are less noticeable. Trees store food and prepare for the next growing season during the current growing season. Buds for next year are set this year. Soil and location also help determine how a drought will affect your trees. If your trees are in bottomland they will have deeper roots and more moisture will be available to them. If you are in an area of high ridges with rocky soil, or in heavy clay, trees have shallower root systems and can be affected more by drought conditions. Trees in sandy soils will have deeper root systems. It is important to note however that the feeder roots most adapted to taking in moisture grow in the top 12-14 inches of the soil.

The ability of a tree to respond to a new growing season in the spring is also dependent on the amount of winter rainfall. If the drought continues into the winter it is advisable to do supplemental watering of trees. The Texas Forest Service recommends watering trees every 10 days or a minimum of twice a month. Apply up to four inches of water or soak the soil to a depth of up to 6 inches at each watering. If you are using a sprinkler system, measure the amount of water by using a tall water glass or rain gage. A better method is to use a soaker hose or slow drip watering system to avoid run-off and wasted water. Watering at the tree drip-line, that is the edge of the canopy, is the most efficient area to apply the water. Use a small trowel to dig into the soil to test the depth of wet soil. During cooler weather or if there is rain, watering can be reduced.

In summary, drought stressed trees will show signs that might suggest the tree is dying. The root system is no longer capable of supplying sufficient water and the crown of the tree will begin to go dormant. In fact the entire tree may look like it has gone into dormancy. This is the tree’s way of coping with the drought. So how can you tell if the tree has died from the drought or has gone into early dormancy? The Texas Forest Service suggests two simple tests. For the first test, collect some small twigs about 1/8th inch in diameter and try to break them. If they snap and appear dry and dead, your tree may have a problem. If they bend and are difficult to break, the tree may still be viable. Second, take a small twig or branch and scrape off some of the bark, if the tissue under the bark is moist and light green, the tree may still be alive. In either case, it is better to wait until spring, to see if the tree will respond with a new set of leaves before taking any drastic action.

How your trees respond in the spring will be the only true method of determining how they weathered this summer. For more information visit the Texas Forest Service at  http://txforestservice.tamu.edu/main/popup.aspx?id=1283

Have any questions about gardening in Central Texas? Contact  ask bcmga@gmail.com