

Stress to Trees and Shrubs is Cumulative

Stress is cumulative. In other words, trees and shrubs can be affected by stresses that happened up to several years in the past. Recent stresses in Kansas include winter damage as well as the extremely dry winter of 2017-2018 which often resulted in damaged root systems. This damaged root system may have been further weakened due to too much rain this spring. The excess water harmed root systems due to saturated soils driving out oxygen. Roots need oxygen as much as they need water. Though the roots were able to keep up with moisture demands during the cooler spring weather, they may not have been able to keep up when the weather turned hot and dry. Such trees and shrubs may suddenly collapse and die or slough off branches they can no longer support. I have never seen lilacs collapse due to stress like they have this year.

This does not mean that all of our plants are doomed. As a matter of fact, plants that have survived thus far into the growing season will likely make it. Also, some plants are just better adapted to our tough Kansas conditions and have suffered little to no harm. However, it is a good idea to check the overall health of your trees. So how do you tell?

One of the most important clues in determining the health of your trees is the amount of new growth that tree has produced. A healthy tree should have a minimum of 4 to 6 inches of new growth each year and usually much more. Check branches with the tips in the open and not shaded by the tree itself. Anything less than 4 inches on the majority of branches suggests the tree is under a great deal of stress.

So, how do you tell where the new growth stops? Look for a color change in the stem. New growth is often greener than that from the previous year. There is also often an area of what looks like compressed growth where growth transitions from one year to the next.

Lastly, look at leaf attachment. Leaves are only produced on current seasons' growth. Therefore, new growth stops where leaves are no longer attached directly to the twig but to side branches. However, pay attention as leaves may appear to be attached directly to last year's growth but are actually borne on short spurs. If you look closely, you can tell the difference.

All this clue tells you is whether a tree is under stress or not. It does not tell you what is causing or has caused poor growth. This year, the most common cause by far is environmental stress caused by the excess rain this spring.

So, what do we do for trees under stress? The most important practice is to water as needed.

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