



TREE NEWS

AUGUST 2020

YOU CAN USE

CONTRIBUTING AUTHORS



Dr. Sharon Jean-Philippe
Associate Professor
Urban Forestry



Dr. Larry Tankersley
Extension Specialist
Forestry



Dr. Natalie Bumgarner
Assistant Professor
Residential & Consumer Horticulture



Sam Adams
ISA Certified Arborist
UT Knoxville Facilities Services



Lee Rumble
Extension Agent & ISA Certified Arborist
UT Extension, Knox County

STAYING SAFE DURING SUMMER STORMS

What to do when trees fight back?

Summer in Tennessee means thunderstorms. These storms can cause significant damage to residential trees and shrubs from high winds, hail, and heavy downpours that can lead to both above- and below-ground tree issues. High winds can break limbs and damage trees and shrubs. Hail can cause leaf damage and affect the trees' overall ability to photosynthesize and produce sugars. Also, heavy rains that saturate soils can lead to root issues. While little can be done prior to the storm, prompt action after may help minimize the long-term impact to vegetation in your yard.

Following heavy rains that fully saturate the soil, we may find our trees struggling. Most species can tolerate some minor flooding (e.g. a few days). However, if soil pore spaces remain filled with water for a longer period of time (e.g. major flooding), this will inhibit gas exchange by the roots. In turn, flooded trees may exhibit a wide range of stress symptoms such as leaf yellowing, premature leaf drop, reduced shoot growth, waterspouts forming along the main stem, or even dieback in upper portions of the canopy. Essentially, they are suffocating because they are unable to obtain enough oxygen in the root zone to carry out essential cellular processes.

An additional cause of concern in fully saturated soils is that this may even leave trees more vulnerable to windthrow failure. Windthrow is the technical term for trees that are uprooted right where the trunk meets the soil. Closely examining the root plate (central root area critical for tree stability) following heavy thunderstorms can be extremely beneficial. Look for mounding (i.e., lifting) or cracking in the rooting area surrounding the trunk that can indicate a lack of stability. Should you see any mounding or cracking of the soil in this area, consult with an ISA Certified Arborist (www.treesaregood.org, click "Find An Arborist").

While trees can cause significant property damage, cleaning up storm damaged trees can also pose a serious threat to you as well. You may be tempted to get out and start cleaning up storm debris yourself. However, there are several potential hazards to keep in mind. Wading into the tangled mess of branches with a chainsaw takes knowledge and expertise and is best left for an experienced arborist. Professional arborists will have the experience and equipment to do the job safely and efficiently.

Considerations and precautions to take before you decide to tackle the work yourself:

- Downed trees or parts of trees may be in contact with electrical lines. Both direct or indirect contact with these energized lines can cause serious injury or death.
- Broken limbs can be an unseen hazard hanging in trees high above your head. These can fall without warning, causing serious injury or death.
- Trees spend their lives storing energy to be released one way or another. When cut, downed trees and tree limbs under tension can shift or react unexpectedly, causing serious injury or death.
- If you do decide to undertake cleanup, be sure to wear the appropriate proper protective equipment to protect yourself during storm cleanup activities.

SPONSORED BY:

