



established 1938
TREE CARE INDUSTRY
Association

3 Perimeter Road, Unit 1
Manchester, NH 03103

Tel: (603) 314-5380; 1-800-733-2622
Fax: (603) 314-5386

E-mail: tcia@treecareindustry.org
Web site: www.treecareindustry.org

Contact: Tchukki Andersen
E-mail: Tchukki@tcia.org

For immediate release

Trees suffer during prolonged drought

Drought continues to straddle much of the nation, especially in the Southeast and Southwest. The U.S. Seasonal Drought Outlook calls for some improvement to the severe to extreme drought affecting the Gulf Coast and parts of the Southeast, though drought conditions may expand into the lower Midwest. Across the interior West and California, drought will persist or intensify.

What can homeowners do to keep their trees healthy during hotter, drier summer months?

“While it’s impossible to keep every tree in good health in times of severe drought, taking a proactive approach for a prized or sentimental tree can support its good health,” recommends Tchukki Andersen, staff arborist with the Tree Care Industry Association. “A plan that is supported with good cultural practices, proactive monitoring for pests and disease, and response to warning signs is more likely to survive.”

Silent Suffering: A tree’s first damage from drought occurs beneath the soil line in the form of root damage, long before any outward signs of trouble. After a tree’s unsuccessful attempts to conserve water by closing stomates, feeder roots die back, sometimes so drastically that the tree is unable to take up enough water to support itself. In the worst case, a healthy looking tree collapses without much warning. More often, though, the signs of stress are much less dramatic.

“Radial growth slows,” explains Andersen. “Leaves are undersized and may wilt, yellow, curl or crinkle, will be marginally scorched or even turn brown and fall. Emergent shoots are short. In an effort to right the imbalance caused by root-loss, crown dieback or a general thinning of the canopy occurs.”

Opportunistic pests and diseases: That’s when “opportunistic” pests make their move. Boring insects are thought to be drawn by the odors and acoustic signals of stressed trees. The sound of water columns breaking cues the borer to invade the tree and lay eggs. Andersen recommends taking preventative action by applying treatment by spray or injection to protect prized or important trees from borers because, “by the time we realize the tree is stressed, it has been heavily riddled and girdled.”

Another danger to stressed trees is fungus, which makes initial contact with surface roots. Andersen notes that when a chemical change in the tree signals a weakened state, the fungus penetrates the bark, wood and cambial zone with fan-like, leathery clumps, cutting off the water supply to the tree.

While all trees are at risk during long period of drought, some are more prone to its effects. New transplants are highly vulnerable to drought stress, and supplemental watering for the first few years of establishment is necessary, to the extent that it’s allowed. But even mature trees are suffering.

Watering trees deeply with soaker hoses or irrigation systems – as opposed to brief, surface watering – helps sustain trees. But it’s very difficult to do much for a large tree because of the massive amounts of water it needs. With so many trees affected, Andersen recommends watering only those trees that you can help. How much water a home landscape needs depends upon its soil, sun and shade exposure, plant types, irrigation system and local climate. How much water trees require depends upon the type of tree. Applying the right amount of water, based on the local weather and the tree’s actual need, is the key to using water efficiently. But homeowners often over-water their lawns, which in turn surpasses a tree’s real needs.

Drought exacerbates matters for trees already under stress, like those on dry slopes, surrounded by pavement, or improperly planted. In landscape situations, consider taking action, such as moving smaller trees to a better location, alleviating compaction, or replacing moisture-draining lawn with a layer of mulch. Pine needles or a two- to three-inch layer of compost will help trees in maintaining moisture.

Outlook: The aftereffects of the current drought will likely ripple for the next three to five years, with the strongest trees surviving. Trees have developed their own mechanisms for coping with these cycles, but some trees are on the brink of survival and could go either way. If it means the difference between keeping a tree around for your lifetime or losing it in the next five years,” Andersen says, “it’s worth doing something about.”

What can you do?

If you would like some professional help in creating a safer, more fire-resistant landscape, consult a professional arborist. Contact the Tree Care Industry Association (TCIA), a 69-year-old public and professional resource on trees and arboriculture. It has more than 2,000 member companies who recognize stringent safety and performance standards and who are required to carry liability insurance. TCIA has the nation’s only Accreditation program that helps consumers find tree care companies that have been inspected and accredited based on: adherence to industry standards for quality and safety; maintenance of trained, professional staff; and dedication to ethics and quality in business practices. An easy way to find a tree care service provider in your area is to use the “Locate Your Local TCIA Member Companies” program. You can use this service by calling 1-800-733-2622 or by doing a ZIP code search at www.treecaretips.org.

Editors: If you would like additional information or digital photos, please contact Garvin@treecareindustry.org