Three words for trees and shrubs right now: Water, Water, Water

K-State horticulture expert says plants need special care during hot weather

MANHATTAN, Kan. – A Kansas State University horticulture expert is urging Kansas homeowners to pay special attention to trees, shrubs and fruit plants during a stretch that is likely to see several days reach triple digit temperatures.

“Newly planted trees have not established the extensive root system needed to absorb enough water during hot, dry, windy summers,” said K-State’s Ward Upham. “Even trees that are 2-3 years old should receive special care.”

Upham suggests deep, infrequent watering and mulching to help trees become established. Newly planted trees need at least 10 gallons of water per week; twice that amount if they are located on sandy soils.

“The secret is getting that water to soak deeply into the soil so it evaporates more slowly and is available to the tree’s roots longer,” Upham said. “One way to do this is to drill a 1/8 inch hole in the side of a five gallon bucket and fill it with water. The hole should be near the bottom of the bucket. Let the water dribble out slowly next to the tree, then refill the bucket once after moving it to the side of the tree.”

Upham said the method he described assures the tree gets 10 gallons of water. Larger trees, including those transplanted 2-3 years ago, require more water, he said.

Another method suggested by Upham includes using a perforated soaker hose or drip irrigation to water a newly established bed or foundation planting.

“In sunbaked soil, you may need to rough up the surface with a hoe or tiller to get water to infiltrate easily,” he said. “If you are seeing surface runoff, reduce the flow or build a berm with at least a 4-foot diameter around the base of the tree to allow the water to percolate down through the soil, instead of spreading out.”
“Regardless of the method you use,” Upham added, “soil should be wet at least 12 inches deep. Use a metal rod, wooden dowel, electric fence post or something similar to check depth. Dry soil is much harder to push through than wet soil.”

**Water fruit plants**

Upham said when temperatures exceed 90 degrees Fahrenheit, fruit plants lose water quickly.

“When this happens, moisture is drawn from the fruit to supply the tree,” he said. “Stress from high temperatures along with a moisture deficit in the roots may cause fruit to drop, or fail to increase in size. The stress may also reduce the development of fruit buds for next year’s crop.”

Upham suggests using a metal rod, wooden dowel or even a long screwdriver to check soil moisture at the roots of such fruit plants as trees, vines or canes. Push the tool into the ground 8-12 inches.

“If you can not reach the recommended depth, the plants should be irrigated to prevent drooping and to promote fruit enlargement,” Upham said. “Water can be added to the soil using sprinklers, soaker hose, drip irrigation or even a small trickle of water running from the garden hose for a few hours.”

Upham suggests checking soil moisture at least once a week during hot periods.

“Strawberries have a shallow root system and may need to be water more often; maybe twice a week during extreme weather,” he said. “Newly planted fruit trees on sandy soils may also need water twice a week.”

Upham and his colleagues in K-State’s Department of Horticulture and Natural Resources produce a weekly Horticulture Newsletter with tips for maintaining home landscapes. The newsletter is available to view online or can be delivered by email each week.

Interested persons can also send their garden- and yard-related questions to Upham at wupham@ksu.edu, or contact your local K-State Research and Extension office.

**FOR PRINT PUBLICATIONS:** Links used in this story
K-State Horticulture Newsletter, [https://hnr.k-state.edu/extension/info-center/newsletters/index.html](https://hnr.k-state.edu/extension/info-center/newsletters/index.html)

K-State Research and Extension local offices, [www.ksre.k-state.edu/about/stateandareamaps.html](http://www.ksre.k-state.edu/about/stateandareamaps.html)

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