** This news release from K-State Research and Extension is available online at www.ksre.k-state.edu/news/stories/2023/07/horticulture-cost-of-watering-trees.html

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Cut the cost of watering trees

Modifying soaker hoses can help reduce the cost of water, says K-State horticulture expert

MANHATTAN, Kan. – As the temperatures climb into the 90s and above, most trees require more water, but more water means more costs. Kansas State horticulture expert Ward Upham says modifying soaker hoses can help homeowners save a few dollars.

“Soaker hoses are notorious for non-uniform watering,” Upham said. “In other words, you often receive too much water from one part of the hose and not enough from the other part.”

Patchy water application may not affect smaller trees, as the soaker will circle the tree several times, but can affect larger trees. For more uniform watering, Upham suggests hooking the beginning and end of the hose to the y-adapter. The parts needed are just a y-adapter and a female-to-female connector.

“It is also helpful if the y-adapter has shut-off valves so the volume of flow can be controlled,” Upham said. “Too high a flow rate can allow water to run off rather than soak.”

The position of the hose can also make a difference. On larger trees, Upham said the soaker hose can circle the trunk at least half the distance to the dripline. On smaller trees, he said the hose can circle the tree several times so only the tree roots’ soil will be watered.

To check if the watering is effective, Upham said the soil should be wet at least 12 inches deep. A metal rod, wooden dowel, electric fence post, or something similar can be used to check.

“Dry soil is much harder to push through than wet and your probe will stop when it hits dry soil,” he said. “How long it takes water to reach a 12 inch depth varies depending on the rate of water flow and soil.”

As a test when first watering the tree, record the amount of time it takes to reach a 12 inch depth of dampness. The tree can then be watered for that amount of time in subsequent watering.
Upham and his colleagues in the K-State Department of Horticulture publish 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.

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For more information:

Ward Upham
785-532-6173
wupham@ksu.edu