

Post Rock Answers
By Cassie Thiessen July 19, 2024
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Watering Landscape Plants

In Kansas we need tough plants that are able to withstand extreme weather conditions. Most tree problems are simply environmental stress caused by too hot or cold temperatures, too little rain, and dry winds. Applying irrigation to our landscape plants is often necessary this time of year. As the temperatures climb into the 90s and above, most trees require more water. Even established trees and shrubs will benefit from supplemental irrigation during periods of drought.

To maintain vigor of trees that have been growing in place more than 5 years, soak the soil to a minimum of twelve inches, out to and beyond the drip line (the outermost circumference of the tree's canopy). Most feeder roots are in the top 12 inches of soil. If our area hasn't received significant rain, plan to water deeply every 3-4 weeks for established trees.

What is the best way to apply irrigation? Soaker hoses are a great way to get water to your plants, however they may need a few modifications. Soaker hoses are notorious for non-uniform watering. 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 you can hook the beginning and end of the soaker hose to a y-adapter to equalize pressure. 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. Too high a flow rate can allow water to run off rather than soak in.

The position of the hose can also make a difference. On larger trees the soaker hose can circle the trunk at least half the distance to the drip line. On smaller trees, the hose can circle the tree several times so only the soil that contains tree roots will be watered.

To check if the watering is effective, the soil should be wet at least 12 inches deep. A metal rod 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. 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.

Mulch rings are a great way to help conserve water and keep grass and weeds away from the base of the tree. Other plants can compete with the tree roots to absorb water and nutrients, so it's best to establish a broad mulch ring around the tree. It's not recommended to plant a ring of flowers around the base of your trees. These plants would need regular watering and irrigation directly to the base of the tree can cause basal (bark and trunk) decay.

Extra irrigation may cost more this year, but it's worth the effort to allow your established trees to thrive. If you have any garden and landscape questions this summer, reach out to your local K-State Extension Office.

Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Mitchell, Osborne, and Smith counties. Cassie may be contacted at c Thiessen@ksu.edu or by calling Beloit (785-738-3597).