Trees and shrubs need moist soil even during the colder months. Though plants may appear fine above ground throughout the winter, damage caused by winter drought can be evident in late spring and summer when the weather warms and the weakened root system cannot support the growth. Affected plants are more susceptible to damage from disease and insects.

Providing water deep into the soil (at least 12-inches) gives a majority of the roots access. This is especially important for young trees and shrubs that haven’t developed an extensive root system yet. Even trees and shrubs planted two to three years ago can suffer damage from drought. Evergreens are susceptible to drought because they continue losing water through their leaves during winter.

To check for soil moisture, push a metal rod into the soil. Dry soil is much harder to push through than wet so if you aren’t able to easily insert the rod at least 12 inches into the soil, it’s time to water. Water on a day when the air temperature is over 40 degrees F and the soil isn’t frozen. Watering mid-day allows time for the water to soak in before the temperature drops in the evening. Water should be allowed to soak in slowly in several areas beneath the dripline. The dripline is the area beneath the outermost branches of the plant.

Soaker hoses can be used to apply water slowly however they are not always uniform in distribution. To remedy this, hook both ends of the soaker hose to a Y-adapter to equalize the pressure. It is also helpful if the Y-adapter has shut off valves so the flow can be controlled. Too high a flow rate can allow water to run off rather than soak in.

To determine how long the soaker hose should run, check the soil regularly and calculate the time it took for water to reach 12-inches deep into the soil. In the future you can water based on this timing. If you notice run-off you may need to slow down the water or build a berm to keep the water over the rootzone.

Due to the prolonged drought, watering once a month through the winter may be needed. A layer of mulch (up to three-inches) over the soil helps retain moisture and regulate temperature. This also protects the soil from repeatedly freezing and thawing which leads to cracking. Soil cracks put roots at further risk of drying out. Mulch applied beneath the dripline of trees should be kept two-to-four inches away from the trunk to prevent damage to the tree.

For more information, please contact the local K-State Research and Extension Office. K-State Research and Extension is an equal opportunity provider and employer.