Garden Update Week of December 6, 2021 Kathleen Cue, Nebraska Extension Horticulture Educator in Dodge County

Late Fall Watering

Now is the time to provide a last deep soaking of the soil prior to ground freeze. This ensures tree and shrub roots can take in the water necessary to stay hydrated, helping them to overwinter better and to arrive to spring in good condition. If you're unsure about the dryness of you soil, the screwdriver test is the simplest way to determine moisture levels. Dry soils will resist your efforts to push the screwdriver into the soil, while a moist soil will be easily penetrated by a screwdriver.

In order of importance, these are the plants most in need of late fall watering:

- 1) Trees and shrubs planted this past growing season—plants in this category have a limited number of roots, tapping a limited amount of space. Watering focused on these plants should be on the root ball itself and slightly beyond to catch roots where they are at.
- 2) Broad leaf evergreens, such as holly, rhododendron, and mahonia, as well as needle-type evergreens such as yew and spruce, have the unique ability to photosynthesize on days when temperatures reach 45 degrees F and above. The process of photosynthesis requires water, so the oddball warm winter days that occur means water loss won't be replaced when roots are in frozen soil. Making sure evergreens are fully hydrated prior to ground freeze helps them to maintain moisture levels, decreasing the likelihood of winter burn to foliage.
- 3) Trees and shrubs planted in the ground for 1-7 years—these plants have a more robust root system than their newly-planted counterparts but are still considered new to the landscape and benefit from a deep soaking.
- 4) Well established trees and shrubs—especially if the past growing season has been dry and plants received no supplemental irrigation, then watering deeply will make up for some of the moisture loss that occurred.

How much water to provide? This depends on your soil type. Sandy soils will be easier to water deeply while clay soils can be problematic because of water percolation issues. So once again utilize the screwdriver test, this time to make sure water is penetrating the soil to at least an 8-inch depth. Never water plants when soil is frozen as this can thaw frozen ground and force plants out of dormancy, making them more vulnerable to winter freeze damage.