Woody plants across the state are suffering from continued heat and drought. Nebraskans should pay particular attention to trees and shrubs and thoroughly water them if they begin to show signs of leaf wilt, discoloration or drying, especially at leaf edges, said Amy Seiler of the Nebraska Forest Service.

Seiler is the new Community Forestry Specialist located in Scottsbluff assisting communities across western Nebraska.

“A dry winter, minimal spring rains, record high temperatures and low summer precipitation have put extreme stress on trees this summer,” Seiler said.

Challenges of this sort also increase their susceptibility to insects and disease later on. Trees are able to obtain moisture longer than most other plants due to deeper roots so symptoms tend to be delayed and some symptoms may not appear until months or even years later.

Newly planted trees are particularly at risk during prolonged dry periods, but even trees that have survived harsh conditions in the past can decline or even die from extended drought and heat.

To check soil moisture in a tree’s root zone, Seiler recommends pushing a long screwdriver into the soil a foot or two out from the trunk. If the ground is dry and in need of watering it typically is difficult to push the screwdriver in more than a few inches.

If the soil is dry, Seiler said, “Deep, thorough watering will provide the most benefit to trees because it promotes healthy root systems.”

One of the best methods for deep, slow watering is to coil a soaker hose around the tree several times from the trunk to the drip line and let it run until the soil is moist to a depth of 8-12 inches. Five gallon buckets with holes can also be used to slow-irrigate the soil under trees.

The soil type does affect watering. Sandy soils have to be watered more frequently. Clay soils can be hard to re-hydrate once they dry out but will retain moisture longer.

Seiler also stressed the importance of having two to three inches of mulch under trees to conserve moisture and insulate the soil from high temperatures.

“Unlike turfgrass, mulch doesn’t compete with the tree for nutrients and moisture and in fact adds nutrients the tree needs,” Seiler noted.

Some symptoms of drought –stunted or distorted foliage –are similar in appearance to herbicide damage, which has been prevalent this summer. High temperatures have caused herbicides like 2,4-D to volatize and change from liquid to gas.

As a result, the herbicide doesn’t bind to soil particles but rises and spreads to trees and shrubs where it damages and distorts the foliage. Seiler and other foresters remind gardeners that applying herbicides and/or fertilizing are more likely to cause damage than to aid plants in extreme heat.

This summer will test the region’s trees for hardiness, Seiler said. Some of the hardiest, most drought-tolerant trees include bur and chinkapin oak, gambel oak in the western part of the state and hackberry. More information on tree care and health can be found at retreenebraska.org.