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# Take the Guesswork Out of Watering

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## GARDEN NOTES

# TAKE THE GUESSWORK OUT OF WATERING

*By Dennis Hinkamp*

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As summer wanes you probably are faced with two problems — a dead landscape or a large water bill. Now is a good time to start thinking about how much water you really need.

The main problem with helping people with their watering problems is that there are so many different variables — plants, watering systems, sprinklers and soil types, says Jerry Goodspeed, Utah State University Extension horticulturist. All of these factors play a part in determining the correct watering practices.

“How long do I leave my sprinkler system on?”

The answer is simple, he says. Leave the system on long enough to thoroughly water the plants and recharge the moisture level in the root zone. In other words, give the plants enough water to thrive, but not so much that their roots rot or drown. Finding this watering rate for your individual yard is more difficult.

“Most people just guess when it comes to watering,” he says. “They seldom take the time to find out exactly what the water is doing in their soil, or how long it is staying in the root zone of the plants. Don’t take my word for it or anyone else’s. You can and should figure out how long your system should water.”

It is easier to determine how long and how often to run the sprinklers if you understand a little about the system, the soil and your plants, he explains. The first thing to do is become more knowledgeable about your soil. Is it draining efficiently, and how well does it hold water?

Dig a hole about a foot deep in the backyard, and fill it with water, he says. If it drains within an hour, it is probably a sandy-type soil with a limited water-holding capacity. If it takes two to three hours to drain it contains some clay, but still has adequate drainage. If the water is still there the next morning, the soil is either a clay-type or you have a hard-pan.

“If the hole has more water by the next morning, call for help because you have either hit a water main or your Realtor sold you swamp land,” Goodspeed says.

How does this help in determining when to water?

A sandy, well-drained soil can be watered more frequently without damaging the roots, he says. A poor-draining, heavy soil holds the water and should be watered less often. For example,

in the heat of the summer, plants in a typical sandy soil need watering every three or four days, where the same plants in a clay-type soil can go five or even six days between irrigations.

Another method for calculating water requirements is to dig into the soil before watering, he adds. Insert a spade or shovel into the soil about four inches, then feel the soil. If it is still moist to the touch or wet, shallow-rooted plants will probably be fine. If it is dry at a depth of four inches, it may be time to water again. Most annuals, grasses and perennials have roots that grow six to eight inches into the soil, and trees and shrubs are usually even deeper.

“After watering, go out and dig around in the yard to see how long it takes before the top four inches of soil are dry,” Goodspeed says. “Once it starts to dry, water again. This can tell you how often to water.”

Now to answer the question of how long to let the sprinklers run. The majority of the plants in our landscapes have roots that extend about eight inches into the soil, he says. So, it is logical to water until it has penetrated at least eight inches into the soil. This is easy to figure out.

“Take a rod or screwdriver that is at least eight inches long, and poke it into the soil after watering,” he says. “It will slide right through soil that is moist. Once it hits dry ground it will stop and become harder to push. Pull the rod out and measure it to see how deep the water is penetrating.”

Of course deeper-rooted trees and shrubs require some water at a depth greater than eight inches, he adds. Ensuring that the moisture moves to this level in the soil profile can take time. You may need to use a hose with a slow dribble of water at the base of the tree to make sure the water reaches the lower roots.

“The real trick to watering is simply knowing how deep the water is going into the soil and how long it is staying there,” Goodspeed says. “Don’t guess or be afraid to go out to probe or dig around until you know more about what is happening in the yard.”

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