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Test Your Sprinkler System For Uniformity

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GARDEN NOTES

TEST YOUR SPRINKLER SYSTEM FOR UNIFORMITY

By Dennis Hinkamp

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Summer - 46

Just think how selective you would be in watering your lawn and garden if you had to draw all your water by the bucketful from a hand-dug well like our ancestors did. Under this scenario, it's unlikely that Kentucky bluegrass would have hitchhiked any further west than Illinois.

Over the past few years water has been readily available and cheap for all of us, says Jerry Goodspeed, Utah State University Extension horticulturist. Some of us have used it like it was a never-ending, disposable product, instead of the precious, limited resource it is.

Automatic sprinkler systems are part of the problem, he says. It only takes a push of a button to water the lawn. Once the clock is set, homeowners rarely tinker with it. If small, dry spots appear they increase the time the sprinklers water until that dry spot on the lawn disappears. However, this approach over-waters the majority of the lawn.

A dry spot often indicates a lack of uniformity in the sprinkler system, Goodspeed explains. Uniformity is how equally the water is distributed over the lawn. It can't be accurately determined by just watching the sprinklers run; it needs to be measured.

In a perfect world, all the spray heads on a station (all the heads that come on at the same time) would put out the same amount of water, he says. This would create a completely uniform watering pattern. In the real world, uniformity is often around 60 percent, and can be as low as 30 percent. As a result, increasing the watering time for one small area to stay healthy and green means most other areas are grossly over-watered.

There are a number of ways to make sure sprinklers are as uniform as possible, Goodspeed says. First, measure the average amount each sprinkler is putting out by placing cans throughout the lawn in a pattern. Place some cans about one to two feet away from the sprinkler heads and others between the heads, then run the system for about 10 minutes. Turn the system off, measure and record the amount of water in each can, and note where the cans were located in the yard.

"A perfect sprinkler system would put the same amount of water in each can," he adds. "However, as I mentioned before, most systems put out more water in some cans and less in others. The goal is to identify those areas with the least amount of water and figure out why so the problem can be fixed. Check the sprinklers in dry areas to make sure the heads are

functioning properly and are not clogged. They may need to be replaced or cleaned. Some heads may also need to be adjusted if they are crooked or not pointing in the right direction.”

Some homeowners erroneously replace nozzles and even sprinkler heads with different equipment than the original system used, Goodspeed says. They may have found some on sale or picked up a couple of spare ones from their neighbor. This normally causes the uniformity to decrease, so check to make sure all sprinkler heads and nozzles on the system are similar and that they put out the same number of gallons/minute and spray the same distance.

Uniformity can be somewhat confusing, but it makes a big difference when it comes to increasing the efficiency of a sprinkler system and saving water, he says.

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