Utah State University
DigitalCommons@USU

All Archived Publications | Archived USU Extension Publications

1-1-2002

Test Your Sprinkler System For Uniformity

Dennis Hinkamp
Utah State University

Warning: The information in this series may be obsolete. It is presented here for historical purposes only. For the most up to date information please visit The Utah State University Cooperative Extension Office

Recommended Citation
Hinkamp, Dennis, "Test Your Sprinkler System For Uniformity" (2002). *All Archived Publications.* Paper 840.
http://digitalcommons.usu.edu/extension_histall/840

This Report is brought to you for free and open access by the Archived USU Extension Publications at DigitalCommons@USU. It has been accepted for inclusion in All Archived Publications by an authorized administrator of DigitalCommons@USU. For more information, please contact becky.thoms@usu.edu.

Utah State University Extension
electronic publishing

GARDEN NOTES

TEST YOUR SPRINKLER SYSTEM FOR UNIFORMITY

By Dennis Hinkamp

June 2002 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.

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions.

Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person other wise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities.

This publication is issued in furtherance of Cooperative Extension work. Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jack M. Payne, Vice President and Director, Cooperative Extension Service, Utah State University. (EP/06/2002/DF)