TURFGRASS WATERING

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Water experts believe half of the water applied to lawns is wasted. Much of our turf is watered using municipal-treated (culinary) water. This means watering is expensive and water conservation issues must be addressed.

WATER REQUIREMENTS

The amount of water needed for a bluegrass lawn in Utah varies according to the temperature, wind, humidity and solar radiation. Lawns need less water in the spring and fall, but during mid-summer will require as much as 2 inches per week. The following table is a general guide:

May-June 15th . . . . . 1 inch/week
June 16-July 15th . . . . . 1 1/2 inches/week
July 16-Aug 15th . . . . . 2 inches/week
Aug 16-Sept 30th . . . . . 1 1/2 inches/week

Determining SPRINKLER APPLICATION RATES

1. To measure the water applied to a lawn, place at least five straight-sided, #303 (vegetable) cans in various locations, at least four feet from a sprinkler head.

2. Water for 15 minutes.
3. Measure the depth of water in each can with a ruler and determine the average water depth in inches, by adding the number of inches together and dividing by five (the number of cans)

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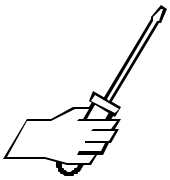
4. Match the sprinkler output (average water depth in cans) with the water depth column in the table.
5. Read the number of minutes to water the lawn in the column, depending on the season of the year.

SEASON	WATER DEPTH IN CANS AFTER 15 MINUTES								
	1/8 inch	3/16 inch	1/4 inch	5/16 inch	3/8 inch	1/2 inch	5/8 inch	3/4 inch	1 inch
	Recommended Watering Time in Minutes by Season								
SPRING (Water every 4 days)	52	34	26	20	17	13	10	9	6
SUMMER (Water every 3 days)	104	69	52	41	35	26	21	17	13
FALL (Water every 3 days)	69	51	39	31	26	19	15	13	10

WATER PENETRATION



To determine the depth of water penetration, push a long rod or screwdriver into the soil. The rod will move easily through wet soil but will stop and become difficult to push when it hits dry soil. Mark the rod at the soil line and pull it out.

Measure the length the rod penetrated the soil and this is approximately the water penetration depth. The amount of water applied, the time required to apply it, and the depth of penetration helps determine a watering schedule. Lawns on sandy soils do not require more water than those on clay soils. The grass still needs the same amount of water, but the frequency of application differs.

OVER-WATERING

Water is usually applied too often and left on too long so water runs down the gutter. Turf studies show that most lawns only need to be watered once every 3 or 4 days to stay healthy and green. Water infrequently and deeply. A large water bill for a small lawn could mean it is being over-watering.

Besides being expensive, over-watering damages the lawn, contributing to poor growth, and causing serious disease problems. Over-watering contributes to iron chlorosis or yellowing in lawns, trees and shrubs, and makes more frequent fertilizer applications necessary.

IMPROVING A WATERING SCHEDULE

If water is applied every day, the roots accumulate in the top 1 to 2 inches of soil. This creates weak plants that are more subject to insect, disease and drought damage.

Train roots to penetrate deeper into the soil by changing the watering schedule to every other day for a couple of weeks, then every third day, and so on. Eventually the grass responds and develops a root system to match the watering schedule.

To calculate how much water to apply, divide the amount of water needed for the week by the number of applications. This should provide enough water to recharge the root zone and keep the lawn green and healthy.

The following chart indicates the number of days between watering once the lawn has adjusted from a daily watering schedule.

SOIL TYPE	APPROXIMATE TIME BETWEEN WATER APPLICATIONS WEEKLY		
Loam Soil	3-4 days	=	2 x 3/4 inch
Sandy Soil	2-3 days	=	3 x 1/2 inch
Clay Soil	4-6 days	=	1 x 1 inch

Learn to water only when needed. If grass does not spring back when it's stepped on, it's time to water. Insect infestations or chemical misuse may cause symptoms resembling water problems. It may be necessary to consult a professional to solve the problem.

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