

SCIENTURFIC

Irrigation Recommendations for Established Bluegrass Lawns

The following recommendations are based upon scientific research, horticultural principles and the expertise learned in growing and maintaining bluegrass.

In order to better understand the amount of supplemental water required by bluegrass, one first needs to understand its growth cycle. Bluegrass is a plant that greens up in the spring (April, May and June), and may turn straw-colored without adequate water in the summer (July and August). In the fall (September and October), bluegrass greens up again with the fall moisture and then goes dormant during the winter months (November through March). The two primary growth periods are early spring as it comes out of winter dormancy and in the fall as it prepares for winter. During these periods the need for water and nutrients is essential for the plant to remain viable and healthy. Originally where bluegrass grew, its growth cycle also paralleled the moisture cycle.

Things changed when the consumer wanted the grass to green up sooner and stay green until winter. Being an adaptable plant, bluegrass can adjust to most consumer requirements by the addition or reduction of water, fertilizer and mowing. The amount of supplemental water may vary as current weather conditions change.

One simple method of determining whether the grass needs watering is to observe the dehydration signs given by the grass. They are:

- 1) First stage – grass has a purplish tint
- 2) Second stage – grass blades turn steel gray and footprints are left when walked upon
- 3) Third stage – grass blades turn straw color

There are numerous ways of watering. Some people drag hoses with a variety of attached sprinklers. Others have automatic sprinkler systems. Some even use weather or soil moisture-based controllers.

For the consumer, the amount of water applied can be measured by using rain gauges, or cans placed on the lawn in areas covered by the sprinklers, or by understanding the application rates of their sprinkler system. However, most consumers over water! Some set their automatic sprinkler clocks and don't change them irrespective of any climatic changes. This method has been shown to be the most wasteful.

The real question is how much water must be applied to get the desired results? The answer is not a simple one because the variables and requirements are always changing –

climatic conditions aren't constant, water availability varies and consumers desire different outcomes.

In order to help the consumer be a better water manager, all factors must be considered. Each lawn environment is different. What type of soil is there? Is the ground properly prepared? What is the purpose of the lawn? What type of grass is it? When and how much is it fertilized? How is it mowed?

Other major questions are: What would happen if the amount of water applied was less? How will it look? What will be the possible results? Will the grass turn straw-colored and survive?

The approximate amount of water that needs to be applied each week to supplement normal rainfall is listed in the following chart:

Approximate Supplemental Water for an Average
Traditional Lawn (Inches per week)

April	May	June	July	Aug	Sept	Oct
1/4 "	3/4"	1 1/4"	1 1/4"	1 "	3/4"	1/2"

If your water provider imposes weekly restrictions, then divide the weekly amount by the number of days watering is allowed.

Example: If there is a two day a week restriction and the month is August,
1 in. divided by 2 days = 1/2 in. per watering day

Data for the chart is based on historical averages and does not predict the future. This is a guideline and is not a substitute for good judgment, reason and common sense. If we don't receive normal rainfall, then the amounts shown in the chart should be increased to gain the same results. If there is greater than normal rainfall, then the amount of supplemental water should be reduced.

It should be obvious that good water management requires analysis coupled with reasonable judgment. Because of the many variables, it is impossible to give one answer that fits all lawn environments. However, by utilizing the information provided, better results will be gained, water will be used more wisely and the grass will receive adequate water to be an average, traditional lawn. People waste water -- not the grass!

For more information or answers to specific questions contact:

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