



## How Long Should I Run the Sprinklers?

by Michelle Le Strange, Master Gardener Advisor

Spring is the time to prepare the lawn for summer heat because mild temperatures favor root growth and roots supply water to leaf blades. Watering thoroughly and infrequently allows roots to develop deeper than six inches in the soil profile. Deep roots help lawns stay vigorous in hot weather.

Short, frequent irrigations stop root development because there is no moisture at deeper depths so roots become concentrated in the top few inches of soil. On the other extreme constantly soggy soils also stop deep roots from growing because there is no oxygen at deeper depths (and roots need air to respire and grow).

Shallow rooted lawns look terrible during summer heat spells because roots can't suck up enough water to keep pace with the heat demands of summer afternoons and hot nights. Water stress leads to brown spots, and insect and disease attacks. Even when more and more water is poured on, the lawn never looks as good as it could.

Deep rooted lawns can pull water from deeper depths and use it to stay hydrated and cool during the summer heat spells. They can wait several days between irrigations and as a result they are stronger and less susceptible to root rotting fungi that thrive when lawns are irrigated daily.

**Lawn Watering Guide.** The techniques I am about to describe will help homeowners set up timed irrigation controllers for home lawns. The simple procedure involves identifying the type of turfgrass you have and the output of your irrigation system. A table provides a general guideline for scheduling lawn irrigation based on average weather data. Environmental conditions vary slightly from year to year and from location to location within a region, so your irrigation controller will continue to need minor adjustments from time to time in order to deliver optimum results.

**Step 1. Determine what type of lawn you have.** The majority of neighborhoods have either a tall fescue or a bermudagrass lawn. Tall fescue is a cool season grass that performs exceptionally well in our region in the fall and spring, but almost stops growing in the hot summer heat. Other cool season grasses are Kentucky bluegrass, annual and perennial ryegrass, and bentgrass. Warm season grasses such as common and hybrid bermuda, St. Augustine, and zoysiagrass thrive in the summer sun, but go dormant and stop growing during winter.

Both grass types need summer water. Cool season lawns require about 20% more water than warm season grasses, but the question remains how much?

