Watering Established Lawns

Best Management Practices

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Even well-established tall fescue or bluegrass lawns must be watered regularly throughout the growing season to keep them green and growing. Buffalograss is the most drought-tolerant grass and often survives summers without regular watering. Bermudagrass and zoysiagrass without excessive thatch require less water during stressful summers than do cool-season species.

Avoid watering established tall fescue or bluegrass lawns prematurely in the spring. Generally, there is a good reservoir of soil moisture remaining after winter, and during cooler springtime weather, grass plants require less water. Unnecessary irrigation can contribute to a shallow root system as summer approaches.

The recommended approach for watering established lawns is to wait for signs of general drought stress, and then apply sufficient water to moisten the soil to the depth of the root system (see below). Established turfgrass indicates drought stress by turning a dull, blue-green color. Moisture-stressed grass also tends to "footprint," meaning that grass that is pressed down when walked on doesn't return to an upright position. During an abnormally wet spring, grass may need to be weaned of moisture dependency by watering in gradually decreasing amounts going into summer.

Turfgrass roots grow deeper in spring and fall than in mid-summer. To accommodate the root system, apply enough water to moisten the soil to a depth of 6 to 8 inches. This should take 1 to 1½ inches of water, depending on the soil type.

On level sites with good soils, this much water may be applied at one time, but not faster than it can be absorbed by the soil. Water that puddles on the lawn may absorb enough heat during hot days to scald the grass.

On slopes, water may have to be applied in increments, letting it soak in between cycles. The objective should be to moisten soil to a depth of 6 to 8 inches during a 24-hour period, then let the soil dry out before the next irrigation cycle.

Because the root systems of cool season turfgrasses recede during hot weather, it may be necessary to water tall fescue 3/4 inch twice a week during midsummer. Kentucky bluegrass may need ½ inch of water three times a week to avoid drought stress. It shouldn't be necessary, or desirable, to water established lawns every day.

When using an automatic timer to activate an irrigation system, pause it when rainfall is adequate. This can be done manually or with an automatic rain sensor override. For more efficient watering use in-ground moisture sensors or manually turn on the system as needed rather than following a set schedule.

A screwdriver or piece of concrete reinforcing rod (rebar) can be used to determine how deeply water has penetrated the soil. Push the tool into the ground until you reach dry soil. The tool will pass easily through moist soil but will stop when it comes in contact with dry ground. Remove

the tool from the soil and measure to determine depth of watering.

As homeowners become more sophisticated in their approach to lawn care, they should become more knowledgeable about the rooting depth of the grass on the site, the infiltration rate of water into the lawn, and how grass performs under stress. They should learn where grass tends to exhibit drought stress first, and use these places as a guide.

Enhance rainfall

Water moves more readily into moist soil. To maximize the benefit of light rainfall, apply ¼ to ½ inch additional water immediately after a rain.

Summer dormancy

An established tall fescue or Kentucky bluegrass lawn has the capacity to enter a dormant condition when subjected to drought stress.

An established lawn consists of mature grass that has gone through a complete growing season. It is growing in good soil, maintained properly, and gradually eased into summer by weaning from moisture dependency.

While dormant, lawns may go two to three weeks or more without water. After that, it's important to keep the crowns of dormant grass plants alive by applying about ¼ inch of water every couple of weeks if that much rainfall doesn't occur. By following this approach, established bluegrass and fescue lawns, growing on good soil and maintained appropriately, can survive up to 8 weeks without substantial irrigation.

Note: Because early fall is the time to perform important cultural practices on cool-season lawns such as fertilization, core aeration, and overseeding, it would be wise to water dormant lawns deeply in mid to late August to establish the soil's moisture reserve and to revive dormant lawns so they can respond to these practices.

Winter watering

The soil supporting any lawn should be moist going into the winter. If natural precipitation hasn't been adequate, thoroughly water before the ground freezes. During a dry winter it may be necessary to apply water during mid-winter thaws.

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