

1-800-331-1746 arborlawn.com WATERING PRACTICES

PROPER WATERING

Watering less frequently and more deeply encourages root growth deep into the soil rather than on the surface, where it forms thatch. Deeper root growth allows plants to withstand dry conditions better, and the formation of less thatch enhances soil aeration. Deep roots have better access to soil nutrients and water, especially in the dry season. They also promote turf growth over weed growth, since many turf grasses develop a deep root system, while many weeds have shallow roots. Most grasses are adapted to seasonally dry conditions and compete best if the soil in the root zone is allowed to become partially dry between waterings. For best turf growth, wait until the soil has dried then irrigate to replenish the water to the depth of the root zone. Watering also needs to be timed according to the soil texture, the rate of water infiltration into the soil, and the flow rate of your irrigation or sprinkling system. If you apply water faster than the soil can absorb it, the excess will run off rather than soak into the soil. Besides being wasteful, this runoff can transport diseases across the lawn. You may need to do two cycles of shorter duration to eliminate this problem.

OVERWATERING

Watering grass too frequently or too lightly causes lawns to develop shallow root systems, encourages water logging, increases the potential for a variety of soil-borne diseases, and stimulates the growth of weeds such as buttercup, speedwell, and annual bluegrass. Watering during the morning places less stress on grass and decreases the potential spread of fungal diseases. While irrigation is essential to prevent drought damage during the dry season, the amount of water and the timing of its application can prevent or contribute to disease development. Most fungal pathogens that cause <u>leaf</u> diseases require free water on the leaf or very high humidity to initiate the infection process. Dew (more importantly, the length of the dew period) is a critical factor for leaf disease development. Dew is dependent on temperature and humidity. Extending the length of the dew (free water) period by irrigating in the evening before dew forms or in the morning after the dew evaporates extends the dew period. Therefore, irrigate when dew is already present, usually in the pre-dawn hours, with the cycle to finish by mid-morning.

TIMING OF WATERING CYCLE

For most conditions, a good time range is from just pre-dawn to mid-morning. Irrigate only in the absence of sufficient natural rainfall, (that is if you touch the soil at the base of the grass late in the afternoon and it is not moist to the touch), and then apply enough water to saturate the root zone of the turfgrass. Make sure the irrigation system is applying the water uniformly across the area. Irrigating everyday for a few minutes is not as beneficial for the turfgrass because it does not provide enough water to the root zone, but it *is* beneficial for the turfgrass pathogens.

Keep in mind that these are general recommendations and specific environmental factors may indicate that a different schedule would be better for you. Feel free to contact us if you have any questions.