

Lawn - Watering

Plants must have water to survive. Water in a plant is like blood in an animal. Water carries dissolved nutrients, sugars and hormones throughout the plant's system. Some plants can go for long periods receiving only minimal water. Others require water every day. Here are some guidelines to help you determine when, where and how much to water.

Common turfgrasses vary in their drought tolerance.

Drought tolerance (highest to lowest):

- Bermudagrass
- St. Augustine grass
- Centipedegrass, Fescue grass, Emerald zoysiagrass and El Toro zoysiagrass
- Meyer zoysiagrass

Some grasses have the ability to go dormant when suffering from drought. If healthy to begin with, They can recover when water becomes available.

Time grass can go without water, before substantial harm and/or death. (weeks):

- Bermudagrass 8
- St. Augustine grass 6
- Zoysiagrass 4

Technically, St. Augustinegrass uses only a little more water than other, drought avoidant grasses such as bermudagrass and Zoysiagrass. What lends to the severity of drought damage in St. Augustinegrass is the exposure of the horizontal above-ground stems ("stolons") to desiccation.

How Much Water

How much should you water? You should apply no more water than what normally evaporates from the soil surface and turf foliage in an average 7 day period. **This evapotranspiration rate" along with other useful irrigation calculators, can be found on our website.** How long you water depends on how bad your irrigation device is. "Precipitation rate" is the volume of water, output by your irrigation device. The precipitation rate varies for all sprinkler hoses, systems and zones. You can measure the sprinkler precipitation rate of your irrigation device to more accurately setup your system.



Gear Driven Rotor type heads must run three times as long, to get the same coverage as a "fan" type pop up head.

There is a **simple test** you can perform to determine your sprinkler's precipitation rate. Place a rain gauge or straight-edged "tuna" can near the sprinkler. Run the sprinkler for 15 minutes. Measure the amount of water in the can with a ruler. Multiply your results by 4. This is your hourly precipitation rate for that zone, or irrigation device. If your irrigation system is low volume, you may have to run it for 30 minutes and then multiply by 2, to get your hourly rate. Multiple "catch" cans may be used, and the results averaged, for increased accuracy. This is especially useful when measuring on a slope or hill side.

How Often

How often you water, is dependent on the composition of your soil, type of turf, amount of available sunlight and practicality. Our Soils in and around Austin, have a high clay content, therefore it cannot absorb water at a very fast rate. This problem is amplified by the slopes found in almost everyone's lawn.



"Pop up" type heads are the most efficient means of watering your lawn. Very little water is placed off target.

When more water is applied to the soil surface than can be absorbed, the water will simply run off. This is wasteful, and can cause disease problems if it runs into low areas containing turf. In Austin, I recommend no more than 3/4 of an inch per watering. In some areas it might only be possible to water 1/2 inch before runoff occurs. I do not recommend watering twice in one day, as this increases the disposition for "Brown Patch" and other diseases. Therefore, the frequency is the total of the water required, (in a 7 day period) minus average rainfall, divided by the amount water that can be applied, with no run off. **This is generally twice a week in the Late spring and early fall, and three times a week in the midst of summer.** Turf grass irrigation should be done between the hours of 4:30 AM until 11:00 AM. Never Water at Night!