

## Lawn Care Recommendations for Drought Conditions in Houston, Texas

We are experiencing the third-worst drought in Texas history. Only the droughts of 1918 and 1956 were greater in severity. Houston has not been spared. We have seen very little rain since February this year. Yet we are now approaching the July to September period, which is routinely hot and dry.

Here is some important information on proper lawn irrigation.

Here in Houston, we historically have more rain than we need and irrigation is often required during the summer months of June, July, August and September. More water may be used during the summer months by grass than is replaced by rainfall. Nonetheless, even if supplemental irrigation is not added, some turf grasses have mechanisms to survive the dry period. Warm-season grasses like centipede grass, Bermuda grass, Zoysia grass and St. Augustine grass will survive dry periods and will rebound when favorable conditions return. During dormancy the plants stop growth of leaves and shoots, causing the existing turf to turn brown. The plants usually do not die, although the leaves cease growing. When adequate water returns, new growth will occur with no long-term damage.

There are exceptions when it is important to keep the grass growing throughout the summer by supplemental irrigation. Any turf that is affected by or is recovering from pest damage, such as disease, insects or excessive weed growth, should receive plenty of water to aid recovery. Any area that has been recently seeded should be watered frequently. Of course, if one wishes to keep their grass green during the dry summer months, it must be irrigated.

### **How much water should I use?**

The preferable method is to thoroughly wet the soil down to a depth of 5 inches. If the soil is initially very dry, it may take 1/2 inch of water to wet a sandy soil down to a depth of 5 inches, while 1-1/2 inches of water may be needed to wet a clay soil down that far. Once the soil is thoroughly wet to a depth of 5 inches, any additional water will simply drain below the root zone. An easy method to determine this is to sink a shovel into the soil and spread the hole so you can see how far the water has penetrated. Then remove the shovel and press the soil into place with your foot. Another general rule is that Houston lawns require about an inch of water a week to remain green during the summer months. This can be accomplished by setting a rain gauge or open-mouthed can outside and measuring combined rainfall and irrigation water.

Note that the condition of the soil beneath the grass or sod will have a direct effect upon how much effort is required to maintain a lawn. In many subdivision areas, poor soil was placed below the sod during construction. It may be very hard and make water penetration difficult.

### **How often should I water?**

Slight wilting, a color change to a more grayish or bluish-green shade or foot printing (when plants will not rebound after walking on them) are indications that irrigation is necessary to maintain a green lawn.

It is desirable to keep the interval between watering as long as possible without allowing the plants to go into water stress. Deep, infrequent irrigations cause plants to develop deep, strong root systems that can extract water from a much larger volume of soil than the shallow roots associated with light, frequent irrigation. This means that watering once or twice a week is more effective than watering a little bit everyday.

Some areas of the lawn will probably dry faster than the rest. This is common on southern exposures, sunny areas, borders of sidewalks and slopes. Hand watering of these areas may save water by extending the interval between watering of the entire lawn.

During times requiring water conservation, hand watering may be all that is permitted.

**When should I water?**

The most efficient time to water lawns is probably early in the morning hours from 4 am to 8 am - less water is lost to evaporation due to lower temperatures and less sunlight. However, watering after 8 am wastes a lot of water: costing the homeowner and doing little for the grass. Indeed, up to fifty percent of the water used for irrigation during the hours of 10 am and 6pm may be lost to evaporation; thereby spending money on water that never gets to the root system of the grass.

Watering in the evening during the spring and fall should be avoided. If the grass plants go into the nighttime hours wet, they will remain wet for extended periods of time. During the warmer days and cooler nights, this may favor the growth and development of turf grass diseases.

**Lawn Watering Tips**

- **Consider whether lawn irrigation is necessary in your situation.**
- **Lawn irrigation would normally be minimal in spring until May.**
- **Add 1 to 1-1/2 inches of water per week (minus any rainfall) during the summer months.**
- **Keep the intervals between irrigation as long as possible.**
- **Water in early morning hours for greatest efficiency.**