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### ***Breaking the Habit***

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Does your lawn have a "drinking problem"? You may never be able to cure your lawn of its dependence on the water sprinkler, but you can certainly convince it to drink more moderately!

Chances are, you are giving your lawn at least 20 percent more water than it should have. This indulgence not only wastes water, but often damages the grass. Excess water robs plant roots of oxygen and also encourages plant diseases.

### ***Limit Your Lawn***

You probably don't realize how much excess water you are pouring on your lawn. You are much more likely to recognize when you are giving too little water than when you are encouraging immoderate drinking. As a matter of fact, a recent study found that more than half of all homeowners overwater their lawns while very few underwater.

An average of an inch and one-half of water applied once a week, according to the Texas Department of Water Resources, will keep most Texas grasses alive and happy. You will need to adjust this amount and time, however, for your lawn's soil structure, land slope, and condition as well as for the season of the year.

How do you know when your lawn has had enough? Water should penetrate the soil deeply enough to encourage firm and solid root growth. Ideally, you should water just enough to dampen the entire root system and water only when necessary.

Since it is almost impossible to guess how much water you are applying to a lawn, you should (1) test the depth of soil which is moistened, (2) use catch cans to measure depth of water applied, or (3) meter the amount of water applied.

To check how deeply the soil is moistened, push a large blunt screwdriver down until it meets resistance. Soil should be damp six to eight inches below the surface.

Place shallow cans or rain gauges to catch water at various distances from the sprinkler head so you can tell how many inches of water you have applied in a specific area. You must average the depth of water in the cans to determine the application over the entire area.

The most accurate method of determining the amount of water you are applying is to actually measure the water. In some cases you can read the city water meter at the edge of your property, but be careful not to use water for other purposes during the metering time. Meters that attach directly to the lawn hose can be purchased at a relatively low cost. Another way to measure water is to run a sprinkler into a container for one minute and then measure the amount.

You should determine the time it takes to apply the right amount of water. A simple wind-up kitchen timer or an alarm clock will help you to remember when to move the sprinklers. Better yet, invest in one of the timer-controlled sprinklers now on the market.

### ***Bad Influences***

One of the worst influences on your excessive drinking lawn is an inefficient sprinkling system. No sprinkler will distribute the water at equal depths over the entire lawn area. This unequal application will over irrigate in some areas and under irrigate in others.

Each sprinkler distributes water in a different pattern. Pattern means not only the surface areas covered by the sprinkler, but the relative depths of water within this area. The trick is to select the best sprinkler for your situation and then overlap applications for the most even distribution.

Homeowners generally water their lawns with one of five types of sprinklers: rotating, oscillating, stationary, impact, or traveling.

Rotating and oscillating sprinklers should be avoided because of their poor distribution characteristics. If used, they should be overlapped in both directions by 75 percent. A traveling sprinkler provides a relatively high uniform coverage without any overlap. Most traveling sprinklers, however, do not apply an adequate depth of water when crossing a lawn once. Traveling sprinklers, therefore, need to be run across the same area more than once.

Sprinklers that throw water high into the air cause poor distribution and excessive evaporation of the water. Large drops of water distributed in a low, flat pattern are more effective than a fine, high mist.

### ***Treatment for Problem Drinkers***

Watering the entire lawn because of a few dry spots is wasteful and can be detrimental to the lawn in areas that tend to stay wet. Dry spots in the lawn may be caused by sandy or rocky areas or by heat reflected from buildings or concrete. Sunny or southern sides of buildings generally require more water than other parts of the yard. These areas should be watered with a soaker or an aerator attached to a garden hose rather than with a sprinkler. A good way to water grass near concrete is to push a root feeder into the soil 12 to 16 inches from the concrete. Force the water jets down to a depth of 4 to 6 inches. When the grass rises like a bubble, remove spike and repeat operation 12 to 16 inches further along the grass edge.

Trees and shrubs need to be watered to a depth of two to three feet. Use a root waterer or form basins around plants to hold water. After the second year, most plants should have established a root system to take care of their own water needs except during extended dry periods.

### ***Happy Hours***

You should give your lawn an especially good drink at the end of the growing season and again early in the spring. Lawns use a considerable amount of water during the winter in this southern climate. As a rule of thumb, during the growing season, you should water once a week for clay soils and twice a week for sandy soils.

Don't water just because it is a certain day of the week or because the neighbors are watering their lawns. If the grass has turned a dull gray-green, or if footprints remain visible as you walk across, then it is time to water.

Properly watered grass will develop a deep root system efficient in recovering soil moisture. Too frequent waterings can produce a lush grass with a shallow root system. Such grass may be especially vulnerable to drought damage and to certain diseases.

Water early in the day. Before 10:00 a.m. is best because rising heat later in the day tends to steal a lot of water by evaporation. There is another good thing about early morning watering: the grass leaves have a chance to dry off quickly. Water droplets left on leaves act like little magnifying glasses and can cause burn damage from hot sunlight.

### ***Temperance Lessons***

You can help your yard kick the habit of excessive drinking with a few of these water-saving tips:

- Add organic material (compost, peat moss, or ground bark) annually to improve sand or clay soil. A good loam soil--the combination of sand and clay --absorbs and retains water better than clay which takes in water too slowly or sand which loses water too quickly.
- Water slowly for better absorption.

- Aerate your lawn to help improve infiltration rate and prevent runoff from compacted areas.
- Raise the mower height one-half to one inch during the summer months. Taller grass encourages deeper root growth to take advantage of the soil moisture. Higher grass also provides more leaves to insulate the soil from heat and reduces evaporation.
- If you use a soaker hose, turn it so the holes are on the bottom to avoid evaporation.
- Fertilize your lawn at least twice a year to establish a grass with a water-efficient root system. During dry seasons, however, hold back on nitrogen fertilizers to keep plants from needing as much water.
- Control weeds. They are water gluttons.
- Don't water on windy days. And try not to water streets, walks, or driveways.
- Mulch shrubs and other plantings so the soil holds moisture longer. Mulching also controls weeds.
- Most importantly, learn what types of grass, shrubbery, and trees do best in your area and in your yard, and then plant accordingly. If you have a heavily shaded yard, for instance, no amount of water will make roses bloom!

### *On the Wagon*

Put a part of your yard "on the wagon" by replacing thirsty grass with drought resistant ground cover or lower quality native grass. Good substitutes for grass include drought-resistant ground covers, redwood bark, pea gravel, decomposed granite, or even concrete. Be careful though--a swimming pool evaporates close to the same amount of water consumed by the grass it replaces.

Could you live with a lower quality grass in your lawn? There are grasses which can survive most Texas summers without help, but they are not as soft or beautiful as grasses now popular for urban lawns. These grasses would save you mowing and maintenance time as well as water.

Trees and bushes native to your area would also save time and money. Once these plants are established, they would need little or no attention from you.

Total abstinence for your lawn is probably not your goal. You are willing to spend a reasonable amount of time, money, and water on plants and grass because they add beauty and value to your life and property. They also reduce energy needed to heat and cool your home.

You can, however, teach your lawn to drink more moderately by kicking some of your own overindulgent lawn watering habits. Woe unto you oh plants with gluttonous tastes. . . those plants which can exist only by drinking excessively. For your days are numbered when rains fail to come and water runs short.

Even mild drought conditions mean curtailment of lawn watering in many Texas cities. Next month's issue of Texas Water Resources will suggest plants which can survive those water-short years.