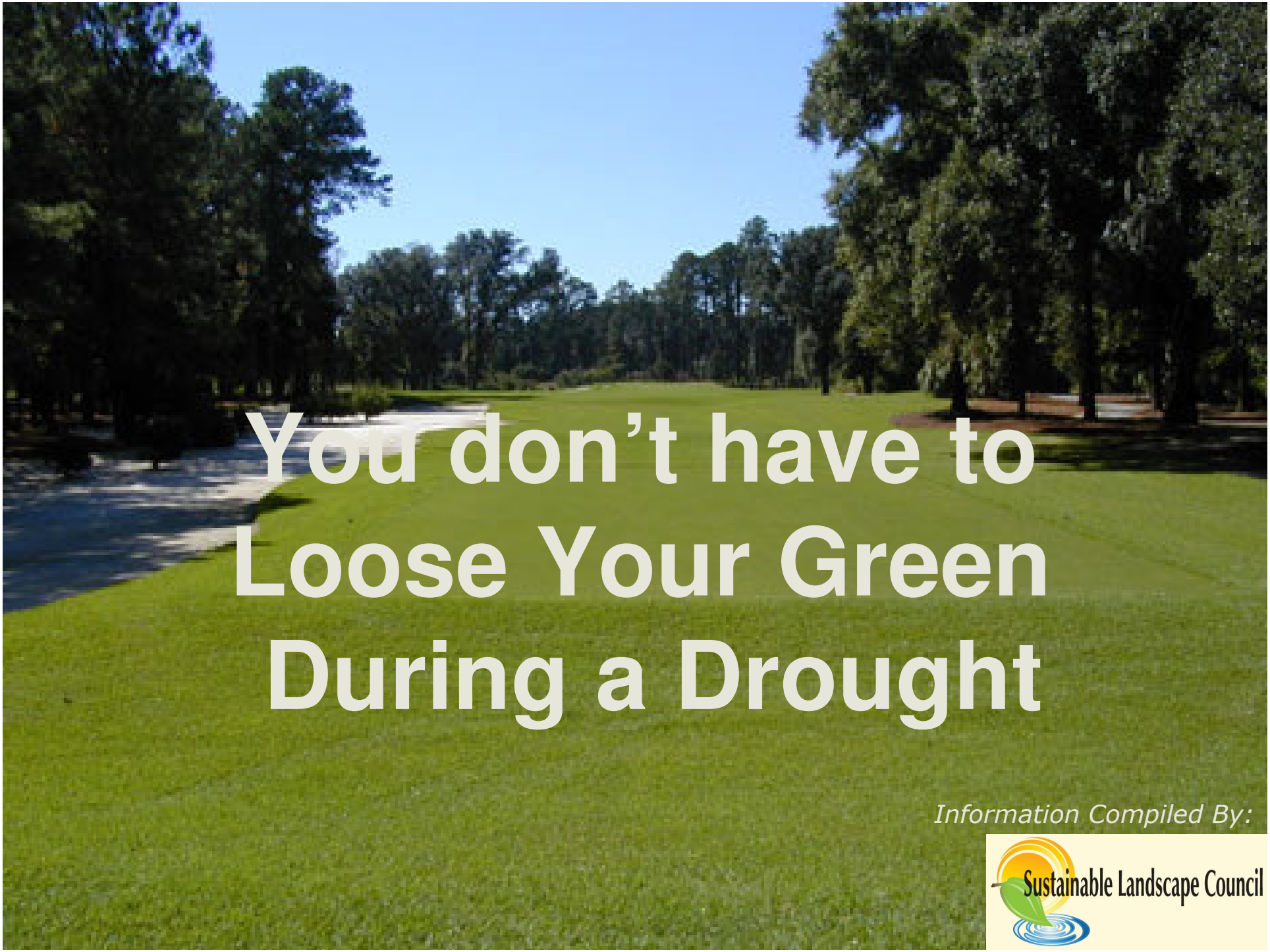


You don't have to Loose Your Green During a Drought

Information Compiled By:

Sustainable Landscape Council


Currently our area and many others across Florida and the United States, homeowners are facing a season of drought.
As a leaders in our industry and as founding members of the Sustainable Landscape Council we wish to provide our community and others like it with the most informative information on caring for their landscape.

The following information is meant to serve as a general guideline to help you maintain a healthier, more vibrant lawn and landscape. It represents a compilation of our most commonly asked questions. If you have more specific or technical questions, we suggest you contact your County Extension Office.

We have compiled the most accurate and complete information a homeowner, landscaper or other industry professional should need when faced with area watering restrictions.

Since there is also concern about fertilizer usage we have also included information about its usage during drought.

Once again our goal is to inform and help homeowners and the like in caring for their landscape during these dry seasons. It is in our nature to keep America Green.


Caring for Your Landscape During Drought
Homeowners armed with a weather forecast predicting severe drought can take proper preparations that can greatly improve the chances of their landscape surviving, even with very limited water.

Reduce or eliminate nitrogen fertilizer

At this time of year it overly promotes leaf growth, at the cost of rooting activity. Plan to fertilize in the fall when top growth slows down and root growth increases.

Avoid all weed killers (herbicides)

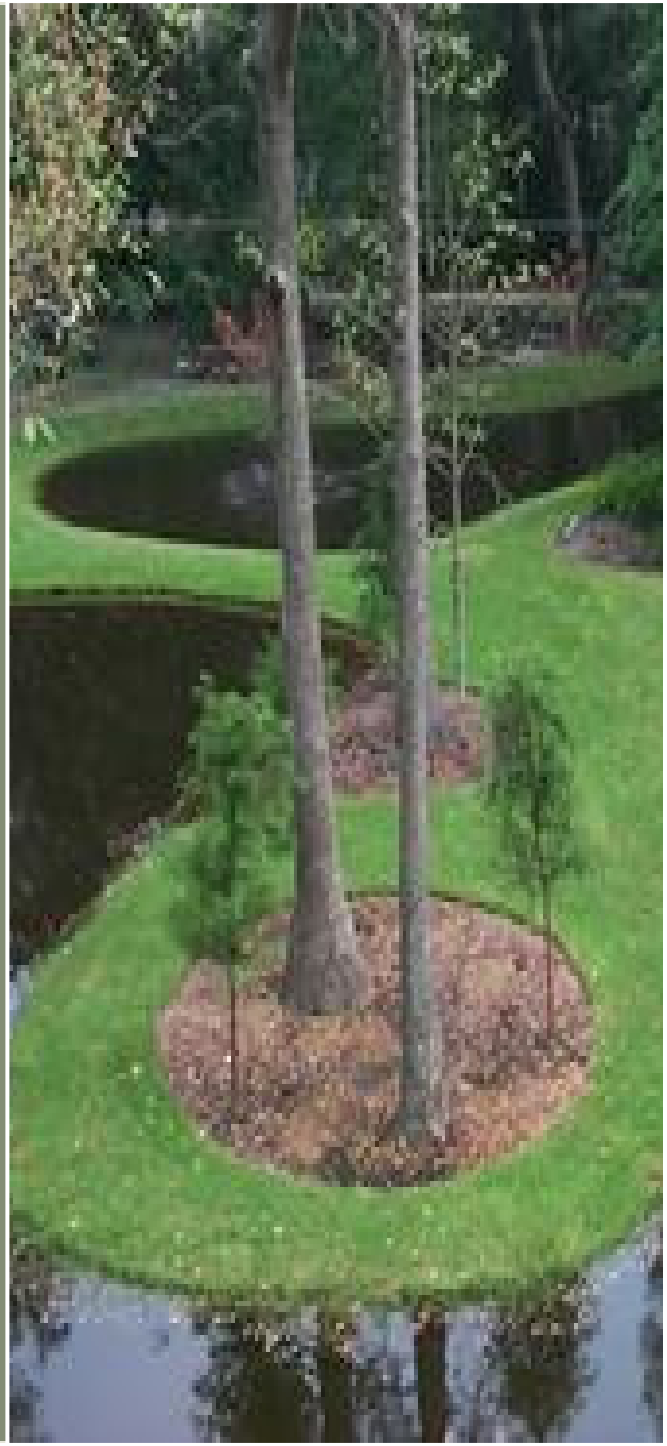
Most can also lessen the vigor of grass roots, the last thing you want to do prior to or during a drought.

Reduce thatch and compaction

As early in the year as possible so that moisture and air can reach the roots as easily as possible. Thatch can act like a sponge, capturing water before it reaches roots while compaction will increase rapid run-off at the cost of deep saturation.

Sharpen the mower blade

Several times during the turf-growing season because dull blades shred rather than cleanly cut grass and shredded turf can greatly increase water losses.



Mow less or when it's cooler
No matter how you cut it, grasses lose moisture After every mowing. Less plant moisture will be lost when mowing takes place at cooler times of the day.

Mow as high as possible
Staying within the prescribed mowing height per variety. Taller mowing height will promote root growth and allow soil shading.

Leave clippings, not clumps
To add moisture, nutrients and a mulching effect; however, remove clumps because they will block the sun and heat up as they decay, killing the under-lying grass.

Water Right...
Defend your right to use water to save your landscape by participating in public water hearings, while practicing proper watering techniques.

Determining When To Water

The most efficient way to water a lawn is to apply water when it begins to show signs of stress from lack of water.

The Following signs are indications of water need

Bluish-grey areas in the lawn

Footprints or tire tracks that remain in the grass long after being made

Many leaf blades folded in half

Soil sample from root zone feels dry

Water requirements will vary according to variety and soil type

For example Empire Zoysia may show signs of drought stress sooner than some St. Augustine varieties, because of its ability to go into a dormant state to protect itself.

As soon as irrigation or a rain event occurs Empire will resume growing and begin turning green again.

Add-on devices are available for some sprinkler systems to automatically determine when to water. Electronic moisture sensing devices allow automatic sprinkler systems to operate only when soil water is getting low.

The How To

Water late at night or early morning to take advantage of cooler temperatures and less vaporative losses to the afternoon winds and hot sun.

Water infrequently and deeply to encourage roots to go deeper where moisture remains available for longer periods of time.

Reduce Traffic on the Lawn

At all times if possible, but especially during the heat of the day when foot traffic and even lawn mowers can injure the grass plants and cause almost immediate dehydration.

When cooler, wetter weather returns you can help your lawn recover from a drought by watering deeply.

This will wash dust off the leaves, re-hydrate the dormant crowns and initiate root growth.

Watering a Newly Installed Lawn

Give your new lawn at least ¾” of water within 1/2 hour of installation.

Water daily keeping turf moist until it is firmly rooted (about 2 weeks).

This allows the root system to become firmly established. After a couple of weeks, water the sod as an established lawn.

Measuring Your Water Rate

No matter what kind of irrigation system or method you use, check and adjust it to the soil's absorption rate.

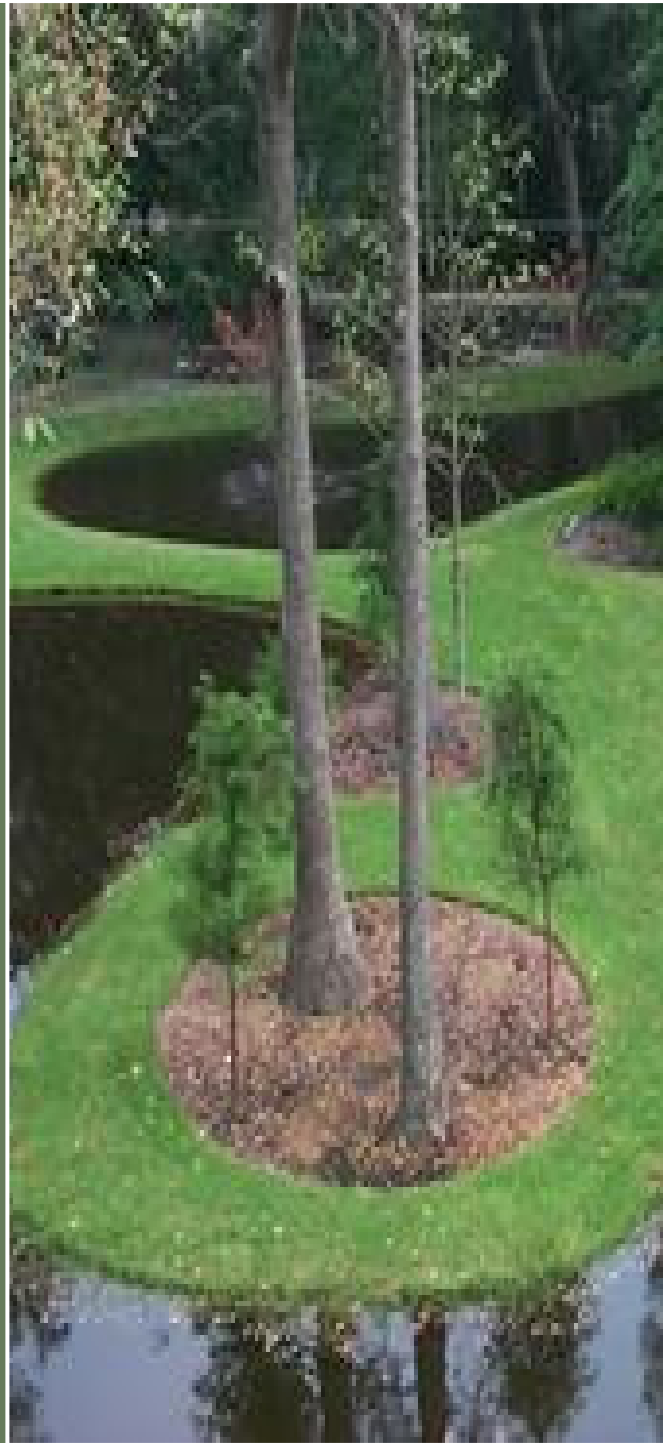
A good rule of thumb is to apply water at a rate equal to or slightly less than the soil ability to absorb it.

Most irrigation systems apply water faster than necessary, which wastes water through run-off. Also, don't forget to check if the system is applying water uniformly!

The best way to check both of these functions is to set out a series of straight-side, flat-bottom cans (an old soup can or tuna can for instance) for an in-ground system or a few cans for a movable sprinkler system. Run the watering system for 30 minutes and measure the amount of water collected.

You can determine the length of time needed to apply one inch of water with a little simple math. If you know the soil type, check the absorption chart to figure how long the system needs to run in order to soak the lawn to a desired depth of 4 to 6 inches. Remember to stop the watering for an interval if you see run-off occurring.

Hilly or sloping areas may require a soaker hose to reduce run-off and allow better water penetration into the soil. Soakers apply water slowly over a small area.



Watering an Established Lawn

The healthiest lawns are produced when they are watered heavily at infrequent intervals.

On an average, the lawn needs about ¾" to 1" of water per week, either by rainfall or in combination with irrigation.

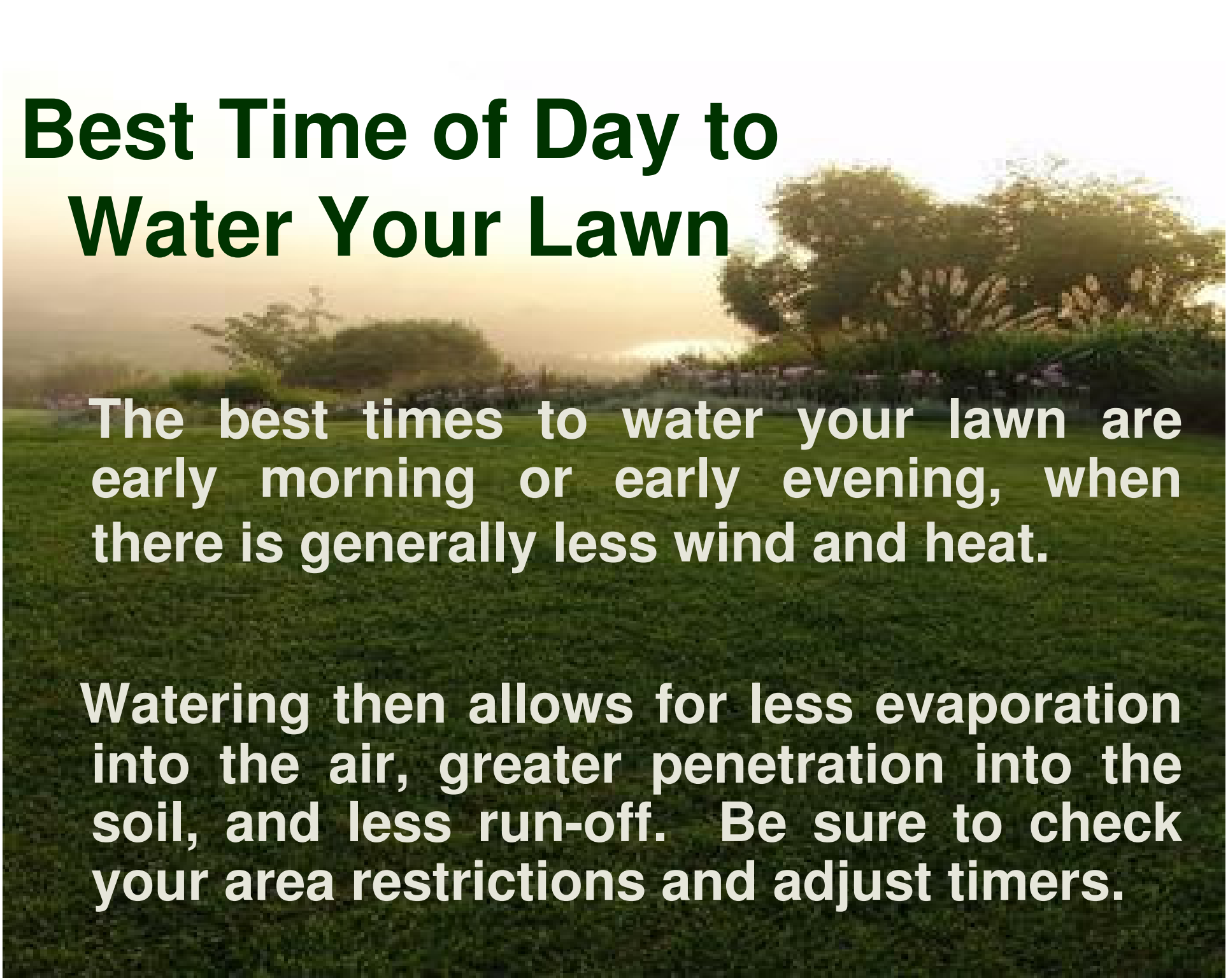
This one-inch rule will normally soak the soil to a depth of 4 to 6 inches, allowing the water to reach deep into the root system.

Let the lawn completely dry out between watering intervals.

Most lawn grasses can tolerate dryer conditions over a reasonable period of time.

Water only when a probe or screwdriver is difficult to push into the ground or shows that the soil is dry 4 to 6 inches down.

Best Time of Day to Water Your Lawn



The best times to water your lawn are early morning or early evening, when there is generally less wind and heat.

Watering then allows for less evaporation into the air, greater penetration into the soil, and less run-off. Be sure to check your area restrictions and adjust timers.

Fertilizer Application Quantity

Fertilizer application rates should be as low as possible and still produce a high quality lawn. Over fertilization weakens your lawn and causes excess leaf growth.

As a general rule, if the amount of Nitrogen (N is the first number in the analysis) is between 5 and 12, the application rate should be 8 pounds per 1,000 sq. ft.

When To Fertilize

It is best to fertilize your lawn twice per year in Spring & Fall with 6 Month Controlled Release Fertilizers.

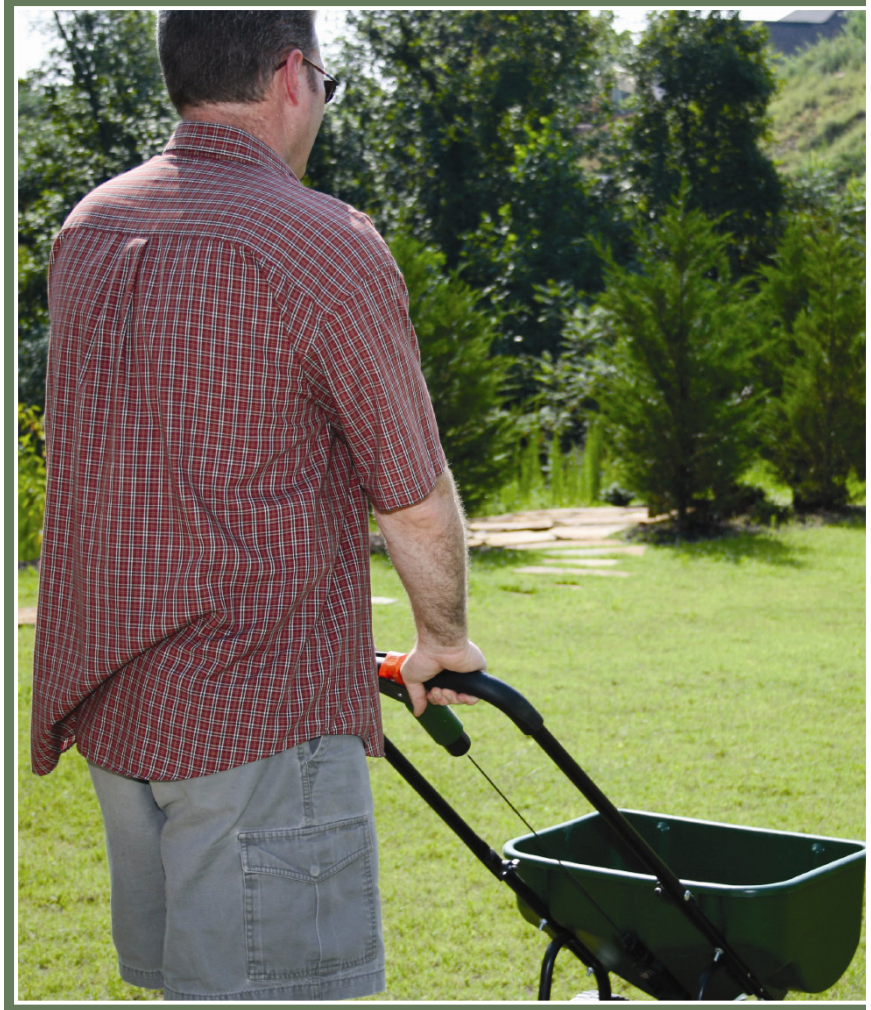
If fertilization is desired from June through August it is best to only apply controlled release fertilizers containing only Potassium, Magnesium and other micronutrients.

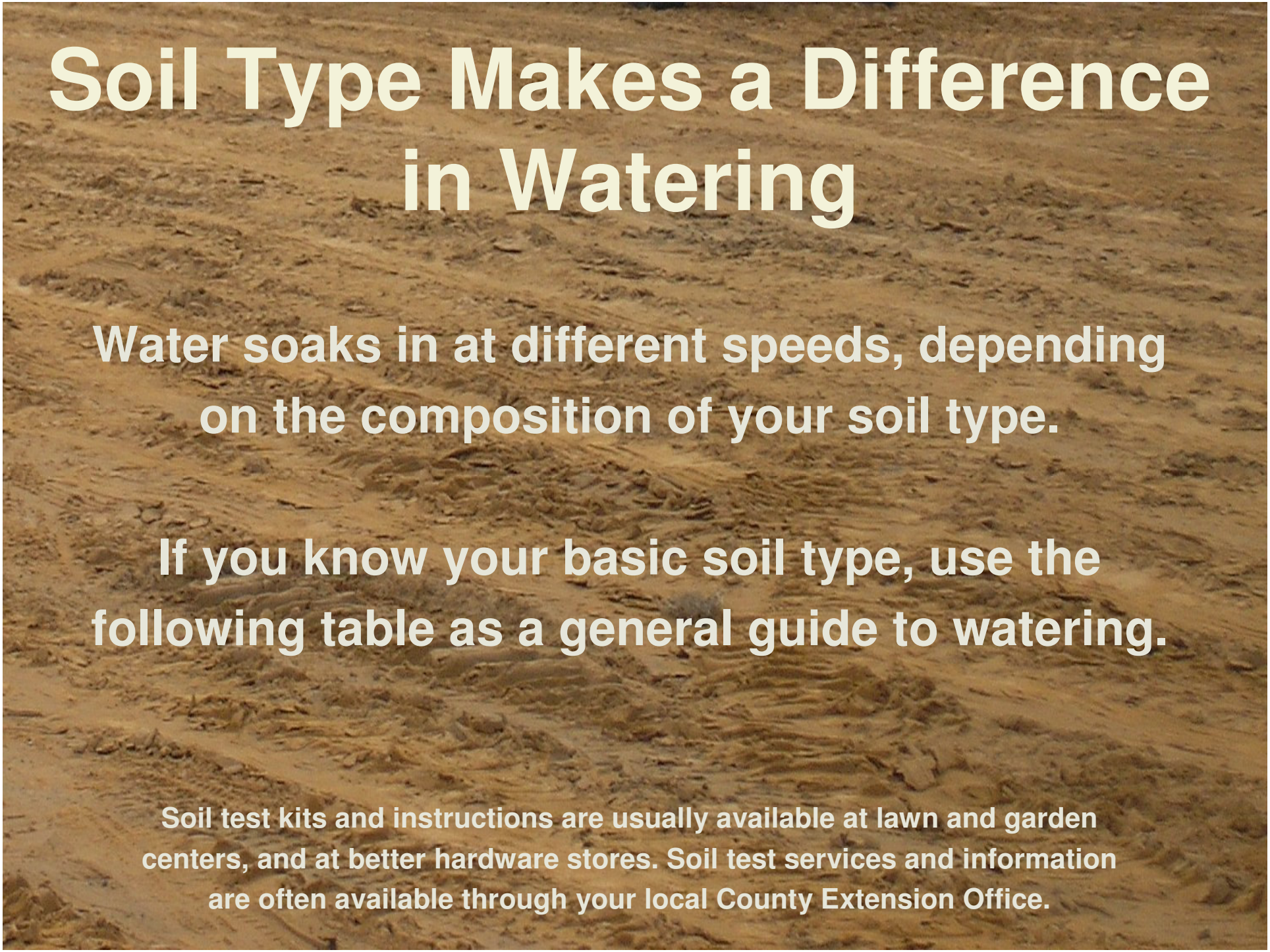
Fertilizers with nitrogen and phosphorus cannot be applied during the rainy summer season due to nutrient runoff concerns unless deemed necessary through soil and tissue testing.

Where To Fertilize

If you live near a body of water, you cannot fertilize within 10 feet (a “mitigation zone”) of the water’s edge to eliminate the potential for fertilizer nutrient runoff.

Due to the fertilizer restrictions, it is recommended to only use Native (or equivalent) plants or Empire Zoysia turf (each of which require little irrigation or nutrients) along with mulch or shell to retain moisture.





Soil Type Makes a Difference in Watering

Water soaks in at different speeds, depending on the composition of your soil type.

If you know your basic soil type, use the following table as a general guide to watering.

Soil test kits and instructions are usually available at lawn and garden centers, and at better hardware stores. Soil test services and information are often available through your local County Extension Office.

Soil Type Chart

Soil Type	Infiltration Inch Per Hour	Time For 1 Inch To Soak In
Sand	2.0 inches	0.5 hours
Sandy Loam	1.0 inches	1.0 hours
Loam	0.5 inches	2.0 hours
Silt Loam	0.4 inches	2.25 hours
Clay Loam	0.3 inches	3.3 hours
Clay	0.2 inches	5.0 hours