Cool It!

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he summer of '98: one of the hottest, driest on record for most of Texas. If your lawn is one of the many that went into winter dormancy in a stressed condition, it's probably showing signs of damage as it emerges from dormancy. While it's impossible to prevent (or predict) another bout with heat and drought, there are a few things you can do to increase your lawn's chance of surviving a stressful summer.

The key is to help it develop a deep, extensive root system and a healthy, dense stand of grass. The basic program outlined here will enable your lawn to beat the heat.

Mow Low

Mowing correctly is the key to forming a dense, healthy stand of turf for warm-season types such as bermuda, St. Augustine, zoysia and centipedegrass. If you were to consult professional grounds maintenance crews that care for turfgrass on sports fields, they'd confirm that statement. That means mowing at the recommended height and at the correct frequency. The more frequently you mow at the recommended height, the faster your turfgrass will spread laterally and form a thick stand. Even if your lawn has become thin due to stress, this type of frequent, low mowing is the quickest way to help it recover.

The bottom line is something you may not want to hear: Mowing at the correct frequency means mowing more than once a week. While it does take more effort to mow more often, the rewards are well



worth the effort. See the table, across, for the recommended mowing heights for warm-season turfgrasses.

Water: Don't waste it

Most of the state entered March on the dry side, with everyone hoping for spring rains to provide some relief before another stressful summer. Whether your landscape has been drenched or parched, you'll need to monitor your lawn's water needs. Watering infrequently and deeply will encourage turfgrass roots to grow down deeper into the soil profile. The deeper your plants' root systems, the better the chance they'll have of surviving summer.

Some do's and don'ts to achieve that deep root system:

- Infrequent light waterings result in shallow-rooted plants that must struggle in order to survive hot, dry weather. The same happens when you overwater your lawn.
- Don't waste water by applying it to the point of runoff.
- Water in the morning or evening but never in the afternoon when the evaporation rate is highest.
- One of the best ways to ensure that you're watering your landscape correctly is to conduct an irrigation audit on your sprinkler system. You can either do it yourself or hire a professional company to conduct the audit. Properly done, an irrigation audit will pinpoint any problems with the system and will determine the proper irrigation frequency as well as the number of minutes to run each zone when the system is operating. Generally, experts recommend 1 inch of supplemental irrigation per

week in spring and fall if the lawn doesn't receive adequate rainfall. That number increases to 11/2 inches per week in summer.

Fertilize

Think of fertilization as another cultural practice geared toward helping your stressed lawn recover while providing a buffer against further stress. In spring apply a 3-1-2 or 4-1-2 ratio fertilizer at a rate to supply 1 pound of actual nitrogen per 1,000 square feet. Use a fertilizer that has at least 50 percent of its nitrogen source in slow-release form. Applying too much nitrogen fertilizer in spring an summer can cause several problems for turfgrass, including excessive top growth and insufficient root growth. Continual applications of excessive nitrogen fertilizer will also produce shallow-rooted plants that can't stand up to hot, dry weather. Whenever you force growth in plants, you create a demand for water. Applying excessive fertilizer can increase the demand for irrigation by as much as 40 percent. Remember that the more fertilizer you use, the more often you'll need to mow the lawn.

Following the spring fertilizer application, you should fertilize bermudagrass every six to eight weeks until mid-fall. For St. Augustine and zoysiagrass, fertilize every 10 to 12 weeks until mid-fall.

Last summer, many lawns exhibited severe chlorosis (yellowing). This was especially true of St. Augustine lawns. If your lawn has shown signs of chlorosis this spring, apply a source of iron. Be certain to read all instructions on the product you choose, and avoid using it near concrete, wood or metal, as it will stain these surfaces.

Anti-stress scalping

This technique encourages new growth to develop faster and helps hard-hit areas cover faster. Scalp all warm-season turfgrasses in spring, with the exception of buffalograss. By scalping your lawn after the danger of a freeze is past, and by practicing low, frequent mowing you'll do more to help it recover than any other cultural practice. To properly scalp, set the lawn mower as low as it will go. Compost your clippings; don't bag and send them to the landfill.

First aid for weeds, diseases, insects

If your lawn is already stressed, use caution in controlling weeds. For example, if your St. Augustine lawn suffered through the summer of '98, avoid using a pre-emergent herbicide after the St. Augustine is actively growing. It's generally best to use as few herbicides as possible on St. Augustine turf.

Recommended Mowing Heights for Spring and Early Summer		
Turfgrass	Mowing Height	Mowing Frequency
Common bermuda	1 to 11/2 inches	2 per week
Hybrid bermuda	½ to 1	2 to 3
St. Augustine (sun)	2 to 21/2	1 to 2
St. Augustine (shade)	2½ to 3	1
Zoysia	1 to 1½	1 to 2
Centipede	1 to 1½	1 to 2
Tall fescue	2 to 21/2	1 to 2
Buffalograss	2 to 2½*	1

^{*}Buffalograss can be mowed at lower or higher cutting heights depending on frequency of mowing.

For bermudagrass lawns, it will be necessary to use a pre-emergent herbicide this spring. Due to its more open type of growth, bermudagrass has difficulty overcoming summer annual grassy weeds. It also has a much higher tolerance to pre-emergent herbicides than does St. Augustine.

If diseases or insects challenge your lawn, treat as soon as possible, before they can cause serious damage to your lawn. You must properly identify the pest problem before applying a pesticide. If you're unsure what's causing it, take samples to your county Extension agent or your local nurseryman for proper identification.

Using proper cultural practices and preventing pest problems in spring can help prepare your lawn for a stressful summer. Applying excessive fertilizer or water in spring will actually weaken the plants and reduce their ability to survive hot, dry weather. It also lowers their resistance to insects and diseases. Conversely, not applying fertilizer or adequate water this spring will also weaken your lawn as summer approaches.

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