"Lawn Care 101"

by Skip Richter

Great lawns are the result of adequate sunlight and attention to three simple practices: mowing, watering, and fertilizing.

St. Augustine is the most shade tolerant species for our area, but even it does best if it receives at least 6 hours of sun or 4 hours with several hours of bright, dappled shade. Narrow leaved types of zoysia (Zoysia matrella) are close behind followed by wider leaved types (Zoysia japonica). Bermudagrass needs lots of sun to look good.

Mow, water, and fertilize may seem too simplistic, but let's take a deeper look at these "big 3" keys to success.

Mowing

Mow St. Augustine every 5-7 days to help build a thicker, more attractive lawn. The goal is to remove no more than 1/3 of the leaf blade at each mowing. Bermudagrass and zoysia are often mowed lower which requires more frequent mowing to adhere to the 1/3 removal goal.

Set the blade at 2 ½ to 3 ½ inches high for St. Augustine, and 1 to 2 inches for Bermuda and Zoysia. There is a direct relationship between taller grass height and more extensive root system.

Think of grass blades as solar panels. Sunlight fuels the process that builds a dense, healthy lawn. In shade, there is less sun energy reaching the turf. Mowing higher leaves more solar panels to capture the limited solar energy resulting in better turf performance.

Return clippings to the turf. Clippings decompose rapidly to provide nutrients to the growing turf. Think of those clippings as free, slow release, organic fertilizer. Over the course of a mowing season, your lawn mower puts out more nutrients than does your fertilizer spreader!

Two primary reasons to bag clippings are: 1) when weeds have gone to seed and you want to capture and remove them, or 2) when extended rainy weather prevents mowing allowing the grass to get very tall. Other than these exceptions, as a primary rule recycle clippings. Bagging amounts to just "renting" fertilizer; you buy the nutrients, grow grass blades, clip and remove them, and pay someone to haul them away. That is what I mean by "renting fertilizer".

Watering

When the weather heats up and rain becomes scarce, give your turf a good soaking on an infrequent basis. Light sprinklings encourage development of a shallow, sprinkler-dependent root system and increase the occurrence of fungal diseases. You get more of the drinking water you paid for into the soil moisture "bank account" when you make one or two soakings per week than when you apply the same amount of water per week in 3 or more applications!

Deep, infrequent irrigation promotes a deeper, more drought resistant root system. See my Lawn Care Schedule (Gardeningwithskip.com/lawn-schedule) for the average weekly irrigation needed in the greater Houston area in the absence of rainfall throughout the year. As a general guide, apply 1 inch of water per week from May through August in the absence of rainfall.

Use rain gauges or straight sided cans to determine how long it takes your irrigation system or hose end sprinklers to apply an inch. You won't be able to apply 1" all at once without

losing some to runoff. So, apply it in 2-3 applications, waiting about 45 minutes between applications to allow the water to soak in.

Fertilizing

The best time to make your first spring/summer fertilizer application is after the second time you mow in spring. See my Lawn Care Schedule (Gardeningwithskip.com/lawn-schedule) for best times to fertilize throughout the year and the best products to use. In the greater Houston area, this is generally about early to mid-April. If you fertilize too early, the grass will green up some but won't start growing due to cool temperatures. If your lawn is full of cool season weeds, they will thank you and grow like... well, like weeds!

The best way to know what nutrients in what quantities are most needed by your lawn is to have the soil tested. The fact sheet Soil Testing Made Simple (Gardeningwithskip.com/soil-testing) describes how to take and submit a soil sample.

In the absence of a soil test, turf scientists tell us that a product with a 3-1-2 or 4-1-2 ratio of nutrients is a good fit for most home lawns. The three numbers on a fertilizer product represent percent nitrogen, percent phosphorus, and percent potassium (always in that order). A 3-1-2 ratio fertilizer would contain three times as much nitrogen as phosphorus, and twice as much potassium as phosphorus. In fall, the recommended ratio contains a little more potassium and a little less nitrogen. See my Lawn Care Schedule (Gardeningwithskip.com/lawn-schedule) for specific products for each season of the year.

Lawns that have been fertilized regularly over the years with products containing higher phosphorus content may just need supplemental nitrogen with some potassium.

To determine how much fertilizer to apply, divide the first number on the bag into 100. The result is how many pounds of that fertilizer should be spread over 1,000 square feet. So, for example, for a 15-5-10 fertilizer, 15 goes into 100 about 7 times (don’t sweat the decimals!). Therefore, you would apply 7 pounds of 15-5-10 per 1,000 square feet with each application. After fertilizing apply about ½ inch of irrigation to help move the nutrients into the soil.

Weeds

Even though the "big 3" activities above are the foundation of a great lawn, weeds are a common problem. Wherever sunlight hits the soil, nature plants a weed! The best weed control is a dense, healthy turf, so let proper turf care be your #1 priority. Dense turf can prevent most weed problems, especially annual weeds. There are a few weeds that can survive in a thick, healthy lawn. These may require hand pulling or spraying with an herbicide.

Preemergence herbicides prevent weed seeds from becoming weed plants. They must be applied before the weeds are established, which is ideally early to mid February for warm season weeds and early to mid October for cool season weeds in the greater Houston area. See my Lawn Pest, Disease, & Weed Management Schedule (Gardeningwithskip.com/lawn-pest-schedule) for specific products to prevent or kill existing weeds.

Avoid using most post emergence, broadleaf weed control products in St. Augustine lawns after temperatures rise above the mid to upper 80's or damage to the turf can occur. Spraying in the early morning before temperatures heat up can minimize the risk of damage.

Before purchasing herbicides, find out what weeds are plaguing your lawn. Your County Extension Office can help with identifying weed samples or photos, if they are taken very close

up, and are in sharp focus. With an accurate identification, the best management options can be prescribed including the what, when, and how of herbicide applications.

Aeration

Core aeration is an additional practice that can enhance turf performance. A core aerator machine pulls many small plugs of soil out of the lawn, dropping them on the surface. These plugs can help speed the decomposition of thatch.

Aeration brings more oxygen into the root zone. Often a thin topdressing of finely screened compost is spread over the lawn after aerating. Some of the compost falls into the holes where it adds to the soil organic matter and stimulates microbial activity.

Clay soils, especially compacted clays, benefit the most from aeration. All types of turf can benefit from a compost topdressing.