

Table 10. Mowing height for lawn grasses in Georgia

GRASS	MOWER	HEIGHT (inches)	FREQUENCY (days)
Bermuda-grass, common	Rotary or reel	1 - 2	5 - 7
Bermuda-grass, hybrid	Either	1.0 - 1.5	4 - 7
Centipede-grass	Either	1 - 2	5 - 10
St. Augustine grass	Rotary	2 - 3	5 - 7
Zoysiagrass	Reel	1 - 2	4 - 7
Tall fescue	Rotary	2 - 3	5 - 7

5. Collect the unused fertilizer and pour it back into the bag.

6. Sweep or blow fertilizer that has landed onto driveways, walkways, or roads back into lawn. To minimize environmental contamination, fertilizer materials should not be allowed to move into storm sewage or other water systems.

All fertilizers may burn turf if improperly applied. Never exceed the recommended rate or the lawn may be damaged.

**Liming**—Another important factor in plant growth is the soil acidity level. Most turfgrasses grow best at a pH 5.5 to 6.5. A pH either too low to too high will reduce the availability of plant nutrients. Therefore, it is important to maintain the proper pH. Lime is used to raise soil pH. In most cases a dolomitic source of limestone should be used because it supplies magnesium as well as calcium. Base lime applications on soil test results.

It is important to realize that a plant must have a well developed root system in order to use fertilizer efficiently. No amount of soil testing and fertilization will overcome poor physical conditions of the soil or a poor root system. Soil testing and fertilizer application

Table 11. Mowing calculations for 'One Third' rule

DESIRED HEIGHT	MOW WHEN TURF IS
1	1 $\frac{3}{8}$
1 $\frac{1}{2}$	2
2	2 $\frac{5}{8}$
3	4
INCHES	

cannot overcome poor environmental conditions or management.

**Irrigation**—Many factors influence the amount and frequency of water needed for a turf. Soil type, type of grass, fertility level, frequency of rain, temperature, wind, and humidity all affect the amount of water needed. A high level fertilization and hot, windy days tend to increase the demand for water, while low level fertilization and cool, cloudy days tend to decrease the demand for water.

To conserve water, wilt is a physiological defense mechanism of the turfgrass plant and allowing some moisture stress actually triggers the plant to initiate rooting, allowing the turfgrass to explore a greater soil volume for water reserves. The key to good moisture management is finding the balance between some wilt and too much that the plant is overly stressed and will not recover from a lack of moisture. Being able to identify wilt within a lawn is the first step toward proper water management. Most grasses appear dark and dull, the leaf blades begin to fold or roll, and footprints remain after walking over the area when the grass is under water stress. Actually observing some wilt, or moisture stress, within the lawn prior to applying irrigation can be a good and improve the sustainability of the turf. Daily irrigation of turfgrass produces short roots incapable of tolerating periodic stresses. Most established turfgrasses in Georgia only need 1.0 inch of water per week. Irrigation should be applied to supplement rainfall.

Apply enough water to wet the soil to a depth of 6 to 8 inches. This is usually equivalent to 1.0 inch of water. Do not apply water until runoff occurs. If water is being applied faster than the soil can absorb it, turn the irrigation off and allow the existing moisture to move into the soil, then apply the remaining irrigation to achieve 1.0 inch.

**Prior to sunrise is the best time to water because of less wind and lower temperature.** Research indicates water loss at night through evaporation may be 50 percent less than during midday irrigation. Studies also suggest that irrigating after dew develops will increase disease problems. However, irrigating prior to dew formation or after the dew has dried from the morning sun and/or wind extends the period of surface moisture and increases disease.

Irrigation is one maintenance practice often done incorrectly. Light, frequent irrigations produce shallow root systems. A shallow root system prevents efficient uptake of plant nutrients and soil moisture. The key to