

## Manage to a growth rate

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All turfgrass managers use inputs to help regulate turfgrass growth rate. Slow growing turf has limited traffic tolerance, is more susceptible to disease, and can have an unattractive lime green color. Fast growing turf can also be problematic with succulent leaves, [higher nutrient and sugar demands](#), different diseases, increased mowing requirements, accelerated thatch production, and poor surface playability. An “ideal” growth rate would provide recovery from traffic, sustain acceptable visual quality (color, density, etc.), and minimize mowing requirements. Nitrogen fertilizer, irrigation, [plant growth regulators](#) and even [mowing practices](#) are all tools to help turfgrass managers manipulate growth rate.

I’m encouraging turfgrass managers to establish growth rate goals at their site. Then use management practices to achieve those goals. Many golf course superintendents have started to [collect clipping volume](#) from one or more greens to assess growth rate. In a recent Twitter poll/thread, many of these superintendents started 1.0 to 1.3 quarts of clippings from 1000 ft<sup>2</sup> of greens – equivalent to liters per 100 m<sup>2</sup> – provided adequate recuperative potential and playability on their greens. Clipping volumes less than 1.0 could not handle traffic and had [problems with moss and algae](#) and volumes greater than 1.5 had reduced green speed.

We also found yield goals can be helpful for lawn height turf. Tall fescue that was growing less than 1.5 inches per week had more disease and discolored leaves. Faster growing lawns needed to be mowed more frequently, but didn’t look healthier than lawn plots growing at 1.5 inches per week. To observe the 1/3<sup>rd</sup> rule, lawns maintained at 3.0, 2.0, or 1.5 inches would need to be mowed every 7, 4 or 3 days, respectively if they are all growing at 1.5 inches per week (0.21 inches per day). A homeowner maintaining a tall fescue or bluegrass lawn at 3 inches should not have an issue mowing on the weekends when the turf is growing at the ideal rate.

The “ideal” growth rate at a specific facility does vary with factors including [microenvironment](#), species and cultivar, management expectations, etc. For example, low-mow bluegrasses may never grow 1.5 inches in a week, so that goal would be inappropriate. The season will also have a big impact on growth rate. As the days get shorter and the temperatures cool this fall, expect the growth rates to slow down. This is normal and it means that growth rate goals will need to change from summer growth goals.

The main point of this article is to [encourage managers to develop growth rate goals](#) and adjust management to achieve those goals during the growing season. This can be accomplished by formally collecting [clipping volume](#), by counting the days between mowing events, or recording how many times the bucket/bag needed to be emptied when mowing. Write down the clipping yield and then manage it accordingly with nitrogen fertilizer, [plant growth regulators](#), irrigation management, and [mowing practices](#).

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