USGA REGIONAL UPDATE



The One-Third Rule

By Bob Vavrek, agronomist, Central Region

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Spring has finally sprung across the northern tier of the Central Region and with it, the first sustained surge of turf growth. Some golfers have commented that you better not stand still too long in the roughs or the grass will grow right across your shoes. Common complaints have been lost balls after slightly errant drives and annoyance of wading through dense clumps of clippings after a mowing operation. To some the most obvious remedy is to simply cut the rough shorter, but is that a wise option?

Whether myth or fact, turf managers make an effort to avoid excessive turf stress by removing no more than 1/3 of the total leaf tissue from a playing surface during any one mowing operation. After all, anyone who inadvertently walks a putting green mower into a collar receives an immediate education regarding the detrimental effect of scalping turf.



Figure 1 - Removing more than 1/3 of the leaf tissue during a mowing operation may cause scalping injury and impact turf vigor, especially during stressful times of the season.

The 1/3 rule makes the most sense for relatively high cut turf found in golf course roughs, sports fields and home lawns. Applying the rule, you should never let a

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rough maintained at 2 inches grow higher than 3 inches before mowing. When wet weather, equipment breakdowns or other circumstances necessitate removing more than 1/3 of the leaf tissue to return to a previously maintained mowing height, reducing the mowing height in several small increments over time is recommended.

An often overlooked aspect of the 1/3 rule is that the shorter you cut the rough, the more often you need to mow to avoid the potential for scalping injury. Let's assume the rough is healthy, well-fertilized, has ample moisture, and is growing like the dickens – i.e., 0.25 inch per day. As mentioned above, 2-inch rough will need to be mowed when it reaches a height of 3 inches and, for this example, it would take four days to grow 1 inch between mowing operations to follow the 1/3 rule. In contrast, 3-inch rough needs to be mowed when it grows to the height of 4½ inches to avoid removing more than 1/3 of the leaf tissue, which would take six days to occur assuming the same 1/4-inch daily growth rate. Would you rather mow every four days or every six days?

Many factors like grass species and clientele need to be considered to determine the optimal height of cut for roughs at a particular facility. Overly penal roughs can negatively impact the pace of play and certainly make the game much more difficult for beginners. Then again, if they were meant to be easy, they wouldn't be called roughs.

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