

# HOW CLOSE ARE YOU CUTTING YOUR GREENS TODAY?



By Andy Cole

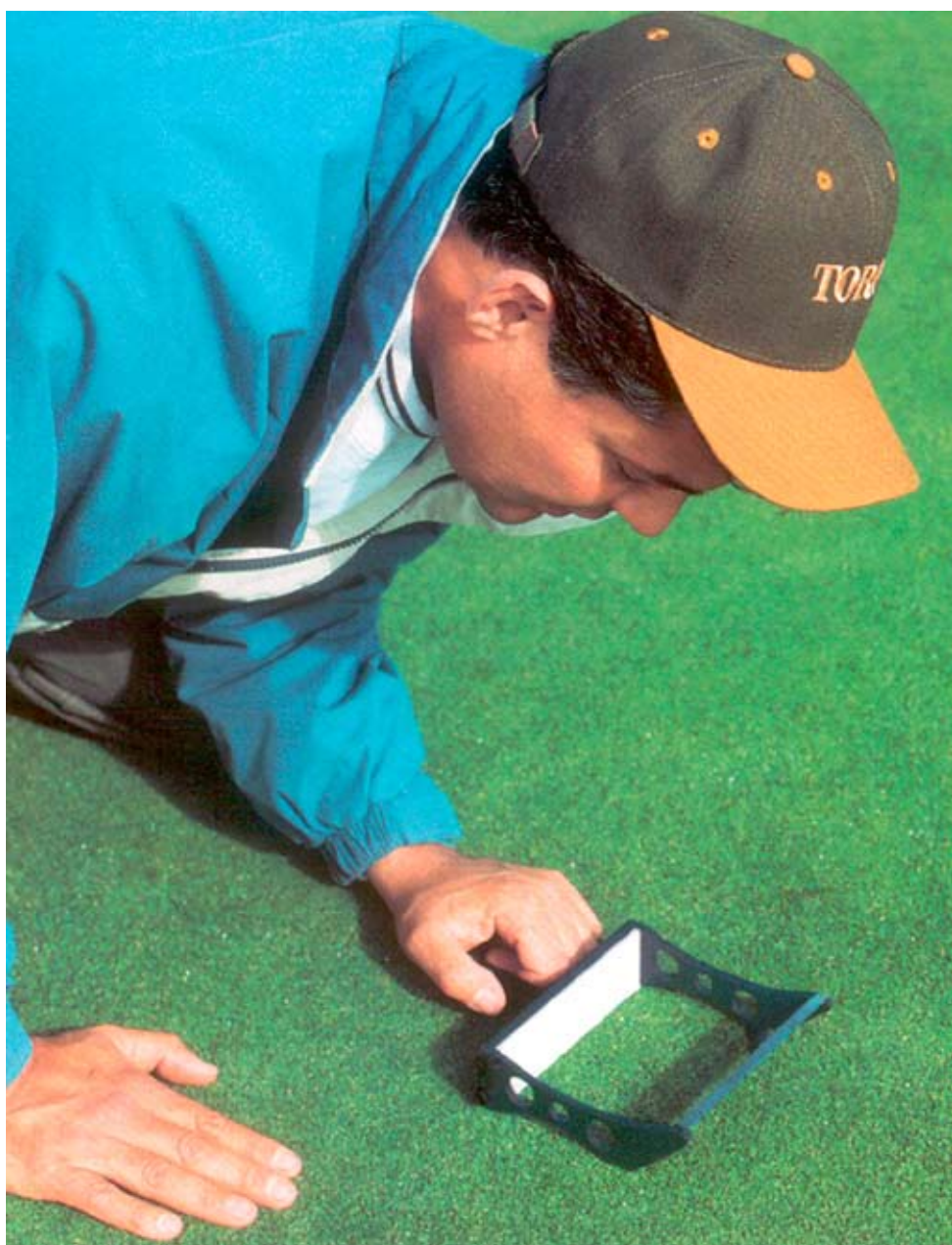
Mowing is fundamental to good turf management but how much attention is paid to the detail of this operation as well as understanding the effect it has on the short, medium and long-term quality of the putting surface? Golfers consistently want greens cut shorter in pursuit of pace but do they understand the effect that actual height of cut has on species composition and sustainability?

The height of cut of a greens mower is set on the "bench" using a variety of tools and gadgets to assist the greenkeeper in creating the length of grass required to provide a smooth and consistent putting surface. A steel mower gauge, was and still is, used in many quarters as the standard tool to set the height between the rear and front rollers and the cutting edge of the bottom blade. Indeed, three old pennies were sometimes used to set the gauge to provide a bench setting of 3/16in. Depending on who set up the greens mower, the bench setting would be a "tight" or "loose" 3/16in, which could account for some variation in the actual height of cut presented on the greens.

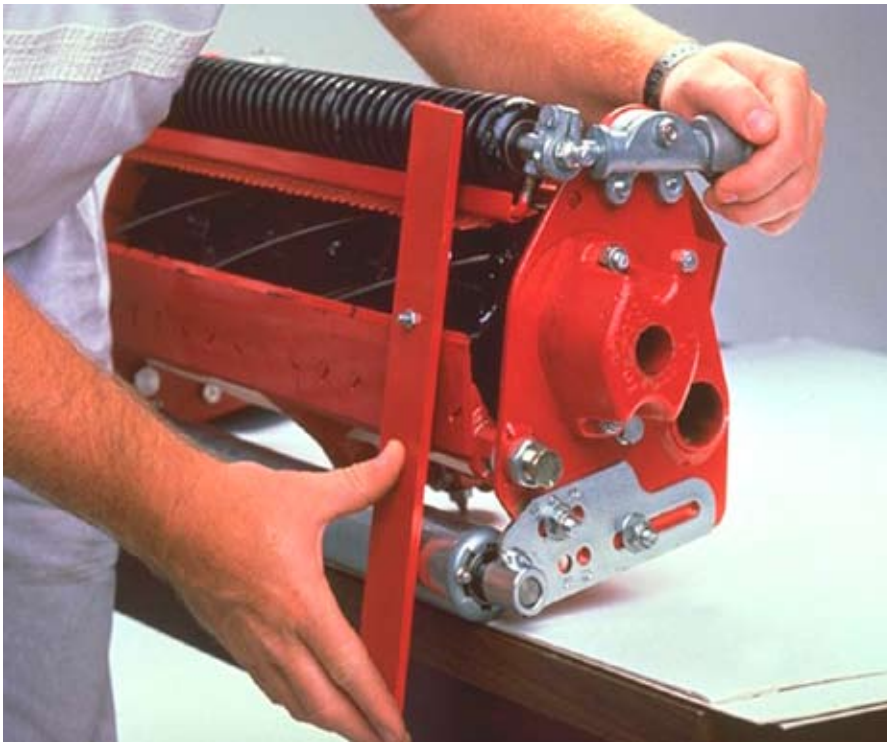
The modern approach to "bench setting" a greens mower employs the use of an Accu-Gauge



Prism gauge (supplied by John Deere)



Worms eye view of the leaf blade. Lets you view the "actual height of cut"  
Turf Evaluator (supplied by TORO Irrigation)



An example of "bench setting"



Hand cutting versus triple mowing – an ongoing debate

setting bar, where the fixed nut has been replaced with a needle attached directly to a dial, allowing the greenkeeper to set the machine to fractions of a millimetre.

The height of cut used for the Ryder Cup at the Belfry in 2002 was 2.72mm! By removing the emphasis on feel, the greens machine can be set more accurately and any greenkeeper using the gauge should be able to set the machine exactly the same.

However, this element of machine set-up is only one part of the mowing process which has to be considered by the greenkeeper.

The "actual" height of cut, i.e. the length of the grass left after mowing, is often quite different to the bench setting, though many still refer to the bench setting as the height of cut.

The actual height of cut can be affected by a variety of different factors including the relative softness of the turf; weight of different machines; triple machine versus hand machine etc.

Greens units can also be set up with the bottom blade in a neutral position or relaxed position, where in the latter instance the bottom blade pushes the grass before it is picked up by the cutting cylinder. This achieves a slightly longer cut compared to the bench setting.

Conversely, an aggressive position will achieve a slightly closer cut compared to the bench setting where the cylinder picks up the grass before it hits the bottom blade...who said greenkeepers were just grass cutters!

The actual height of cut can be measured with the aid of a genuine Prism Gauge available through John Deere or the Toro Turf Evaluator which allows a horizontal view of the grass via a mirror.

Care must be taken to ensure the gauge is

used as a guide and confirmation of how the grass is being cut. It can nevertheless be used to good effect to achieve the same height of cut when alternating between hand and triple machines.

It is generally felt that a more flexible approach to mowing heights is required across the country. This could influence the texture of the turf thereby helping to generate smoother greens with slightly greater pace.

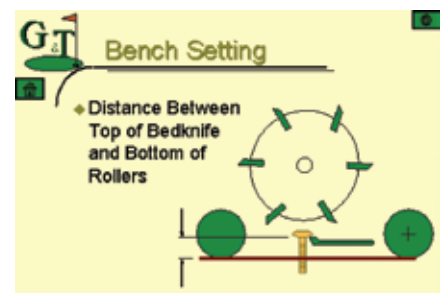
The general principle is to adopt as low a mowing height as the turf will comfortably tolerate, without putting the turf under undue stress. These heights will of course vary through the year due to differing weather conditions, or be influenced by specific competitions and timing of other maintenance practices.

In essence, we need to move away from being tied to the numbers (dictated in agronomic textbooks) and use your own judgment and skill as greenkeepers to balance the needs of the golfer with our agronomic aim of increasing the finer fescue and bent content of the greens.

Without doubt height of cut is a factor in achieving a desired level of pace and uniformity but should not be regarded as the overriding factor

The effects of fertiliser, water, thatch, etc. all play a part in green speed and it is essential that you avoid creating lush growth through over-feeding and over-watering. Such lush conditions create the need for additional verticutting and grooming in an attempt to create the smooth and consistent surfaces desired – you are then actually fighting against your own inputs!

In my experience, one of the main difficulties for greenkeepers is differentiating between the bench setting and actual height of cut. Where pace is lacking, invariably the actual height of cut is found to be longer than the bench set and yet the



(supplied by John Deere with thanks)

first point of reference is the fact that the greens mower has been set to cut at 4mm.

It does not matter how the height of cut is measured on the machine, if it is not cutting at the height that you are trying to achieve, you will never get the best out of your greens.

Always check both the bench set, which should be your first point of reference, and then check the actual height of cut on the green.

Of equal importance is the quality of the finish, making sure the blades are sharp and the machine on-cut.

Through the summer grass cutting will take up the majority of your time on the golf course. Make sure that all your cutting units are set correctly and for the long-term sustainability of the course and the encouragement and retention of the finer grass species...make sure you know how close you are actually cutting.

#### About the Author

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