



Fine Tuning for Fine Turf: Greens Brushing

John Lockyer discusses the need for greens brushing.



There are many cultural manicuring practices geared toward the improvement of fine turf playability characteristics. Typically, a combination of mowing, grooming, verticutting, top dressing and rolling are employed. They all are supposed to work in conjunction with each other so that the sward is well regulated, uniform, consistent and exhibits good playing qualities. However, in certain situations there may be another treatment that will add extra performance: brushing.

BRUSHING - A TURF MANAGERS PERSPECTIVE

When we think of brushing as a cultural practice we normally associate it with the incorporation of topdressing material, dew removal or perhaps lifting seedheads of annual-meadow grass for removal by subsequent mowing. In the southern regions of the USA, brushing (as part of a programme) is much more widely used to help control the heavy turf nap or grain that is formed by stoloniferous grasses such as Bermuda. The effects of this grain are reductions in both pace and trueness, markedly reducing ball to surface quality factors.

Grain potential of cool-season grasses is very much less than that of their warm-season cousins, indeed most cool season grasses that are well groomed and regularly lightly verticut should never display grain characteristics. However, in some situations (and particularly in parts of continental Europe) creeping species such as creeping bentgrass, may sometimes be prone to grain development. As the UK climate alters and becomes more "continental" (particularly in the south), will we perhaps eventually see some turf composition changes where the potential to form grain actually happens? Indeed, there are already some signs of this taking place in some instances.

THE ASSOCIATED COSTS

Costs associated with brushing are very low in relation to improved speed and quality, which often results. Rotary bar brushes are available from most ride on mower manufacturers to use in conjunction with the grooming bar. Alternatively, systems such as the Greentek cartridge product are very effective. Or, perhaps like many others, access to a "Grainskeeper" hydraulic sweeper and/or static drawn units is possible, normally used in the top dressing process.

PERFORMING REGULAR BRUSHING

The frequency of brushing will depend on the condition of the sward. Brushing could begin in spring on a regular basis with a continuance into the summer and autumn months. If brushing is to be performed separately, consider a bi-weekly approach, alternating the direction of travel, immediately followed by mowing.

BRUSH SELECTION

The key for brush selection and design is to get both brush stiffness and brush-turf angle correct. Too stiff and the turf may well suffer from bruising, too soft and the benefits are reduced. The angle is important so that the brush filament makes contact with oncoming grass leaves; and does not simply slide over. When looking at brush heads, you should try to judge by feel the right stiffness. Ideally, the brush should feel between yard broom and house broom stiffness.

ASSESSING THE NEED

The author has sometimes observed light grain in well-managed green swards, even where regular manicuring operations are being applied. Most commonly such grain is associated with continually mowing in one or limited directions. To assess any such light grain, use your hand to brush against the grain. When brushing against any grain it is likely that you will see more of the thatch/soil surface when looking through the canopy and perhaps feel the sward is not as dense as you thought.

THE BENEFITS OF BRUSHING

In brief, the benefits of brushing are as follows:

- Reduces turf grain where it occurs
- May help produce more uniform leaf texture
- Can increase sward density
- May reduce the tendency towards thatch accumulation
- Enhances the quality of mower cut and reduces the surface area of damaged leaf tissue
- Promotes upward growth and lifts procumbent growth
- Improves ball roll pace, trueness and green consistency
- Lifts more Poa annua seed heads ahead of mowing
- Is less damaging to plant tissue than verticutting or grooming during periods of plant stress, i.e. drought
- Produces very low levels of disturbance maybe reducing the risk of annual-meadow grass germination.
- Can be combined with mowing cheaply and easily, reducing costs but maximising playability benefits
- May help reduce some undesirable grasses (Yorkshire fog, perennial ryegrass, wide leaf textured native bents)

Green speed-readings often increase up to one foot in some cases with much improved trueness and consistency. Most clubs are trying to improve these key performance attributes but can mistakenly look to lower heights of cut alone in order to do so. However, as with any management technique, it is recommended that benchmarking is undertaken, before and after brushing. Consider recording green speed, trueness (degree of separation between balls used in Stimp meter readings) along with cultural conditions (soil temperature, moisture levels, height of cut, sward composition, etc).

CONCLUSIONS

Brushing offers another range of benefits to supplement those from the more traditional manicuring treatments, so essential to maximising playing quality of putting surfaces. Brushing can also enhance presentation.

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