



CHOICE DECISIONS

I have the privilege, in my job, of visiting a large number of golf courses, old and new. It distresses me on many occasions to see that the high specification used in the construction of greens and tees is not continued when it comes to the turf that is laid on top. Turf described as "having been grown on a sandy loam" generally will have far too high a percentage of fine particles.

The increased number of rounds of golf pushed through our golf courses places enormous demands on the turf where play is concentrated; these demands being met only by giving the grass the best possible growing conditions, one of the most important of which is a free draining rootzone. Without a growing medium that has sufficient air-filled porosity, the surface water cannot get down to the drains beneath at a fast enough rate, resulting in waterlogged conditions.

Not only does the rootzone material have to show good aeration initially, it also has to resist the effects of compaction over time. Compaction, of course, is the result of heavy wear under wet conditions. Sand has excellent drainage characteristics and low compaction potential, and that is why its use has become so important in the construction of high quality natural turf surfaces where heavy use is expected in the winter months; and indeed where irrigation levels are high during the summer.

Of course, the quality of sand used is crucial and must be chosen carefully with respect to its size and uniformity of grains, so that the air spaces between the larger particles cannot become clogged by smaller particles.



Choosing the right cultivated turf for sand/soil constructions is a task not to be taken lightly, says TIM FELL

Picture: Ideal for golf courses - cultivated turf, such as Rolawn, grown on light, sandy soil

This is why a cheap source of local sand may prove a false economy.

Experience has shown that pure sand constructions lead to other problems, namely the difficulty of maintaining adequate levels of fertility, and their tendency to dry out. For these reasons, top soil and organic matter is mixed to provide a buffer. The amount of additive must not exceed a critical threshold level above which the infiltration rate drops off dramatically. The threshold can only be predicted by having a mechanical analysis done on both the sand and additive.

All the above is important when it comes to considering the laying of cultivated turf in sports constructions using sand/soil mixtures. It is no exaggeration to say that all the cost of a high specification sand/soil construction will be wasted if turf grown on the wrong soil type is used. One fundamental rule is to buy turf that is grown on soil that resembles as closely as possible the rootzone material. I cannot over-emphasise this critical point.

It follows that when looking for turf it is important to ask for a mechanical analysis of the soil that the turf is grown on. Those turf growers with a concern for the needs of their customers will be able to supply one. A high specification rootzone material will have less than 25% particles smaller than 0.25mm. In addition, the material will contain less than 5% silt and less than 3% clay. The infiltration rate of compacted laboratory samples should be at least 150mm per hour. However, it is very rare that naturally occurring soils meet these speci-

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Expect 'disastrous' results from turf grown on the wrong soil

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fications, and so one has to accept a compromise when buying turf. As long as turf is grown on soils that do not have more than 20% of particles smaller than 0.125mm and less than 10% of silt and clay then the chances of success are greatly increased.

The consequences of using turf grown on soil containing a high percentage of fine particles are disastrous. What happens, under wet conditions, is that the fine particles migrate into the air spaces and effectively block off the natural drainage channels. Rain and irrigation water cannot get down to the underlying drains and the turf stays wet and spongy. The only recourse in this case is a prolonged period of intense aeration, hollow coring and top-dressing with the proper rootzone mixture.

It is really the combination of heavy wear and wet conditions that causes the problem. Turf that is suitable for countless other situations may not be appropriate for the demanding job that is expected of today's golf tees; greens; and surrounds. It is crucial in any specification for turf for these situations to include the correct physical soil characteristics, as well as the other quality features expected to produce the highest standard of playing surface.

● The author, Tim Fell, is Managing Director of Tillers Turf Company Ltd.

FROM THE EDITOR

One of the greatest pleasures afforded me each April is my visit to Augusta and The Masters. This year was no exception and I was as thrilled as anyone to actually witness 'Woosie' – or 'that darlin' boy, Iron Woodsman' as he was christened by one softly spoken Southern Belle – win in such dramatic fashion. Whilst the victory was a personal triumph for Ian and another shining nail in the coffin of American golfing dominance it raised one point that just will not go away. I refer to the continuous chuntering of TV and radio commentators, officials, journalists and especially players, all expounding upon the great green speed saga – an everyday story of slick and trick. No doubt you received the same treatment via satellite TV and I can imagine both your reactions and those of your club members. Thus it seems appropriate at this time to place on record a view that I have long held, one which greenkeepers throughout Britain and Europe will no doubt be in total accord – speed kills!

The Masters has no monopoly when it comes to rapid putting surfaces, indeed having played at Augusta National and many other championship courses in America and on close to 200 courses in Britain, I feel as well qualified as any to opine that it's the wretched stimpmeter – or the thinking behind it – that has done more to set the rank and file golfer on a stampede toward demanding quicker and quicker greens, to the great detriment of club golf generally and at the cost of vastly increased green maintenance costs.

In the United States, where they have a knack for measuring everything and a penchant for using the latest in high-tec to prove the point, the noted architect, Pete Dye, had old movies of a US Open in the sixties analysed by mathematic boffins, discovering that green speeds then, although believed to have been "very fast", were something like two or three inches slower than the average championship speeds of today.

That stated, British club golfers – indeed golfers everywhere – fired by the sight of superstars and

their undoubted ability to shoot low numbers on beautifully manicured and ultra-slick turf, continue to howl for a course in their back yard that exhibits the same characteristics, mistaken in their belief that quicker is better and emerald green the only correct colour.

Now this 'demand' philosophy has spilled over to the superstars themselves, with carping remarks made recently about the condition of St.Mellion, where the budget is undoubtedly a much smaller one than that of Augusta National and where weather, turf and growing characteristics are totally different.

Perhaps golfers should be aware also that those escalating costs – which they pay for in ever increasing subscriptions – are due to factors for which our forefathers cannot be blamed. These include the practice of cutting greens seven days a week at many British courses, the introduction of thinner bottom blades which allow greens to be scalped, the introduction of verticutters and groomers which remove excess growth and the increase in top dressing, once a practice that took place twice a year and now a regular (and in view of the above) necessary monthly exercise.

Add to these factors the vastly increased traffic experienced almost everywhere, traffic which brings with it such "nasties" as compaction, dry patch and a higher probability of turf disease and it is small wonder the poor greenkeeper is tearing out his hair.

Returning to Dye, commenting on the USGA's attempt to raise \$10 million to find a hardier turf, his suggestion is one that deserves exposure beyond those shores: "All that is necessary," he says, "is for them to raise the height of cut!" If all this seems too simplistic, tell your members that green speeds – and the increased management programme necessary to maintain them – have increased in direct proportion to their subscriptions. See how that grabs them!

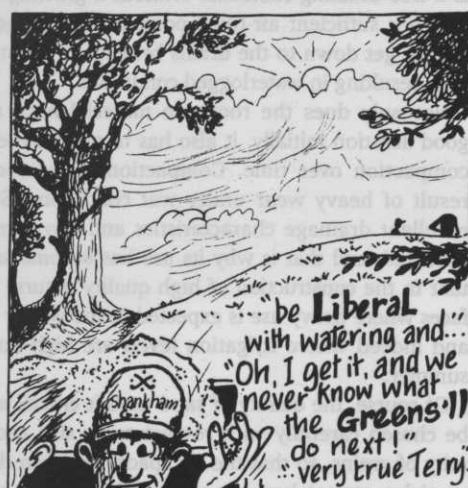
David White

Slow down

Your speed is killing me!



On the BRIGHT side...



All characters are fictitious