Great strides have been made over the last 20 years improving the general quality of golf courses throughout the UK. Quite rightly most of the emphasis has been placed on putting greens.

Here, the average height of cut has halved in this period and the average frequency of cut has quadrupled or more. Nutritional programmes receive great attention, irrigation systems are usually all encompassing and aeration is carried out in a myriad of forms. Unfortunately the same progress has not been made on tees. Little has changed with the way we manage tees, apart from mowing units being better and more efficient than they were.

We still mow twice per week at most, we don’t scarify enough, we don’t top dress enough, we don’t aerate enough and we don’t divot enough. Furthermore, some clubs expect the same tees to deliver high standards all year round when for four or five months there is no turf growth at all.

Most tees have no more time devoted to their management than they did twenty years ago. If we want the condition of our tees to improve in line with the greens then larger staff complements or more efficient use of existing resources must be considered.

A great many clubs have spent fortunes in recent years improving and enlarging tees only to see them fall into rack and ruin when the maintenance programme can’t deliver the results the membership expects. The result is predictable—bigger, not better tees!! Good construction is, of course, very important but money has to be spent on the day-to-day retention of these higher standards if tees are to improve in the longer term.

I see so many golf courses with good greens but whose tees are uneven, poorly aligned, contaminated with clumps of coarse perennial ryegrass, shaded, and sometimes soft and poorly drained as well. Furthermore these tees often exhibit weak and worn entry and exit points exacerbated by poor design and the absence of adequate path integration.

If we are looking to improve the overall standard of tees we must first of all identify what makes a good tee. There are certain attributes that all the best teeing surfaces offer and they can be summarised as follows:—

**Adequate Size and Shape**—par 3 tees should be approximately 400 m² in size, with par 4 and par 5 tees at least 350 m². The tees should be shaped to accommodate mowing with a ride-on unit. This has implications for the edges and bankings of the tee as well as the surface itself.

**Good Drainage**—effective control of organic matter and thatch development is vital. Push up tees might need additional drainage or need to be reconstructed depending on prevailing circumstances.

**Excellent Surface Levels**—creating a level surface through reconstruction is relatively easy. Maintaining high standards is difficult but so important to the enjoyment of the game. It is also important for spreading wear and tear. No golfer tees the ball on an uneven area.

**Appropriate Botanical Composition**—the finer grasses are usually easier to manage. They grow more slowly, require less fertiliser and do not need to be mown or scarified as regularly. If tees are big enough the wear tolerance they give should be more than adequate.

**Good Accessibility**—multiple entrance and exit points linked to purpose built pathways should be the aim, particularly on heavier soils.

**Good Aspect and Location**—however attractive they may look, tees that are shaded by surrounding woodland where the passage of air is restricted provide poor sites for grass growth. Reduced evapotranspiration and photosynthesis lead to weakened growth and poor wear tolerance in such situations.

**Alignment**—some tees are intentionally misaligned, others become misaligned through changes in mowing patterns or the development of adjacent trees. Realignment can sometimes be facilitated with the mower alone. On other occasions it needs to be incorporated into the reconstruction process.

**A Sound Maintenance Programme**—it is impossible to produce good tees without a sound maintenance programme, even if all the above issues are adhered to.

The last point is one of the most important but is frequently the least attended to. What does sound maintenance mean and what does it encompass?

The key issues can be summarised as follows:—

**Surface Level Perfection**—the development and retention of good surface levels is perhaps the primary aim of tee management. In order to achieve success, the tee must be large enough and sufficiently well drained to cope with prolonged wet periods of weather.

Surface preparation should then revolve around top dressing at least twice per year (spring and autumn) with an approved product and divoting once per week through the main playing season. Divoting should take place with a material similar to the top dressing, although in certain instances the organic matter content will be greater to aid binding and prevent blow-out.

Seed (which should mirror botanical objectives) should be integrated with the divot mix to allow surface recovery through the season. Divoting should be followed by switching with the divot mix to allow surface recovery through the season. Divoting should be followed by switching to ensure even distribution of applied material. If this important task is omitted, poor divoting can actually contribute to a loss of levels.

**Nutrition**—basic requirements are for nitrogen only, particularly on soil-
based surfaces. On more modern free-draining sand-based profiles, soil testing may occasionally indicate the need for potassium but rarely phosphate. Nitrogen rates will vary with sward composition, with perennial rye swards more hungry than traditional bents and fescues.

Irrigation - I would argue that it is almost more important to have automatic pop-up irrigation to tees these days than it is to have it to greens. If pop-ups are not available for greens irrigation the management crew irrigate by hand and, although it is time consuming, results are often very good. If pop-ups are not available on tees, the surfaces rarely receives the attention they deserve in droughty conditions.

The turf is often in a stressed condition anyway because of heavy playing levels and insufficient irrigation can be the final straw. The absence of pop-ups on tees also limits divot recovery during the summer season. This can be the difference between well grassed, wear-tolerant, level platforms and scarred, uneven and weed-ridden surfaces.

Mowing and Scarification - we do too little of both on many sites. Mowing frequencies at most clubs are stuck at twice per week. This may be sufficient on links and heathland sites where the finer grasses grow quite slowly.

However on heavier soils or where ryegrasses contribute to the sward (intentionally or unintentionally) frequencies really need to be increased to three times per week at the height of the growing season. As for mowing heights, you should be aiming for between 6 and 8 mm.

The height of cut will be determined by how good your surface levels are. Level tees can be mown tighter and are undoubtedly more pleasurable to play from. Scarification should be carried out at least twice per year (spring and autumn) as a precursor to topdressing.

More regular treatments may be necessary on ryegrass or ryegrass-containing swards but these must be balanced with the inevitable removal of seed applied during the divoting process.

Aeration - routine aeration on well sized, well constructed and well located tees should merely comprise some spring and summer solid tining, some autumn hollow coring (to retain firmness and remove thatch) and some winter sitting. Remedial aeration will probably be necessary at some time on tees that do not fulfill the above criteria. This can take many forms.

Resting - the best summer tees always get a rest in the winter. There are very few clubs (I can think of only one) that produce high quality summer tees playing on them throughout the year. To rest effectively, you must have a reasonable winter alternative.

If space exists, always go for natural turf, although there are now some good artificial turf types, which can be considered on sites where space is restricted. Make sure your winter tees are well located and accessible. Where possible, ensure that their location (in front of, to the side of or even behind existing tees) changes landing areas on fairways to give them a rest too!

Also ensure where possible that they are linked with paths and, most importantly, that they are well sized, well drained and well irrigated (you will be renovating these tees in the spring—no water and seed will die in summer droughts!).

Much of our rainfall occurs in the autumn, winter and spring months so winter tees must perform, as well, if not better than, the summer tees. Get your winter course measured so a standard scratch score can be allocated to it. You can then play winter competitions from it. This will make the change in the autumn more palatable to the members.

Renovation Cycles - summer tees need to be renovated sufficiently early in the autumn to get recovery from seed before winter. The basic aim should be to restore surface levels, alleviate surface compaction and return a full cover of grass by Christmas. To achieve these objectives, renovation work must be completed by the end of October. In the spring, winter tees should be renovated in the same way.

Weed and Worm Control - there is really no excuse for weed infestation on modern tees. If the management programme is appropriate, a healthy sward fights weed invasion very well. If weeds do develop, selective herbicides are able to eradicate most of the culprits. Worm control is a little more difficult.

The loss of materials like chlordane means that modern-day worm control must focus on cultural methods. Organic matter regulation and surface acidification are two methods that work well. Carbendazim also gives some relief even though its benefits are relatively short lived.

Much of the above is commonsense but the frustrating thing is most clubs don't implement it for a host of reasons. Focus on providing the correct staffing levels for your course and give your staff the equipment to manage it. Then and only then will we see many of these routine treatments practiced regularly enough to make a difference to our tees. They are an important part of the game - golf is hard enough without the starting point contributing to our downfall!