Developing a Golf Course – from virgin territory to opening day: Third and final part

And now the REAL WORK begins

If a golf course has been constructed to schedule and all elements are installed and working effectively, it is imperative that it is maintained correctly during its infancy in order that it may be ready for play when opening day arrives.

Unfortunately, it is so often the case that a schedule will be set back, due to all manner of unforeseen circumstances throughout the construction phase. This in turn has a direct effect on the starting date for a maintenance contract. It can make things very difficult for the greenkeeper and his staff if, for example, a course due to be handed over on August 31st is not his until October 31st.

If the greenkeeper has been employed from the very beginning of the construction phase then he will likely be prepared for such changed circumstances. If not, he must adapt to the situation very quickly.

Once seed has been sown on greens, tees and fairways there is little the contractor or greenkeeper can do until seed germination, apart from ensuring the irrigation system is working efficiently and keeping rabbits, moles or deer off the site.

The contractor, as part of the construction contract, will be responsible for limited maintenance of the new course: for example, an agreed number of mowings before handing over. He will also be obliged to make good any defects that may occur within a negotiated period, such as wet areas due to problems with drainage, scour effect due to extreme surface run-off or poor acceptance of grass seed.

Eventually the course will become the responsibility of the greenkeeper and it will left to his knowledge and experience to make the necessary decisions in treating any problems he encounters.

When the grass is young it is extremely susceptible to disease: for example damping-off, red thread, fusarium etc. and the greenkeeper must be able to swiftly recognise disease symptoms in order to prevent the problem becoming difficult to eradicate.

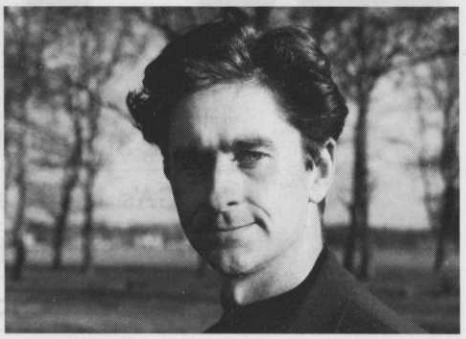
Problems may occur for a number of reasons: nutrient deficiencies; animals and pests; environmental stresses; heavy machinery compaction or excess watering. It is the responsibility of every greenkeeper to retain the balance at all times. Whilst the course is within its establishment period he may at least breath a sigh of relief that there aren't hordes of heavy-footed players (with golf trollies – the scourge of every course) making his job still more difficult. The golf course though, must be maintained to steadily reach a point at which it can withstand the ultimate treatment. After all, this is why a golf course exists – to be played on. So often, greenkeepers utter the words 'the golf course would be great if we didn't have all these bloody golfers walking across it'. I suppose that is one of the reasons why Augusta National always looks so perfect for The Masters – it's closed six months of the year!

As the course begins to establish, the greenkeeper must keep a close eye on minor changes in the quality of the turf, for sometimes a disease can take hold almost overnight. Sometimes an indication of stress can only be seen when the grass itself has reached a point where serious action is required to resolve it. In some respects, it is almost a balancing act, where turf is given feed only when it cries out for it, but to leave it a further day may have fatal consequences.

It is imperative to maintain a running check on the status of the soil, particularly on the greens. At regular intervals it is necessary to take samples (cores or plugs from selected greens, tees and some fairways, if necessary) to identify levels of the three main nutrients – nitrogen; phosphorus and potassium – and to provide information on calcium; magnesium and pH levels.

Visual symptoms of a nutrient deficiency indicate that serious problems will occur if the condition is not corrected. Early recognition of a developing nutrient deficiency is important and in the case of potassium and phosphorus, regular soil testing is used as a guide to fertilisation to ensure that symptoms never develop into fully blown disasters.

The pH of the soil on greens and tees can be affected by the water source for the irrigation system, and in turn this will affect the fertilisation rates. For example, iron can be used to bring the pH down to a manageable level and it helps to keep disease away by strengthening the individual young seedlings. Once the pH levels and nutrients have been brought into the desired range, a soil test is required every one to three years.



● The author and golf course architect, Jonathan Gaunt, will be contributing further articles to Greenkeeper International in the coming months, beginning with his views on the lasting influence made by great golf course architects of former generations, and how modern architects may learn from them

In terms of getting the course into playable condition, the greenkeeper must carefully gauge at which stage to begin reducing mowing heights and at which point he decides to use ride-on mowers. With some seed mixes it is quite possible that a good putting surface can be achieved very quickly. Given the perfect conditions at East Sussex National, for example, by using Penncross seed the greens were in play within three months of sowing. In the case of the more readily acceptable traditional bent/fescue mixes, it is often 18 months before a really good putting surface is achieved. However, it is important to note that although it takes longer for this seed to establish, the costs of maintenance are significantly cheaper and the methods are considerably less labour intensive.

Although a course with good greens will always prompt the golfer to return time and time again, there are other elements that require attention prior to the opening. There is often a lot of cosmetic work that takes place at this stage which effectively 'finishes off' the course, cleaning out ditches and bunkers in particular. Sanding the bunkers is a big job that can be extremely time consuming, especially when the greenkeeper could otherwise be spending time on important maintenance work. Having said this, it is often the responsibility of the contractor to fill bunkers with sand.

If the greenkeeper succeeds in juggling his many roles as course manager; golf course constructor; golf course architect; agronomist; drainage specialist; irrigation engineer and personnel manager and still manages to manicure the course in readiness for the all-important opening, then he has overcome the hardest task in the business. To take a golf course from the constructor and to literally 'tame it' is a mammoth task. Thankfully, many greenkeepers are well up to this extraordinary feat, with approved colleges now training greenkeepers to be multi-talented specialists. This inevitably makes for better and forever improving standards of golf courses in this country and throughout Europe.