



the Learning experience

Aeration: Making a case for further education



Ground under repair. Returfed areas must be protected from golfers, trolleys and course machinery. Note alternative routes from the green to the next tee



Reduce turf compaction and wear by guiding golfers along different pathways with the help of white lines, hoops and ropes

Turf aeration is one of the most misunderstood maintenance practices undertaken on golf courses the length and breadth of the British Isles.

It is, however, rarely misunderstood by those who do the work but rather by those for whose benefit it is being carried out.

How often have greenkeepers heard golfers complain: "Why have they messed up a perfectly good putting surface? The greens were in excellent condition and now they've gone and made holes all over them."

The answer to this question lies not in argument or in heated discussion but in education. It is important that the golf club and the people who run it, maintain it, and use its facilities understand why aeration is needed, why it is carried out at a specific time of the year and why a particular aeration method has been used.

The most important message to get across is that if there were no golfers there would be little need for aeration. The human foot creates considerable downforce, compressing turf and its underlying soil structure to restrict the downward passage of water, air and nutrients needed for healthy root and plant growth.

This damage is most prevalent in the wetter months when the soil particles are better able to slide over one another before sticking together to form a dense, impermeable layer. The result is a build-up of moisture at the surface with its associated puddling, waterlogged turf and muddy patches. Beneath the surface, growing conditions are far from ideal.

Course machinery, although greatly improved through the fitting of flotation tyres, is another major cause of compaction. Yet, ever-increasing mechanisation is essential if the job is to be done quickly, efficiently and with minimal disruption to turf preparation and to those playing a round of golf.

So, it appears that we are trapped in a "tails you win, heads I lose" situation. No golfers means no compaction, but no golfers also means no course maintenance.

The basic answer has to be preventive maintenance. In other words, maintenance which is carried out on a planned and regular basis to keep the problem of compaction at bay. Above all, maintenance which prevents turf and soil conditions from ever reaching

the situation where major remedial work is needed – bringing with it costly disruption to everyday turf-care operations and the playing of golf.

"Aeration is essential to maintain the soil in a healthy condition," points out Neil Squires, agronomist with the STRI. "Apart from improving its physical structure to promote strong root growth, aeration encourages drainage, the movement of air and the function of micro-organisms. It is important to understand that compaction can affect all soil types at a range of depths, so treatment must be targeted accordingly."

That age-old saying, "prevention is always better than the cure", could have been coined specifically with aeration in mind. If all golfers were made aware of the alternatives to timely course management practices, many of the complaints and bad feeling which arise due to seasonal aeration work could be avoided.

Why not display in the clubhouse or locker room photographs of soft, sickly greens, churned-up pathways and worn tees, greens surrounds and standing areas? Point out that such conditions will be commonplace

on any course unprepared to suffer the minor inconvenience of regular aeration, the use of winter tees and greens and the adoption of alternative routes between them.

There should be very few who will be unwilling or unable to grasp the importance of the measures being taken and the reason for them – that they are being carried out for the benefit of those who want to play golf all year round in virtually all weathers. All it takes is education and understanding.

"There is a host of equipment available to treat compaction successfully, but it is better and less costly to minimise the problem in the first place by spreading the traffic load over as wide an area as possible," comments Neil.

"Human nature makes us take the shortest route between two points. That is why alternative pathways must be clearly signed and marked, why different tee and flag positions are needed and why parts of the course need to be roped off from time to time. All measures designed to minimise the load on the turf and the soil structure beneath."

Neil commented that the STRI has a major role to play in the



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education of those who manage, maintain and use golfing facilities. "We have been called in by clubs who are looking for professional backing for their criticism of a greenkeeper and the way the course is being maintained," he explained. "In most cases, we end up supporting the greenkeeper who we find is doing the job to the best of his or her abilities and giving the club the optimum playing surfaces for the maximum number of months of the year."

Many courses built during the past 20 years have been designed from the outset to cope with large numbers of rounds, often having sufficient land to provide alternative summer and winter tees on every hole, hard-surfaced walkways and even additional fairways and greens to allow parts of the course to be

rested in critical periods.

Long established courses were never designed to withstand upwards of 40,000 rounds of golf a year. Agricultural-type drainage was the norm and timed, measured irrigation was unheard of. Many greens, fairways and even tees employed the natural lie of the land to trap and hold water rather than looking for its fast dispersal and rapid turf recovery.

"There is a simple message that golf clubs need to understand if they are to get the best out of their course and the people who look after it," points out Neil. "Most golf greenkeepers and their staff are qualified, well trained people who understand sports turf and the demands imposed on it by the modern lifestyle.

"My advice to clubs and their members is to let greenkeepers get on with their work and to



Minimise wear and damage to greens with forward hole positioning in wet or difficult playing conditions

support them fully in the decisions and actions they take. The days when the greenkeeper was seen as someone who just cuts the grass and rakes the bunkers should be long gone. These are professional people trying to do a professional job and I can think of very few golfers who would tolerate being told how to do their job

by an unqualified person."

● Many thanks go to Goring and Streatley Golf Club for assistance with all of the photographs used to illustrate this article.

● Next month, the Learning Experience takes a closer look at aeration techniques, with special emphasis on minimising disruption to play.

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