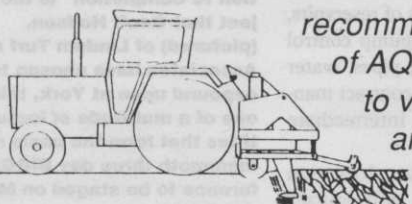


# Tackling heavy

Grass doesn't grow on busy streets, least of all where golf's infantry patrol and armoured divisions proliferate. However, until every green chairman in the land 'bites the bullet' and imposes a total trolley ban in winter the problem will escalate. STUART ORMONDROYD offers advice which may help to alleviate the damage. His timely comments suggest re-routing is a partial answer, prevention better than cure...

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# TRAFFIC

In recent times there has been a significant upsurge in course usage which, in the last two years, has even spread to the more isolated country and island golf courses in remote parts of Ireland and Scotland. The increase in the volume of traffic is largely due to organised parties and visitors as well as additional competitions and an increase in membership playing more often, especially during the winter. Whilst swelling the Club's coffers is very welcome, the net result for the head greenkeeper is one of year-round wear and the associated erosion this brings.

The implementation of routine renovation work to promote recovery on worn areas should be an integral part of the management programme, but the primary aim must always be prevention before cure. Allied to this point is the often overlooked aspect of educating golfers to the objectives of wear control through communication. This can take the form of a monthly newsletter, pinning up information on the members notice board, inserting a leaflet with the subscription renewal as well as talks given by the head greenkeeper and members of the committee. Indeed, the general membership should be encouraged to understand the importance of any reasoning behind management carried out on the course, eg. observing re-routing markers. In this way, golfers are much more likely to abide by the instructions rather than flaunt them.

For those involved in new products it is vital that consideration be given to spreading wear during the design stage before construction starts. On the one hand course layout must incorporate feature and a degree of difficulty, but allowance must be made for alternative entrance and exit points from tee to fairway, fairway to green and green to tee and that they are made as wide as possible. Smooth contouring of surround banking will prevent scalping and providing sufficient area of putting surface for pin positions will enable wear to be spread over a greater area. With a similar aim in mind, banking, tree and bunker placement should not be excessive. In addition, an appropriate depth of a free draining growing medium for tees and greens is essential, bearing in mind compaction and turf wear are closely linked together.

Turning to practical management, an ongoing programme is vital in reducing the effects of turf wear, especially in respect of a package of aeration treatments to relieve compaction and improve drainage. Consequently, routine maintenance must be geared to favouring the deeper rooting, finer grasses, namely fescue and bent, which, in an open, free draining soil, will clearly be better adapted to withstand foot traffic, machinery and trolleys than stress susceptible annual meadow grass growing in a compacted, ill draining medium. Turf damage on green surrounds can also be reduced by confining tractor mounted equipment, primarily mowing, to fairways, mowing instead with a ride-on Triple Mower. Developing larger aprons is another aspect that will help here as well as keeping trolleys away from green perimeters.

Any greenkeeper will tell you that golfers invariably take the shortest possi-

**Too many trolleys,  
too many buggies,  
too many feet.  
Proliferation  
leaves its mark!**





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**'Golfers invariably take the shortest possible route to their next shot and therefore tactics have to be adopted to ensure alternative paths are taken...'**

ble route to their next shot and therefore tactics have to be adopted to ensure alternative paths are taken. One the more worn sections in the winter, this involves re-routing using hoops, ropes and white lines backed up by clear, strategically placed signs. There will always be a few golfers who ignore such markers and would only be stopped by an electric fence, but for the majority, this is where education can be so valuable in achieving the desired aims.

To restore a complete grass cover for the next competition season, this involves a full renovation programme, principally involving forms of deep aeration, turfing/seeding and localised application of fertilizer as required. On heavily worn areas such as bottle-necks, the introduction of purpose-built paths can be considered, but only as a last resort when other aspects of management have been tried. Remember that there are problems associated with paths such as finding a suitable material, the general aesthetics and the transference of wear to the end of the path.

If a Golf Club has the advantage of an extra hole or existing design allows, the sequence of holes can be changed during the winter and hence alter traffic route patterns. In addition, careful pin placement

● Continued on Page 34





● From Page 30

using the higher features and margins in winter has a dramatic effect on spreading wear, not only over the whole putting surface but also influencing entrance and exit routes.

Where space allows, the provision of alternative tees off line and in front of existing areas has distinct advantages, proving invaluable for resting and renovating the well worn summer routes from green to tee and tee to fairway. In a similar way, skillful siting of winter tees

**With the obvious pathway re-turfed, a simple roped detour offers no great hardship**

can bring alternative fairway landing zones into play. Where space for alternative teeing ground is not available, look to be extending and re-leveling existing tees which will help to spread wear by providing extra area and, when associated with an increase in width, allow for additional lateral movement of tee markers. Where a path is mown out from the tee through the carry to the fairway, it is good policy to change the line during the winter months and thereby, alternate traffic flow.

With increasing levels of play during the winter period and little frost and snow over the last three years, there is an increasing chance of a significant degree of damage occurring through the autumn to spring period. With limited grass growth recovery capacity due to the weather and ground conditions and the curtailing of routing maintenance work, it is important that winter play is strictly controlled, especially on the greens. During adverse weather conditions, primarily frost, there can be a requirement for temporary greens, even taking into account the aim of playing on the putting surfaces for as long as possible throughout the year. However, temporary greens are never popular with members, but if golfers accept that as winter golf is normally less competitive and there is only slight inconvenience caused when playing to temporary greens of a satisfactory standard, then putting surfaces on the main greens can be preserved for the competition season, when they are expected to be at their best. The key to winning over golfers is to prepare separate, good quality, temporary greens (say 100-200 square metres) well in advance and some distance away from the main putting surfaces.



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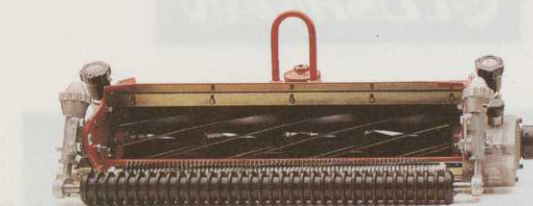
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This another course of action which be instrumental in changing the pattern of wear.

One bone of contention that comes up every winter is the question of trolley use. The change from narrow to wide-wheel trolleys did help to relieve the extent of turf damage to a degree, although with the increase in volume of traffic and the proliferation of heavier, powered trolleys, the problems of wear are now increasing again, notably under wet surface conditions in the late autumn and through the winter months. The main drawback to trolleys is that they are usually confined to the same traffic routes. Re-routing can overcome some of the difficulty, yet golfers should be encouraged to carry their clubs during the winter months. Using a reduced number of clubs in a 'pencil' golf bag without the attendant suitcase of accessories that the larger bag affords should be practicable for the vast majority of golfers without significantly diminishing the enjoyment of the game. By this means, members and visitors will be able to circumvent obstacles with less difficulty and traverse the putting surfaces and adopt a much wider range of traffic routes. Indeed, a ban on trolleys would prove most effective through the winter months, say December to March, when the surfaces are most vulnerable.

Extremes in weather patterns, mild winters and increased levels of play as well as the introduction of heavier trolleys have all contributed to the increase of traffic on the vast majority of golf courses. This has led to worn turf surfaces and compacted soils and so it is vital that all head greenkeepers adopt an ongoing pol-

**'The change from narrow to wide-wheel trolleys did help to relieve the extent of turf damage to a degree, although with the increase in volume of traffic and the proliferation of heavier, powered trolleys, the problems of wear are now increasing again...'**



icy of spreading wear and maintaining good soil conditions and grass composition. Preventative aspects are also very important, eg. initial design. Establishing co-operation and channels of communication between committees, golfers and green staff is also vital, so that the objectives behind decisions taken and work completed are appreciated by the general membership and hence, increase the chances of co-operation. This aspect will be particularly important in the immediate future as the implication of increased usage is greater wear and tear.

● **Stuart Ormondroyd is an Advisory Agronomist with the Sports Turf Research Institute.**

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**T**he two courses of The Berkshire were built on 460 acres of open heathland in 1928, the architectural creation of W H Fowler, Harry Colt and Tom Simpson. Since that time there have been few alterations save those made by nature, with this shown as an abundance of trees lining the fairways and surrounding the majority of tees and greens. These are mostly Pine, Silver Birch and Sweet Chestnut, 90% of which are nature's own planting.

These may make the courses look attractive but bring problems such as loss of heather, lack of air-flow around greens and tees and the creation of shade. In addition there are many roots which have encroached upon the course.

In this part of the county the season for visiting parties begins in March and lasts until mid November. We are still mowing greens three times a week in November and cut greens, tees and surrounds weekly until January.

Air-flow restriction around greens means that with mild weather we suffer from fusarium patch. This makes me very careful about top dressing, for if they are smothered and a disease attack occurs the scars may still be visible well into May.

It is worth remembering that soil temperatures begin dropping in September and can remain low, certainly until February or even March. Grass is no different from other plant life and has its dormant period. This period comes – yes, you've guessed it – right at the start of spring.

Golfers have no consideration for soil temperatures and think that as spring begins the grass should begin to grow. They do not understand the thinking behind our programme and often a visitor, when confronted by a working party, will ask 'do you have to do that today, can't it wait until tomorrow'? How nice it would be if golfers had a dormant period to coincide with nature!

Having made my excuses, how do we tackle our spring programme? My answer is with great care. It could be disastrous to

# Spring: in the air and on the greens

force growth and patience must be the watchword, together with gentle assistance given to nature's own development.

Greens aeration is still the most important task, but only if ground and weather conditions permit. Deep slitting 6" – 8" until March and light verti-cutting instead of mowing is important, as is sweeping by hand with birch brooms.

We still have thatch, some greens worse than others, with this attributed mainly to poor drainage. Our main tasks are to scarify, hollow tine and brush a top dressing of 80% sand 20% soil before overseeding with fescue and bent, brushing at this time of year by hand. No further deep aeration is done until a further month has passed other than occasional 3" slits.

Our programme starts early in March with the hope that our greens will be in good order by May first when the Berkshire Trophy, a prestigious 72 hole amateur event over two days, takes place. My heart goes out to any greenkeeper who stages a professional tournament at this time of the year.

March also sees the start of priming the automatic watering system. I like to be fully operational by mid March so that any faults can be put right, for I have found that it can take two months for major faults to be rectified, indeed before someone even comes to take a look!

By April the greens need just a little reminder that they should be waking up and over the past years I have treated mine with 2 oz per sq yard of lawn sand. Confident that the watering system is O.K. I will at no time let my greens dry out for the last thing they need is stress. I am of the opinion that a little moisture now can save a lot of heartache and I water by hand, avoiding flooding.

May is the time I think of applying fertiliser – 8% organic – and just before application I like to spike to make sure some of it reaches the soil. A fortnight later, just like magic, the sward starts to grow and fill in. Thereafter it's a cut every day, verticutting and grooming. I ask myself, 'is it the fertiliser?' but am sure that although the rising temperature is making the fertiliser react as it should, the real secret lies in the work carried out in autumn and early spring.

I treat my tees in a similar fashion to greens but fairways demand different treatment. Two dry summers has left them far from their best and being heathland we have the problem of an overlay of organic matter, due mainly to lack of aeration over the years. My order of the day is aerate, aerate and, when I think I've done it enough, aerate again. At the moment we are spooning, which is a form of hollow tine. This year we plan to overseed and apply a pre-seed fertiliser. The task order is aerate, light harrow, light scarify, sweep, fertilise, seed after two weeks, spray with seaweed, sit back and watch it grow! Weather permitting these tasks will be complete before March ends.

Another problem we have suffered is that of chafer grubs and leatherjackets. Some areas are soft as the grubs have disturbed the soil below the surface. We plan to put a Cambridge roller over them for, believe it or not, we stand a better chance of killing chafer grubs by the roller weight than by use of pesticides. Of course, this cannot start until the grubs surface from hibernation. Whatever the spring programme you may use I wish you all perfect weather conditions and good greenkeeping.



When 'Greenkeeper International' asked Bob Moreton, (pictured), Head Greenkeeper at The Berkshire, to write about his individual Spring Turf Maintenance Programme, we were surprised to learn that in Bob's eight year reign, despite the luxury of having 36 holes, both Red and Blue courses have remained in constant year round play. Never closed (save for snow) and never having temporary greens imposed on its members, The Berkshire, it seems, thrives on hard work. Bob Moreton's spring programme is therefore one where, given good fortune, the ravages of winter and voracious play may once again be restored

## FAIRWAY THATCH! THE PROBLEM

- SOFT SPONGY TURF
- POOR ROOT DEVELOPMENT
- MOSS INVASION
- LARGE DIVOTS



- POOR SURFACE DRAINAGE
- LOW DISEASE RESISTANCE
- POOR UTILISATION OF CHEMICALS
- INSECT INFESTATION

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### SURFACE AERATION

The thatch layer acts as a sponge holding water and impeding surface drainage. Nothing works more economically than scarifying to aerate the surface to encourage healthy root growth giving a stronger, more durable turf and stimulating the finer grasses — fescue and bent.

### DIVOTS

A thatchy, soft, spongy turf is associated with large divots. Removal of this thatch produces a firmer surface producing smaller divots.

### CHEMICAL UTILISATION

Many pesticide and fertiliser applications are rendered only partially effective due to the organic layer made up of thatch. Chemical applications can be reduced, or even cut out completely once the thatch has been removed, stimulating the natural ability of the turf to fight off infection.

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