

# Martin's golden opportunity

to understand that successful greenkeeping was as much a matter of forward planning; investment in the right equipment; budgeting and finance; as it was in leading his team out on the course by example.

This meant establishing good working relationships, in particular with the club secretary/manager and the chairman of green. This entailed projecting the right image; which meant doing his homework and, when the occasion demanded, looking as smart as his golf course. One of the ways he understudied George was by representing him on the green committee. Thus, when he became acting head greenkeeper, he was a familiar figure at its meetings and used to procedures.

Martin had acquired, during his 'acting' period, sufficient self-confidence in his ability to run his own show. That being so, when George returned from illness, he began to look around for head greenkeeper vacancies at other clubs. He sought advice, consulting with Hillside's Secretary /Manager, Peter Ray, and the Chairman of Green, David Rose. Both counseled him to do nothing precipitous. They assured him of their full confidence in him and their recognition of the outstanding work he had done as acting head greenkeeper. They expressed their hope that he would stay – at least for the time being – whilst recognising his wish to progress to the post of head greenkeeper.

In the event George Lloyd left Hillside. He took up a post as head greenkeeper at Fairhaven in 1987 and Martin succeeded him. After six years, four as a greenkeeper and two as an acting head greenkeeper, Martin had realised his dream. He had become the top man at a top club and he was still only 22 years old! It was a big step for Hillside but it has paid off.

What then were Martin's immediate, short term, priorities when he took over? First, to continue to smarten up the course. He tried to see the course as the player might see it, recognising the importance of first appearances, of looking cared for, neat and tidy, with no detail out of place. Second, to maintain staff morale, for as their new boss he wanted them to have just cause to be proud of their work, and in what they were hoping to achieve together. Third, he wished to further the good working relationships he already had with the secretary/manager and the chairman of green.

These three priorities were all linked together. He wished to show straight away the standards he wanted which would, he hoped, get his staff fully behind him and convince the club that it could safely leave the course in his hands. Of course there was a price to pay. To maintain his standards the club would need to continue its investment in maintaining a championship course. There would be times when he would have to do unpopular things and needed the club's backing, e.g. when he restricted pin positions on greens to avoid over-use. Martin got it and achieved these three priorities.

Next he had medium term priorities. These included re-equipping Hillside with modern machinery. Naturally he had preferences and having gained support for his case he began to buy. First a Jacobsen Tri-King to cut tees and green surrounds: second, a Ransome Hydraulic 5 to mow fairways

(and leave those picturesque broad swathes): third, a Jacobsen Green-King with turf groomers for greens; fourth a new tractor, spray equipment, and a scarifier/collector; fifth and finally; a Verti-Drain for aerification. He has now achieved these medium term priorities and Hillside compares with the best.

Has he got any long term priorities? Yes, he has. He plans to improve the consistency of the turf on Hillside's course – fairways and greens – so that it more genuinely reflects a true links test of golf. At present the course is a mixture of links and parkland/meadowland. His plan will need a worked-out policy of regular aeration, appropriate feeding, controlled (minimum) watering, together with measured grass cutting. In this as in all his other activities Martin has sought the on-going and regular advice of the STRI. Not unexpectedly, the annual reports on Hillside of David Stansfield (STRI's senior agronomist) have been most complimentary!

Martin has now been head greenkeeper for approaching four years. He is still only 26 years old. He is very happy and enjoys the continued confidence of the Club. There is now a new chairman of green, John McMurray, with whom Martin has an excellent working relationship. For the foreseeable future much remains to be done and Martin and his team play a key role in bringing this about. Hillside has its sights set on gaining recognition as a venue for the top tournaments and as an example applied to be the European venue for the 1993 Ryder Cup matches.

To succeed in its aim, Hillside must have a top quality course. That it was included in the recent Golf World survey of Britain's top 50 and ranked 19th was commendable, but not good enough if the club is to fulfil its aspirations.

Hillside is looking to Martin to mastermind the improvement needed as well as training an assistant and putting into place a first class team of greenkeepers. In due course, no doubt, he may well be tempted by the prospects opening up in Europe for top flight proven head greenkeepers, and he also has a developing interest in golf course architecture and design.

He would like to be a member of a design team, creating and building new courses, and has his own ideas about golf course design. He believes, for example, that fairway bunkers shouldn't be so shallow as to allow a shot to reach the green. A wood from the bunker? 'no way', says Martin, who also has a liking for little fairway pot bunkers.

Martin's family swear he eats, drinks and breathes greenkeeping – as well as being an enthusiastic member of BIGGA. He talks of little else – all the time! Surely he can't have time for interests outside of golf? Well, actually, he has. Predictably they are all outdoor pursuits and include clay pigeon and game shooting; and course fishing. His enthusiasm is infectious.



**Attention to detail pays dividends**

● The author, John Nelson, is a retired college lecturer and a member at Hillside.





# Computer wizardry takes the

# pain out of paperwork

**Keeping golf course records is important, be they kept via the user-friendly TRIMS computer package or through a simple manual system - and the greenkeeper should know what to have on file and how to use the information recorded.**  
**STEVE ISAAC, Advisory Agronomist with the STRI, asks the pertinent questions and provides many of the answers**

Ask any greenkeeper why he entered the profession, and involvement with paperwork will come very low on his list of replies. However, the task of keeping up-to-date and detailed records is more important than ever, now that golf course management is big business. With the distinction between head greenkeeper and course manager becoming less clear; more Clubs prepared to give the head man more responsibility and more head men prepared to take it, the need to maintain a well ordered records system has never been greater.

Storing records is a science in itself. Papers should not be kept in a disorderly biscuit tin, where it will take several hours to find the specific piece you want. All head greenkeepers should be provided with a filing cabinet within which information is grouped into different subject matter. The TRIMS computer package is - in essence - a filing cabinet which contains a number of files detailing different facets of the greenkeepers job. Like all record-keeping, the input of information takes time, be it a manual or computer system. However, once the information is installed, retrieval should be a quick AND simple process, thereby speeding up the daily tasks requiring the use of paper. Any system used should not only appear logical to the compiler but must be clear enough for deputies to use during, say, holidays or sickness. Equally the system should be in a format that any eventual successor to your post can recover information which will assist him in his first few months of running the golf course.

## Organisation

The filing cabinet sits in front of you with an inviting array of files waiting to be filled. Don't panic! Sit down and think about the tasks carried out on the course and the paperwork involved with each task. Jot down notes and headings for collective tasks. Such a list may include materials, machinery and manpower. Within these main headings all the basic works can be inserted - in separate files if necessary. The purpose of separation to this fine degree is primarily for ease of access, ensuring that when asked a question you can go straight to the appropriate file for the answer. Your filing system may seem logical to you and you may be able to find individual items in seconds. However, others may not think in the same way and could need assistance to locate the information they require.

Perhaps the most important reasons for keeping records are to facilitate the management of the maintenance budget and to aid the organisation of the management programme. Organisation and efficiency are two key words, for without them a records system will have little value and an inefficient and poorly organised greenkeeper does not get the job

done. An unkempt, disorderly records system says as much about the greenkeeper as an untidy machinery shed.

## The records system

The exact order and division of paperwork is an individual thing, though headings for main or primary files should be fairly universal. In this way the TRIMS computer package highlights the main categories for a record system. Within each main heading the information can be split into sub or secondary files. In most cases this is all the division necessary, but for more complex information, tertiary files and beyond may have to be prepared for ease of access to specific information. Let's consider the main headings and the information that should be stored within them.

## Work schedule

The daily work schedule is often monitored on a wall chart planner or diary. This is all well and good as an open display of intent, and is useful to recall the exact timing of works. However, once the year has come to an end, a more permanent and less bulky record of the year's work should be kept.

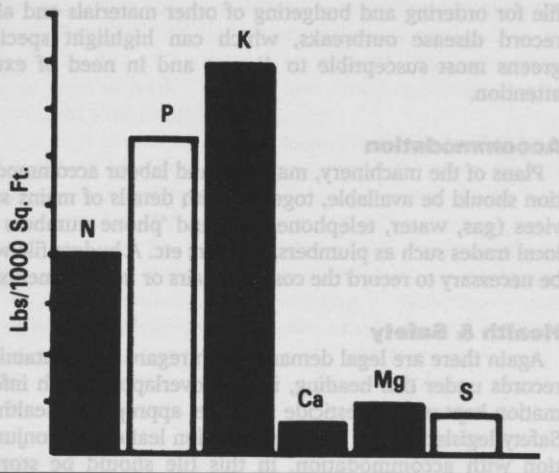
Personal experience is only valuable if it is reliable; and writing information down is an essential back-up to memory. Obviously your understudy or successor can also make use of information in this form. This file should contain information to help plan the maintenance workload, not only day to day, but forward planning in terms of months and even years. Details should include the operations necessary throughout the year on areas of the course - including frequency and a brief description.

Such records not only aid in planning future work but can be a useful reference to determining the effectiveness of past practices. It is important to keep a record of golfing commitments for the

year - i. e. competitions and society play - so that the greenkeeping work can be planned accordingly - with the golfing programme agreed at the start of each year between the head greenkeeper and the club and setting aside adequate time for routine and occasional disruptive maintenance practices. Having such a record enables all staff to be aware of what is expected from them. Long term planning is most important and a 5 or 10 year plan should be formalised and agreed within the Club. This should detail on-going maintenance, together with proposals for construction works (tee enlargement, bunker work, etc) and forward budget plans, perhaps even a copy of STRI reports! In such a file it is useful to keep a record on weather conditions. All Clubs should have access to information on daily rainfall, ambient and soil temperature readings and also record frost days and waterlogged green days.



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**'Keep a record of staff throughout the year, which will help pin-point future busy periods and aid plans for early recruitment'**

dates for replacement. In the latter respect a record of demos. with comments on performance is useful. Maintaining a well ordered list of machinery should ensure that all equipment is in working order and serve to remind of in-house maintenance schedules and dates for off-site servicing. Planning service timing is important, with problems developing if, for example, all greens mowing machinery is off site at the same time. With the name of each unit, record serial and engine numbers so that parts may be ordered more easily and accurately. Sources and cost of hire equipment should also be stored.

**Irrigation**

It is sensible to use a separate file for irrigation. A copy of the original layout and subsequent additions should be stored. It is not only important to know when the system is to be commissioned or shut-down and drained, but also for noting faults (where, when, how) and how they were rectified. Record the areas on greens/tees not adequately covered so that you know where hand watering should be concentrated, and where the system might be up-dated. Also record water quantities and time spent watering through the automatic and/or manual sprinklers.

**Materials**

Not only obvious items like fertiliser, top dressing, sand, seed, turf and wetting agent but also diesel; petrol; oil and sundries such as flags, tee boxes and litter bins. Keep a record of new stock, what is used and when, dates for re-ordering. It is important to know exactly what has been used so that you may re-order if successful or seek alterna-

● Continued overleaf

**Manpower**

Use in conjunction with the Work Schedule file to make sure you are getting the best out of the available manning levels, for man management and efficient labour utilisation are key areas for head greenkeepers wishing to get the best from their course. Keep a record of permanent and temporary staff through the year, which will help pin-point future busy periods and aid plans for early recruitment and thus avoid undue staff stress factors. Overtime, holidays and other personal data should be recorded, together with personal details - strengths and weaknesses, training and education - all are important.

**Equipment**

Detailed information must be kept on machinery, with information on the stock, purchase date, service, repairs etc. together with comments on performance and proposed

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# More than just efficiency – certain



**A well-ordered set of records improves the efficiency of the course management programme**

tives if not. Analysis of materials, e.g. top dressing, fertiliser, plus chemical analysis of topsoil from greens, should also be kept. Work out how much fertiliser or dressing is required per unit (e.g. green) at the more common application rates and record these figures – easier than re-calculating for each application or when re-ordering.

## Pesticides

Under the COSHH Regulations 1988 it is a legal necessity to keep detailed records on all pesticides and other materials used. With an ever increasing importance placed on the safe use of pesticides they deserve to be kept in a separate file. Information leaflets on legislation and how it affects you should be stored, with details of application rates and dilution factors for regularly used materials. Calibration records for all spraying equipment are essential, together with a diary detailing pesticide use around the course. Keep a stock

file for ordering and budgeting of other materials and also record disease outbreaks, which can highlight specific greens most susceptible to disease and in need of extra attention.

## Accommodation

Plans of the machinery, materials and labour accommodation should be available, together with details of mains services (gas, water, telephone etc.) and 'phone numbers of local trades such as plumbers, builders etc. A budget file will be necessary to record the cost of repairs or improvements.

## Health & Safety

Again there are legal demands with regard to maintaining records under this heading, in part overlapping with information kept within pesticide files, i. e. appropriate Health & Safety legislation and other information leaflets. In conjunction with accommodation, in this file should be stored duplicate information on the siting of emergency equipment and a record of protective clothing, its condition and use. Keep the 'phone number of doctor, hospital, police and fire service handy and that of the local Health & Safety Executive.

## Words and Pictures

It is all well and good keeping records in this way, but they must be used to your advantage. Obviously, some record keeping such as budgets and pesticide information is a necessity, whilst other material can also be of great value but needs to be used to its full potential.

Records can be stored in a more legible way if documents are typed. You may be able to decipher your own handwriting but chances are no one else will! Ideally you should have access to a typist in the club secretary's office and should keep a record of all communications between yourself and your contact (secretary, green chairman et al) within the

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# record-keeping 'a legal requirement'

clubhouse. This should include minutes of meetings you are privy to, memos from/to club contact and information provided by you to the general membership via the notice board. You never know when you might have to justify yourself and dated confirmation of agreed practices could work in your favour.

As a high proportion of the main file headings hold budget information, it may be a good idea to create a separate main budget file that collates all disseminated information. At the present time there are a limited number of head greenkeepers actively involved in the decision making process for formulating a budget, though thankfully we see more and more each year. Only the man doing the job can have comprehensive knowledge of forecasting budget requirements. Even those greenkeepers who are simply allocated a budget will find life a lot easier if detailed records are kept and far better than having to explain to a finance chairman why a maintenance budget is over-spent. In such a situation records will prove invaluable in revealing cash inadequacies for work that must be done, along with extras initiated by the green committee!

Facts and figures are all very well, but unless they are presented in an intelligent and simple format much of their impact will be lost. This is particularly true of budget information, where producing reams of numbers will do nothing to convince management that the green staff is under-funded or under-manned. A visual and easy to appraise presentation might be in the form of a graph or diagram. Pie charts, histograms, scatter and line graphs can exhibit diverse information that is immediate and clear, and can be used to present information in a concise way. As an example, if a graph shows a trend of lowering pH and potash levels, but stable phosphate, it is an aid to manage fertiliser and top dressing inputs. Scatter diagrams of disease incidence can pin-point susceptible greens and times or weather patterns when outbreaks are likely.

In such instances graphs copied can be overlaid on an overhead projection sheet to show connection between, say, the weather and outbreaks of disease.

## For the record...

In this article, hopefully, one can appreciate the importance of keeping a well ordered set of records in one's bid to improve the efficiency of the course management programme. Within each main title there is great scope for producing sub-files, but there is little point in separating records in main categories if all the segregated information is then thrown into a single file in no particular order.

What is shown here is purely a personal review and your records system must be designed by you, for you are the one that has to understand and use it. The outline above is a suggested format of how you might organise all the paperwork that is part and parcel of greenkeeping today. The order in which you file is predetermined on computer packages; in a filing cabinet the choice is yours.

There is likely to be so much information that it is best to keep closely related main file headings together, rather than use a convention alphabetical order. There may be overlapping, or repetition, but this is no bad thing as cross referencing information not only speeds up the process but makes your system more user-friendly for others. Duplication of information is useful, especially if vital information is stored in two separate places. Is it worth risking loss of essential paperwork when a filing cabinet burns for the sake of taking photocopies or listing addresses in a book? Computer packages emphasise the importance of such a back-up, storing information on both hard and floppy disk. If there is any duplication of information remember to change all references if making alterations. Having different addresses for the same company is going to mean a 50% chance of getting no reply!

In addition to all this information filed away, we have discussed the merits of keeping a diary or wall chart planner. It will be more convenient to have a desk-top address book which can be quickly flipped open than wading through files in a record system. At the end of the day, keeping good records is for your own benefit. A deal of time is now spent by head greenkeepers coping with paperwork and this time will be minimised if you know exactly where information is kept.



**'Facts and figures are all very well, but unless they are presented in an intelligent and simple format much of their impact will be lost'**

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# Short cuts to efficiency

Part 3  
Work  
recording

One of the more difficult tasks for a new chairman of green is to understand the various jobs that are done on the course, their frequency and work content. It is absolutely essential for him to have a full grasp of this information when preparing annual budgets, manning level calculations and costing for specific projects.

I discussed the problem with Jim, the greenkeeper, and asked for his advice. He maintains a personal diary and from this and his knowledge of work done on the course he prepares a written report once a month for the committee. This type of report requires the extraction and selection of details together with some input from memory. Although well prepared it requires valuable greenkeeper time to produce.

I feel sure that no chairman or any member of his committee can remember the detail of, say, the previous two years reports. When detailed information is required the written reports have to be analysed. We decided to short circuit the analysis stage and devise a reporting system that was easy to understand, required minimum effort to complete and gave us meaningful answers at the end of each reporting period.



The maintenance schedule: Proving to disbelieving members when greens are cut and other vital work undertaken...

We settled on the idea of a tick sheet with job descriptions down the side and days across the top. Entries should be made each day or on the completion of a job, a weekly total would be entered in a column on the right.

Our discussions soon led me to understand that course work was covered by three headings, Maintenance, Project and Other, which we defined under each heading as:

**Maintenance:** That work necessary to maintain the existing features for them to be displayed to their best advantage. We agreed that this work may absorb 100% of available manpower during the Summer but may be as little as 30% during the Winter period. As an additional refinement we identified certain operations, such as mowing greens, were always or nearly always done at all 18 holes while other operations may be done at one hole.

**Project:** The modification of existing or the development of additional features on the course. This work would be done during the autumn, winter and early spring.

**Other:** Those jobs not included under either the Maintenance or Project headings would include Hollow Tining, Vertidrainage, Arboreal work after a gale and the repair and maintenance of plant and machinery. While it may be possible to identify some of this other work and its work content we recognised that there will always be contingency work which cannot be evaluated but we must make some allowance for it in any calculations.

By trial and error we determined a description for each work item that has stood the test of time and includes:

**At all 18 holes**

Mow	Greens
Mow	Tees and Surrounds
Mow	Fairways
Mow	Rough
Switch	Greens
Cut	Holes
Rake	Bunkers
Slit Tine	Greens
Slit Tine	Tees
Fertilise	Greens
Fertilise	Tees

**At one hole (write hole numbers)**

Maintain	Bunkers - Annual - including cut new edge
Maintain	Bunkers - Periodic - including strim edge
Fungicide	Greens
Top Dress	Greens
Scarify	Green

**Other work - give details**

After a trial period we introduced a Weekly Report Form capable of accepting daily entries. Individual weekly totals would then be entered on to a Quarterly Report Form. We also recognised that subsequent similar quarters could be compared to determine an average frequency for each job during a particular quarter. An immediate benefit would be that the greenkeeper would spend less time preparing his written report.

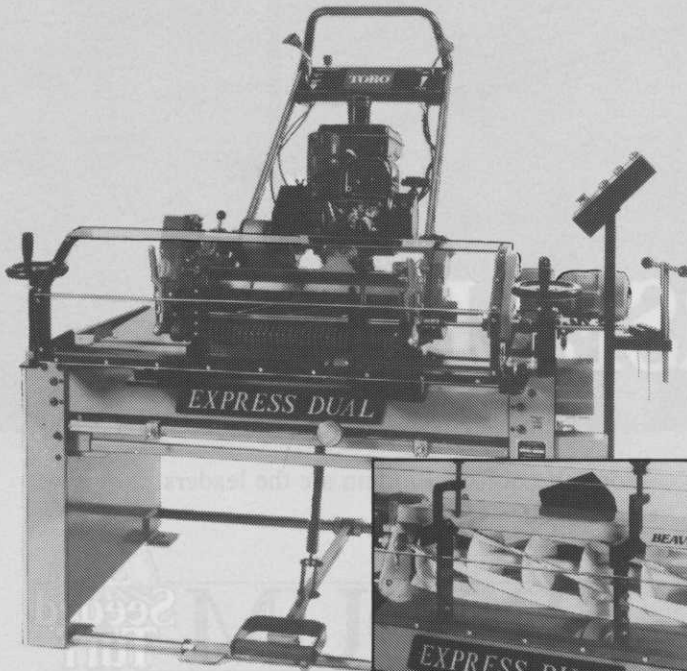
Information gathered would be meaningful and used to determine both the quarterly and annual frequency of regular and irregular maintenance work, together with examples of the other unscheduled work. The detailed data would also be used to produce more accurate budgets and manning level calculations.

After one year the results gave us quantified common sense answers. While we knew that greens were cut more often in the summer than the winter, we now know that the frequency varies during the quarters from 6.9 to 0.8 times per week.

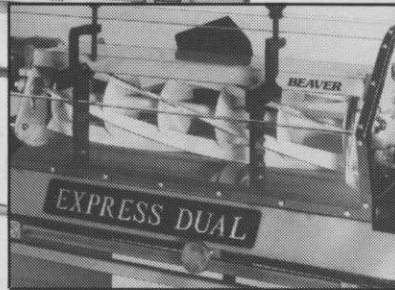
To date this method has had two side benefits, we can now prove to disbelieving members when the greens were cut and to suit certain competitions we have modified, weather permitting, actual cutting days during the darker months of the year.

As well as being used for both the preparation of budgets and manpower calculations the results are also used to discuss the frequency of operation during the annual visit of the agronomist from the Sports Turf Research Institute at Bingley.

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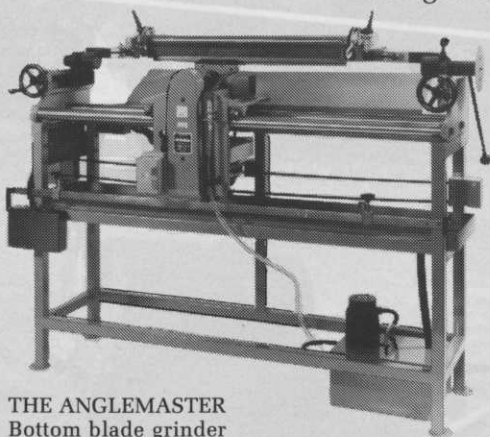
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# CHOICE DECISIONS

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-

● Continued overleaf



## 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!

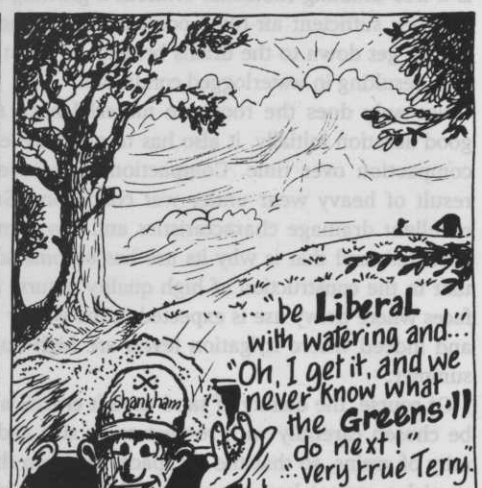
David White

# Slow down

Your speed is killing me!



## On the BRIGHT side...



All characters are fictitious