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FEATURE

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2 GREENKEEPER INTERNATIONAL August 1991
Let Greenkeeper International work for you! For further information on the products and services advertised in this issue see the Reader Reply Card facing Page 62. Simply return the card to us (no stamp needed), stating the companies' Ad Ref numbers (found near their advertisements), and we will then contact the companies for you. Below is the Greenkeeper International advertisers' index – an easy guide for you to find the advertisements in this issue.

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**BIGGA greenkeepers share in Baker-Finch's Open success**

BIGGA certainly made its presence felt at golf's greatest tournament at Royal Birkdale. See if you're on any of our pictures in our special Open photo-feature.

**Perfection through perfect planning**

The responsibility for nurturing Letchworth's fair acres to perfection rests with a talented young Scot, Duncan McGilvray, and his highly motivated team, backed by an enlightened committee. His approach to 'The Way Forward' suggests no simple lip-service to an idea, rather a long-term plan that works.

**Introducing the first Master Greenkeeper**

Laurence Pithie, Course Manager at Minchinhampton, is named as BIGGA's first Master Greenkeeper. His personal comments and observations on the MGC may prove inspirational to many future Master Greenkeepers.

**Roll up for the greatest show on turf**

We preview the best of both well established products and services - along with innovative ideas and new equipment that will see the light of day for the first time at the IOG on September 3rd - 5th.

**DEPARTMENTS**

*Around the Green*

Waiting over and regional qualifiers declared. What odds a Scottish winner?...Pages 52, 53, 54

*Faces and Places*

Winners, losers, stayers, movers - all in the page that's right up to date with the news.

*Education*

Another reminder for the Management Courses - and your invitation to New Orleans.

*Advertising Features*

The Compact Tractor continues to win new converts with a plethora of accessories.

*Cover Picture*

Looking back from the 17th green at Letchworth Golf Club: part of Duncan McGilvray's triumph.
Communication is the answer

Struck by the wide variety of misinformed comment I hear from many Club members on golf course maintenance (and aren’t they all experts), I am prompted to ask one simple question: Are you getting your money’s worth? With few exceptions, the answer depends on how well the green committee relate with the greenkeeper.

The norm for admission to green committee status often seems to be coercion, with the sometime carrot of Club captaincy perhaps an attraction, though all too often the incumbent knows little or nothing about agronomy, course management or course architecture. How then can that weakness in the chain – knowledge – be overcome in order that the green committee man may participate effectively in an ongoing maintenance programme which will continue long after he is done with committee life?

This is not the problem it seems, for the answer – practiced and preached by all effective managers – is communication. Visiting Letchworth Golf Club, where Duncan McGilvray is the course manager, I was impressed by one of the best structures I’ve seen yet, where Duncan works not in isolation but as an equal in golfing terms. He eats lunch in the dining room, talks with most of the members both on and off the course and enjoys regular dialogue with the Club secretary and his course liaison officer – a one on one discourse – as well as playing the course regularly and being active at meetings. The result is that he knows what members want.

The antithesis of this enlightened approach came to my attention at a northern Club where most members didn’t know the head greenkeeper’s name and where a bunch of low handicappers were exerting authority to toughen the course up to the detriment of the rank and file majority. The final outcome of this aggression has yet to surface, but with the head man listening to the few, my guess would be that his job could be on the line.

There are problems in having too many bosses and again Letchworth have it right. Members may button-hole Duncan with ideas but they know how the course is managed and that only declared policy can be implemented. Such policy is well documented and programmed long term. It not only works but can be seen to be working.

The weakness of an ineffectual green committee can manifest itself in another and even more insidious fashion when complaints fail to reach the ears of the head greenkeeper. I know of more than one case where silence resigned and resulted in a programme continuing in total disregard to the members’ wishes. The end result, when called to explain the direction the course was heading, was that yet another greenkeeper – rightly protesting that he hadn’t heard of such problems and where early communication would have diverted the bubbling volcano – was forced to look elsewhere for a job.

In advocating an enlightened approach to course management via the green committee it would be wrong not to highlight the sterling work carried out by the STRI agronomists. They do a grand job but are quite clearly overworked. An annual course visit is fine but when isolated problems loom large and time is not on their side, Clubs must pay for expert advice and get advice fast. The wise greenkeeper will know not only his own course but those around him and will be able to guide his committee. If there is a moral to all this it is a simple one – communication wins friends and influences people and the good course is one where regular informed dialogue between green chairman and greenkeeper takes place. Added to this might be the truism that is much in fashion these days: a green committee should consist of an odd number... and three is too many!

DAVID WHITE

Flying Divots

An appreciation of what is not always appreciated

As predicted in ‘Flying Divots’ in April, a report issued by Savills, the estate agents associated with pricey country estates and ‘high rent’ property in Belgravia or the like, estimates that about 30 golf course hotel sites are in the hands of the receiver, with many more on the brink. That grandest of grand projects – Loch Lomond – with a budget variously estimated at between £45 – £60million and promoted as a rival to Gleneagles, is “in difficulties” and is now run by an accountancy firm. It is not alone, with developers now chided for having responded too soon to the 1989 R&A report predicting a need for 700 new courses by the end of the century. As we always guessed and is now confirmed by R&A Secretary, Michael Bonallack: ‘it didn’t mean you could build them anywhere’. Thus it now seems that some developers have egg on their faces for building on a grand scale in places clearly inappropriate – the biggest sin.

The secret dream of some Club members – that a Japanese consortium will offer umpteen millions for their course – is now a fairy tale and Greenkeeper International understands that one estate specialist has no less than 90 potential courses and 40 existing courses on its books with precious few buyers.

Those already built will of course survive and continue, but is there really much ‘silly money’ around any more, where debentures of £15,000 – £30,000 are demanded? Henry Cotton had the right idea – simple courses for beginners – and one wonders if perhaps the report should have identified the prime candidate, who is clearly not yesterday’s ‘yuppie’.

Some 104 years later, the following from Sir Walter Simpson, author of ‘The Art of Golf’ still stands in good stead: “The vital thing about a hole is that it should either be more difficult than it looks, or look more difficult than it is. It must never be what it looks.”

Foreigners laugh at us British and our obsession with the weather, but it is a subject that is catching. Now some American friends have taken to weather watching and as they flew in from the yellows and browns that mark California – still drought ridden after five years – remarked on the sudden and astonishing green-ness that is our home.

Not surprising really, as June drew to a close with what we believed was a record soaker. Don’t believe it! Weather men claim that the monotonous downpours were ‘nothing special’, with things just feeling worse because we had some rain every day.
Who and what are moving on and moving in, in the greenkeeping industry

- Jimmy Richardson wrote telling of young Michael Gunn’s lucky escape following an incident at Tyneside GC. Michael was cutting grass on the 15th fairway when his tractor somersaulted three times down a 30ft ravine before coming to a halt and catapulting him clear. Michael’s father, club professional Mac Gunn, on talking of Michael’s injuries to back, neck and stomach, said: ‘He is lucky to be alive. The tractor could easily have fallen upon him’.

- Ian Corcoran, pictured, Assistant Greenkeeper, Market Drayton GC, will play in the 36 hole strokeplay Dunhill Amateur Masters at Woburn on September 6th. This after placing first in the regional finals held at Tynemouth GC. He beat last year’s Champion, Ian Pethbridge, by one shot.

- Scottish BIGGA Chairman, Harry Diamond, who is also head greenkeeper at Belleisle and Seafield GC, had a dodgy start to his day recently when vandals decided to make an unscheduled visit and set fire to the starters box. It was razed to the ground.

- Despite forbidding weather forecasts which happily proved wrong, nearly 100 head greenkeepers attended two Sta-Brite golf days in June, the first held on a blustery but dry day at Calcot Park GC, the second at Mid Kent GC, Gravesend.

- At both events a great day’s golf was followed by a splendid dinner, with prizes presented by Mike Fabb, General Manager of Sta-Brite.

- Pictured: Mid Kent winners, from left, Richard Pride, Willie McConville (winner) Ron Christie (third) Mike Smith (runner-up) and George Barr (longest drive).

- Gordon Moliir, the Sherlock Holmes of Fraserburgh, wrote telling a sad tale concerning Derek Ray, head greenkeeper at Nairn Dunbar, who – wait for it – broke his leg playing cricket! I wonder, do we send Derek a get-well card or a contribution toward psychiatric guidance?

- From the East Midlands, via Walter Cole of Longcliffe GC, comes the startling news that Tim Allard has had a baby! We bet his wife is pleased and is taking great care of the new ‘mother’ during the critical nursing period. Good luck to them both!

- ICI have just appointed a new member to their National Sales Team, Johney Beck, who takes up the position as ICI’s Technical Area Sales Representative responsible for the south and south east of England. Johney has recently moved to be central to his area and can be contacted on 0227 47474.

- It’s difficult to keep Elmwood College out of the press these days, and now comes news that a Toro 3000 D Greensmaster has been donated by the manufacturers through A M Russell Ltd of Edinburgh, who will undertake all servicing. The machine will be used on Elmwood’s golf course and in training greenkeeping students.

- Hawtree, the golf course architecture practice responsible for more than 600 projects world-wide, will celebrate their 80th birthday in style next year with their first Indian course, a newly commissioned 27 hole layout in New Delhi. India was the first country outside Great Britain to be introduced to the game, the first Club being established in 1829, and it is hoped that this course will mark a revival of golf in a country with a great golfing tradition.

- The firmly established Annual Parkers Greenkeepers Tournament was staged recently at Cuddington GC, with 68 Golf Clubs represented. The coveted Parkers Rose Bowl was won by Eric Green, Woodcote Park GC, with 35 points, followed by Stuart McMillan, Leatherhead GC, with 34 points. Pictured: far right, Mr Jim Parker; centre, Mrs Yvonne Montague, far left, Peter Simpson, and the winners.

- Barcham Trees of Soham, Ely, Cambridgeshire, have appointed Andrew Mitchell to their sales team to promote their range of container grown trees. Andrew was formerly with the Crown Estates Commissioners at Windsor and Notcutts Garden Centres.

- Steven English has been appointed UK Sales Manager – Tyres, for Trelleborg Ltd. He will be responsible for the market development of Trelleborg Low Ground Pressure tyres used in the sportsturf industry.

- The footprints of a giant lizard which last roamed the Cheshire Plain over 230 million years ago have been re-created in the shape of two bunkers on the Donald Steel designed Portal golf course, which opened for play on June 24th. Portal is aimed primarily at the corporate business market and will operate on a pay-as-you-play basis, with a green fee of £30.

- Excavation at Chirk Golf and Country Club, near Oswestry, meant digging out a huge rock weighing in at 35 tons, a back-breaking task. Pictured with course manager Alan Sharp (left) are Roy Thelwell, Patrick Anderson, George Griffiths, Richard Taylor, Haydn Jones, Sidney Woods, Barry Roberts and Mike Turner. Now where exactly did you bury Alan’s car lads?
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Introducing **Laurence Pithie** – winner of BIGGA's most prestigious award

Following the recent Stage III examination for the Master Greenkeeper Certificate, Laurence Pithie has been declared Britain's first Master Greenkeeper – after being the only candidate who successfully completed the two examination papers presented.

Laurence, Course Manager of Minchinhampton Golf Club in Gloucestershire, will be presented with his Master Greenkeeper Certificate by Viscount Whitelaw in Harrogate next January at the opening ceremony of the BIGGA (BTME) Exhibition and Seminar Programme.

Since the Master Greenkeeper Certificate (MGC) was launched at BTME in January 1990, many members have been striving toward achieving the magical 200 credits necessary for completion of the first stage. From this, four members moved successfully on to stage II, which involves a visit to their respective places of work by a panel, before moving to the final hurdle, the examination!

Shortly after examination day and before the results had been announced, Laurence wrote to our Education Officer, David Golding, outlining his views on the MGC programme. Such a thoughtful document deserves wider exposure and with the proud result no longer a secret, we print it here in its entirety.

**Britain's first MASTER GREENKEEPER**

**THE MASTER GREENKEEPER CERTIFICATE – FROM A MEMBER'S VIEW**

When details of the MGC were first published, I thought to myself ‘do I really need to undergo a lengthy procedure of study and examination?’ After all, I had 20 years experience in greenkeeping, 14 of them as a course manager, as well as gaining various greenkeeping certificates many years ago. In fact, there must be many more course managers who have greater experience than myself and who may also have a proven track record of hosting major events.

Then I thought, ‘if this certificate is just about the number of years one is engaged in working on a golf course, it seems fairly useless and unlikely to be accepted as a meaningful achievement within the golf industry’. Conversely, if our profession is to meet the ever increasing demand for better surfaces and progress successfully toward the year 2000, then the need to establish a worthwhile qualification is greater than ever.

In 1971 the Golf Course Superintendents Association of America (GCSAA) recognised this problem and implemented their own Certification Programme (or Program, as they spell it) soon after. It has been tremendously successful in raising the standards their profession and my view is that we must do likewise and learn from our American colleagues.

Education is, has, and always will be the foundation upon which BIGGA exists, for through training and education it can promote confidence, improve technical knowledge and engender motivation, which leads in turn to greater respect. Managing today's golf courses requires not just practical experience but also a wealth of technical expertise in understanding the theory and practice of turfgrass management. If we are to change the public conception of being ‘the greenkeeper that cuts the grass’, we must improve our image.

The course manager must be an agronomist as well as a business manager and public relations officer, he should also understand the basic principles and inter-relationships of turfgrasses; soils; fertilisers and pesticides, as well as irrigation; drainage and construction. Together with this knowledge he must have the ability to train; supervise; motivate and lead by example, as well as possess the ability to communicate ideas and plans in a professional manner when addressing committees or a board of directors.

It must be seen therefore that it is increasingly important for aspiring course managers to prepare for the technical and managerial aspects of their profession by attending college, conferences, seminars and management/Workshop courses organised by our Association. Only then can we as individuals hope to advance our own careers and raise the standards of our profession.

The MGC was set up to recognise these aims and gaining any such certification should be regarded as a worthwhile achievement. It the MGC was simply ‘handed out’ to those greenkeepers with 20 years or more experience, or far worse, made too easy, then it would not meet the required objectives and be a complete waste of time. With this new qualification there will inevitably be a degree of fine-tuning required, but I firmly believe that it will be seen as a most thorough and comprehensive examination of all the technical skills required by those who seek to manage both golf course and course personnel. As such, it will be warmly welcomed by those within the golf industry.

Gaining certification requires that the candidate accumulate 200 credits - recognising one's educational efforts and commitment as well as years of practical experience. A successful assessment of the candidate's course and style of management follows, perceiving the desire that person has to provide the best possible playing conditions at all times and - not unnaturally - generates a feeling of pride and fulfillment. It is, however, the third and final stage which demands the greatest self discipline - that of studying and being able to answer a large and varied number of detailed questions relating to every aspect of turfgrass management.

My eight months of self sacrifice brought home to me the reality that there was much I didn’t know without further research. As a result of that research, the knowledge gained has proved most beneficial in my own career, as well as being essential in completing the final examination.
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**The MGC... should be the aim of every golf course manager or head greenkeeper**

For those who remain undecided about registering for the certification programme, let me remind you of one simple fact. Considerably more money is now being invested in maintaining today's courses and just as these sums increase significantly each year, so also does Club management seek assurance that the man entrusted to take charge knows exactly what he is doing. The knowledge gained through years of practical experience is both invaluable and essential, no one would disagree. Equally important however, and rightly so, is the need for technical skills and those of a manager. The MGC provides proper recognition for these facets of total management and achieving this qualification should be the aim of every golf course manager or head greenkeeper.

---

**The Joint Golf Course Committee**

**'Great cause' continues**

After the announcement in the June issue of Greenkeeper International that the R&A had created The Joint Golf Course Committee, a decision to broaden the horizon for greenkeeper education has been taken. The appointment of Bob McLaren as Chairman of the JGCC Greenkeeper Training and Recruitment Panel will come as no surprise to those who have been following the fortunes of "The Way Forward."

Bob's volunteer support of golf has been highly visible for many years and significantly his professional career was in the field of education. After a number of years in the Glasgow Education System, McLaren became head teacher at Quarriers School for Special Education near Largs, where he now lives. Before retirement, Bob was active in the game as Ayrshire delegate to the Scottish Golf Union, which led to him being elected President in 1989.

As a member, now Chairman, of the Greenkeeper Training Committee from 1984 and a member of the four man R&A committee commissioned to further the cause of "The Way Forward", this first chairman of a Joint Golf Course Committee Panel stated quite simply, "I expect the next few years to be of great benefit to Golf Clubs and golfers". Of course, that is exactly what Bob McLaren has been doing for a long time past; so why should we expect less now?

Readers of Greenkeeper International are first to know the Terms of Reference for the JGCC. Here are extracts of consequence for greenkeepers:

To recommend standards of golf course construction and maintenance.
To work with National Golf Unions and other organisations for the improvement of education and professional standards for greenkeepers.
To promote golf-related turf research.
To encourage more effective committee structures and the formation of long term management plans within Clubs.
To raise funds for the furtherance of stated objectives.

If anyone can give reasons why these objectives are not in the best interests of golf, let him or her speak out in the next issue of Greenkeeper International. More to the point, the writer would love to hear from any- one with bright ideas towards dealing with the last of these Terms. Golfers are well known for their generosity in the clubhouse bar, let's hope they will spare the cost of a pint a year on behalf of one of the hot topics they pontificate upon, that being - whether they know it or not - "The Great Cause".

* The writer, Eric Shiel, is Executive Director of the Joint Golf Course Committee.
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Robert Trent Jones Jnr on the reality behind golf course architecture

I'm sure there are any who have ever played the game who haven't had visions of being a golf course architect? All golfers, from the top of the PGA Tour to the last little youngster in a junior tournament, all have illusions about the golf courses they play and those they would like to play. How often have you glanced out of the car window to see a grassy, wooded meadow and thought what a wonderful little 4 par that would make?

I did the very same thing in my younger days, and I still do. In my case, with a very famous father blazing a legendary trail in front of me, I actually did become a golf course architect.

Now that I look at it from the other side, it's amusing to hear the comment of golfers with regard to golf course design and construction. Years ago when Alister Mackenzie and Donald Ross were laying out courses, they would find a receptive piece of ground, a few mules and a drag line and get to work. A little mounding around the tees and greens, finishing work on the putting surfaces, some grass seed and a little water and you had a golf course.

However, in recent times, that has all changed. It often seems like most of the great sites have already been taken. In Japan they literally move mountains. In Hawaii we actually make topsoil out of lava rock. In the deserts of the Southwest we grow grass right out of the sand. In the US and Canadian Rockies we carve fairways right out of granite.

Finding the land is only the start of the puzzle. Then there is the endless permit process, including the EIR (Environmental Impact Report). Modern golf courses are now built to higher standards than ever before, and our private clubs and better public courses are now maintained in better playing condition than the generations before us ever knew. Even under ideal conditions, the design and building of a golf course today is a mammoth undertaking.


In our company we have four project engineers, all of whom are accredited golf and landscape architects and fine golfers who maintain single figure handicaps. Each is a member of the American Society of Golf Course Architects, a prestigious organisation which promotes and elevates the game in every way possible.

What's the point of all this? It is simply that the specialised construction drawings for grading, drainage, irrigation and the various other details are never seen by the golfer. The blasting and the handpicking of rocks occurs long before the first shot is hit. And the talented people who design and build golf courses are not often visible either.

Those beautifully turfed golf courses that you enjoy are not laid out casually on the back of an envelope. Nor are they the result of pushing a little dirt around and throwing some grass seed on the ground. They are the result of talented and skilful people devoting what is often the better part of three years to plan, design and construct.

So the next time you think about becoming a golf course architect, remember it takes more than just a good golf game. Just as becoming proficient as an expert golfer requires years of play and countless hours on the practice tee, so too is a long apprenticeship needed to be a real golf architect in fact. Just as the great player makes the game look easy, so the best of golf course architects often make their work look easy, too. Don't you believe it. I have a lot of dirty clothes and worn out shoes to prove how tough it really is!
It's a holiday and learning experience rolled into one – and it's the trip of the year and maybe the holiday of a lifetime!

As with this year's trip to Las Vegas, BIGGA will be joining with the IOG to visit the 1992 Golf Course Superintendents Association of America Conference and Show in New Orleans, which will be held from 10-17 February.

The trip will include an optional extension to Florida taking in the Everglades National Park, Key West and Fort Lauderdale for four days sightseeing and relaxation before returning home direct from Miami.

With a world class convention centre plus a rich heritage and countless cultural attractions, New Orleans will be an ideal venue for this prestigious event.

Two hotels are available - the Holiday Inn Crown Plaza situated about three blocks from the Convention Centre and the Quality Inn situated on Maison St Charles, a 20 minute walk to the centre and French quarter. Both hotels have all the usual facilities and are of the standard expected from four star hotels in America. Included in the itinerary is a three hour tour of the city on the Thursday morning which will enable the group to gain a feel for the area. Flights will be with American Airlines departing from London Heathrow, with an optional supplement from Manchester.

Those joining the extension will depart New Orleans on 18 February for Miami where mini buses will be waiting to pick-up the party and will be used to transport the party during the four days. Arrival is anticipated by lunchtime at the Comfort Inn Hotel at Deerfield Beach, just north of Fort Lauderdale, giving an afternoon of relaxation before continuing the following morning via the Everglades (boat tour included) and the 49 bridges to the most southerly point in the USA, Key West, for the last three nights. In addition to the good beaches, a number of places are available to visit, including the world's second largest coral reef.

At the end of three days in Key West, the party returns to Miami for a non-stop flight to London, which departs early evening. Please complete and return the booking form - this can be photocopied or the details can be written on a plain sheet of paper if you don't wish to cut up your magazine.

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At a time when greenkeepers are making such great strides in presenting a professional image I found such behaviour beyond comprehension. The act is not just irresponsible, it is tantamount to criminal theft. Personally I am all in favour of a good flogging! — editor.

May I respond to Jim Arthur's article 'When Will They Learn', which I found entertaining. However, the facts are misconstrued. Grass needs a balanced diet of nitrogen, phosphorus and potassium, as well as micro nutrients. There are a lot of phosphorus and potassium deficient courses all over the world and as phosphorus can be available or unavailable, why not take the guesswork out and recommend soil testing?

Penncross was not bred to replace Bermuda grass in warm areas of the USA. It was bred to out compete Poa annua in cool northern climes, as a cool season grass. Because of its superior putting quality it has been pushed further and further south to replace Rye and/or Bermuda grass greens. Management techniques in the south are quite different to those in the north. It is a cool season grass, very aggressive in growth habit. If not managed properly it will thatch and spike and, however, if managed properly it produces a very good putting surface.

The principle behind USGA Spec, greens is improved drainage and reduced compaction — the biggest problem all over the world. Common sense tells me that USGA Spec or other greens which drain well and do not compact would be most desirable in the south of France, designed by Donald Steel and built by our 'First of the Summer Wine' competition sponsors, Brian D Pierson (Contractors) Ltd, the next best thing is to enjoy some of their tempting wines. Results of the competition are now available and reveal the following three members as lucky winners of a case of wine bearing the distinctive Chateau des Vigiers label: Terry Trench from Northwich, Cheshire, Angus Gray from Stanton in the Wolds, Nottingham, and Richard Whymann from Bude, in Cornwall.

These three, selected at random from the competition postbag, will shortly be receiving their prizes for correctly completing the answers, which were:

COMPETITION RESULTS

Short of actually visiting Chateau des Vigiers Golf and Country Club in the south of France, designed by Donald Steel and built by our 'First of the Summer Wine' competition sponsors, Brian D Pierson (Contractors) Ltd, the next best thing is to enjoy some of their tempting wines. Results of the competition are now available and reveal the following three members as lucky winners of a case of wine bearing the distinctive Chateau des Vigiers label: Terry Trench from Northwich, Cheshire, Angus Gray from Stanton in the Wolds, Nottingham, and Richard Whymann from Bude, in Cornwall. These three, selected at random from the competition postbag, will shortly be receiving their prizes for correctly completing the answers, which were:

I was intrigued at the introduction into the UK of the Toro Hydroject 3000 ('Shot in the Dark' — June issue) and greatly admire the design of this beautifully engineered product.

I am among the first to applaud new thinking in the field of surface and sub-surface cultivation without disruption... but the article, written not unexpectedly with an American slant, compares water injection only with core-aeration and implies that this is the only conventional method of aeration.

Of course, in the USA, regular slit-tining for sub-surface cultivation does not feature in many maintenance programmes, whereas in the UK greenkeepers have for years slit-tined on a regular basis to fulfil most of the needs described. Many would refute, on this side of the Atlantic anyway, that coring is the only conventional method of aeration.

'Compaction pans' due to repeated cultivation to a uniform depth are a phenomenon more prevalent in the USA. British greenkeepers, with solid support and recommendations from consultants such as Jim Arthur, have for many years been regularly slitting at four, six, eight inches and deeper, with such as the Hydromain, to avoid such a pan developing.

The long, uncompacted hole produced by such tines have side walls of a considerable area to absorb air and moisture, promote gaseous exchange and encourage deeper root growth, all contributing to a healthier sward. I wonder why the research in Michigan compared work on plots which had only received hollow-tine or non-cultivation? Surely on such areas any type of deep penetration would provide conclusive improvement.

Interesting also that soil strength measurements showed water injection treatment effective to a depth of four inches against hollow-tining at only two inches! When necessary we are consistently core-aerating to four or five inches, with measurable cores on the surface to prove it. It must be difficult (or at least time consuming) to truly assess the regular penetration depth of a jet of water into a surface where degrees of compaction are variable.

I may well be accused of bias, perhaps justifiably, but it seems to me the title 'Shot in the Dark' is apt. Perhaps we need a little more light on the subject.

ARThUR HARRISON
SISIS Equipment (Macclesfield) Ltd

To David Golding, Education Officer

I have recently been accepted for a Greenkeeping Management course at Oaklands College and seek your help in gaining practical experience whilst progressing toward my qualifications. I live on the Herts/Beds borders and wish to enter the greenkeeping profession. I find that without practical greenkeeping experience my college progress is hampered. Can any Club use a willing and eager extra hand?

DAVID DAY
70 Woodside Rd, Lower Woodside, Caddington, Beds LU1 4DQ
As the final cheers for Ian Baker-Finch die away, the machine-gun fire of champagne corks in the R&A and VIP hospitality marquees finally fade and the back slapping ceases, thoughts of the greenkeeping cognoscenti turn, not surprisingly, to the part played by BIGGA members in this most spectacular sporting pageant of all time.

The Open is really something special for a multitude of reasons, for just as the game could not take place without world class professionals, so also it could not take place without the care taken over so many months by a group of dedicated professionals from a different school - I refer of course to Royal Birkdale's Tom O'Brien and his team, and to a lesser, though no less important, extent to the spirited team of BIGGA greenkeepers who assisted so ably throughout the Championship. To Tom and his crew, and to all those who by their presence and hard work made the 120th Open the huge success that it was, we offer our sincere thanks. In addition, although they probably don't realise your importance in quite the way that we 'in the know' do, it is proper at this time to extend gratitude - as though it came unsolicited - from the hundreds of thousands of spectators who marvelled at the splendour of it all.

Words alone cannot tell the story of The Open, or of BIGGA's increasingly important part in it all, so let these photographs tell our happy tale of 'one week with BIGGA at The Open Championship.'
thank-you
Soil science is one of those subjects that either interests people or it doesn't, yet if you think about it, most of the problems that are likely to be experienced on a golf course are related in some way with what goes on under the turf. Drainage, compaction, turf nutrition and irrigation are all extremely topical areas for discussion and all come under the umbrella of soil science in some form. Sand greens are promoted as the answer to all our problems of poor drainage and playing quality, yet how much detail is used to explain that these greens are also artificial creations for which the physical, chemical and biological characteristics associated with 'traditional' soils simply do not apply.

In short, I believe that many greenkeepers experience only the bad side of soil science, i.e. once it has caused a problem. Unfortunately, many will be in the almost permanent position of batting against the undesirable side of soil science (e.g. compaction, poor drainage, drought) simply because the increase in traffic over the last few years has put constraints on the soil that did not exist in the past. In contrast, new courses that are currently being built should be constructed with many principles of soil science firmly embedded in the specifications if the project as a whole is to succeed. Therefore the greenkeepers of these new courses theoretically should not experience the same degree of difficulty experienced by greenkeepers of many older courses. I say theoretically because this all hinges on soil science being very much part of the golf education scene.

**SOILS AND CONSTRUCTION**

In my time as a research scientist and soils consultant and more recently as a turfgrass and soils lecturer at Lancaster College of Agriculture and Horticulture, I am often amazed at how so many principles of soil science continue to be ignored, particularly when the whole approach to construction is tackled from a civil engineering angle. Take for example the photograph opposite. This shows a cross-section of a sand carpet construction where approximately 100mm of medium-fine sand was placed over existing topsoil which has been intensively slit drained. What you should see is a layer of medium-fine sand overlaying a blinding layer of course sand (which there is), overlaying a layer of clean gravel in the slit drain (which there isn't).

What happened was that a layer of soil (marked by the arrow) was pushed over the gravel in the slit drain during construction so that there is now no direct drainage connection. The consequence of this action was a complete failure of the system to remove surface water during the winter period, such that the whole construction had to be re-drained with new sand-gravel slits after only one season of use. This sort of example gives sand constructions (of which the picture is only one type) a bad name.

**SAND AND PEAT**

Another area that gives sand constructions a bad name happens nearer the surface. When using sand as a construction or maintenance medium, provided that the correct type of sand is used, it is true that some problems of poor drainage and aeration can be overcome. However, solving the primary problem of drainage creates other difficulties relating to water storage and nutrition. Adding an organic amendment (usually peat), which helps overcome water and nutrition shortfalls, is regularly carried out and indeed again it is true that an increase in water holding capacity is achieved in classic 'law of diminishing returns' fashion. For the purposes of soil science, however, adding peat to pure sand or even to a sand/soil mix is in my view a misguided horticultural legacy, particularly when the peat is incorporated only in the surface of the construction. Consider the origins of peat – it accumulates in cold, wet, often high up places where anaerobic conditions prevail and organic matter decomposition is severely retarded – and yet here we are adding the material to a growing medium with no biological activity whatsoever and suddenly expecting the rootzone to drain, to provide water and nutrients, to provide an acceptable level of aeration and to absorb the impact of golfer's feet – all within a few months of being created.

What often happens to the peat is that with time it separates out into a separate layer, which, if it doesn't, yet if you think about it, most of the problems of poor drainage and playing quality, yet how much detail is used to explain that these greens are also artificial creations for which the physical, chemical and biological characteristics associated with 'traditional' soils simply do not apply.

In short, I believe that many greenkeepers experience only the bad side of soil science, i.e. once it has caused a problem. Unfortunately, many will be in the almost permanent position of batting against the undesirable side of soil science (e.g. compaction, poor drainage, drought) simply because the increase in traffic over the last few years has put constraints on the soil that did not exist in the past. In contrast, new courses that are currently being built should be constructed with many principles of soil science firmly embedded in the specifications if the project as a whole is to succeed. Therefore the greenkeepers of these new courses theoretically should not experience the same degree of difficulty experienced by greenkeepers of many older courses. I say theoretically because this all hinges on soil science being very much part of the golf education scene.

**ANAEROBIC ROOTZONE**

Whilst at Aberystwyth I made a study of a sand construction which had gone anaerobic due to the addition of peat as an organic amendment at the surface. The study showed that the total amount of organic matter in the peat/sand layer (0-20 mm) was very closely related to the redox* potential of the same layer. What was also particularly interesting was that it was possible to show that the amount of roots growing beneath the anaerobic zone decreased the more anaerobic the peat/sand layer became. We are generally quite accustomed to a physical barrier reducing root growth at depth, but a chemical barrier can also have serious consequences, *The lower the redox value, the more anaerobic the soil – it can even become negative.

**BLACK LAYER**

Furthermore, the same sort of problem can occur with time even when organic matter has not been deliberately added during the construction phase. We are very fortunate at Myerscough to possess some of the oldest constructed sand greens in the country and it is only now that some of the undesirable side effects of certain sand greens are coming to light. Many of you may have come across the dreaded black layer, something which develops particularly in sand constructions as a result of a change in the chemical nature of the rootzone. It may develop in more traditional greens as well, except perhaps we just don't see it.

What is this mysterious black layer? Originally I had assumed that it always represented an anaerobic layer of peat that had become buried by sequential top dressings. Indeed one of the conditions for a black layer to develop is that a source of organic matter must be present to act as food supply for anaerobic bacteria. However, in this particular sand green at Myerscough, which was constructed in 1980, a black layer has developed where the organic matter source comes not from peat but from a natural build-up of organic matter from decaying grass roots and stems, better known to us all as thatch! (a photograph on Page 17).

This build-up of thatch has occurred under anaerobic conditions for two reasons: first, the green was sown with a creeping bentgrass (a turfgrass still causing much controversy) which is well known to be a voracious thatch producer and it has not been particularly well controlled on this green over the years; second, this sand green is a classic example of where the principles of drainage have been ignored – not, I hasten to add, through the fault of the college staff, but because the manufacturers of this particular system (for which there is a patent) insisted on a certain type of sand, which by today's standards would be totally inappropriate. The result of using this sand has been that the
A black layer in a pure sand green. This layer has developed because conditions in the green are anaerobic for long periods, due to inappropriate choice of sand and deficiencies in maintenance. This is formed by metallic sulphides (e.g. iron sulphide) which are created under intensely anaerobic conditions by sulphur-reducing bacteria. These intense anaerobic conditions are sufficient to kill turfgrass roots.

DEVELOPMENT OF BLACK LAYER

One reason why the black layer may have developed so quickly may be due to the regular use of ammonium sulphate and iron sulphate, both of which are acidifying fertilisers and which favour chemical reduction in anaerobic soils, in addition to providing sources of soluble iron and sulphur. We need further evidence of the importance of these sources. Certainly, detrimental consequences are not inevitable with their use and at the moment I would not hesitate to continue using both types of fertiliser.

To summarise, there is a complex chemistry occurring beneath the surface of golf greens, including some which we consider to represent the ideal free-draining growing medium. Development of the black layer is an extreme example of deterioration brought about through lack of adequate mechanical maintenance to improve aeration and prevent accumulation of organic residues. Problems in maintenance are often – as at Myerscough – compounded by errors in design specifications. Finally, I would finish by stressing that soil science is important to the greenkeeper and you are in the extremely fortunate and rare position of regularly being able to inspect the soil in your greens every time you change a hole – something which happens in no other sport. Make the most of this opportunity.

• The author, Dr Richard Gibbs, is a Senior Lecturer in Turf and Soil Science at Lancashire College of Agriculture and Horticulture. He acknowledges with gratitude the provision of analytical data on black layer by Dr Bill Adams and the assistance with redox and peat measurements from Dr David Lance of Land Use Consultants, Devon.
The First Garden City - Letchworth - was and is the most successful township "planned to ensure the health and happiness, dignity and freedom of its inhabitants." Unquestionably, it still remains the very best of such 'dream' concepts and a near perfect model to this day for civilised town dwellers the world over.

That the good burghers of Letchworth saw old Ebenezer Howard's vision through to reality is clear at every turn - it really is a bonny place - as also are the results of some prettiness clear thinking that began perhaps even before the first dream houses were built in 1904. In that year the professional from West Herts Golf Club, Alfred Tingey, was commissioned to design nine holes on what was then the Manor Park of Letchworth Hall, with a year or so later a somewhat rough and ready course opened for play. Like many such unsophisticated courses of that era, it served an initial purpose and was okay in its way, though according to their first professional, Bert Ashby, who seemingly doubled as a greenkeeper, "the greens were hardly bigger than the tees, the fairways were narrow tracks covered with weeds, and nettles abounded in the rough".

DAVID WHITE

At some point in 1909, 'having regard for future development of the course', £10 was set aside to look into the prospect of planning an extended course and the six times victor of The Open Championship, the near-invincible Harry Vardon, was invited to look the place over. His 'thumbs-up' opinion was followed by his own detailed architectural plans to re-design the existing nine and further extend the park to 18 holes - at a cost of £500 - and although the Club only had £64 in the bank, somehow the funds were found and the course laid out to Vardon's specifications, remaining much the same as Harry saw it to this day.

Those who hold office at the Club seem to have been astute in many of their decisions, not least their choice of head greenkeepers, for in 86 years just six men have held the post, the last and present incumbent being Duncan McGilvray, a young Scot who joined them nearly four years ago.

To learn more of the course and the man, I took time out to play a round with Duncan, taking in the delights of real parkland golf whilst listening to him and absorbing many of his thoughts and ideas. "How was it", I asked, "that a man celebrating his 38th birthday this very day, comes to be Course Manager of one of Hertfordshire's most prestigious courses - what path did you take?"

Like many a young Scot before him, Duncan took to greenkeeping straight from school, guided by some of the very best head greenkeepers whilst gaining theoretic knowledge through college tuition. For ten years he remained in or around his birthplace of Edinburgh before moving south to England, where he took work as a head greenkeeper, first for three years on the seaside links of Great Yarmouth and Caister before moving inland to Bramall Park in Cheshire for six years and, just under four years ago, to Letchworth. He was hired as course manager from the start, inheriting a situation which the Club saw as being 'an awful lot of problems on the course' and which no one on committee had the skill or knowledge to effectively oversee. A man to manage totally was their brief. The idea of an old style doffing of the cloth cap and grubby overalls image was not part of Duncan's make-up and he straightaway presented the Club with a 15 point management plan - culled over many years - which clearly impressed both the committee and John Campbell, who sat in at his initial interview.

Just as Duncan was impressed by the Club, who had made a radical decision about that time to dispense with a green committee, so were they impressed with him. They needed someone to take total control and they saw him as their man. There is just one committee member with whom Duncan negotiates, a green convener or course liaison officer, who having spent one year under the previous convener, learning the ropes so to speak, will hold office for five years. He reports to the management committee on course matters, but as Duncan was pleased to point out, no policy decision made previously can be changed. Committees come and go but policy once decided continues, and Duncan's number one point of his 15 point plan was to take an active

Doffing of the cloth cap wasn't for Duncan McGilvray.

When he joined Letchworth, he brought with him a 15-point management plan, as

DAVID WHITE reports
role in the formulation of such policy.

From the very onset the Club was behind him all the way, with a committee stalwart, Brian Hodder, arranging for the local 'Citizen' newspaper to print photos of Duncan and his course and introduce him to the golfing community. Soon a Club newsletter featured the new incumbent and within his first year he presented a detailed course discussion evening – now an annual feature – in which he presented to over 200 members his thinking behind course planning and maintenance. Duncan smiled as he recalled the title of that first talk, "The Way Forward", which can now rightfully be seen as the forerunner of the R&A document which was launched in 1989. Did they, one wonders, hear of the Letchworth initiative beforehand?

Talking of the course, his first and main aim was to reclaim indigenous grasses and eradicate thatch and Poa annua, whilst at the same time managing the course in such a way as to not alienate either his members or visitors while the change was taking place. Judging by the deliciously true hand-mown greens, he's winning that particular war and his members must be well pleased. His other primary aim, an admirable one, is to protect the environment and to that end he is a founder member of the School of Minimal Use of Pesticides and Herbicides. He's a confirmed admirer of Jim Arthur and believes in his doctrines.

"What are you most proud of?" I asked, and without hesitation he cited the achievements attained with his team. 'We've gone from their working in often confused and opposing directions into a tight and highly motivated group, spending over 70 per cent of our working time actually on the playing surfaces and with each man knowing full well the reasons behind every move we take. I've brought them forward to a point where if anything should happen to me my second in command could take over and each man could move up a place. The Club would not be in a panic situation, something that isn't always the case at some Clubs I could mention, and I claim training as the reason, the effective management of people'.

I was equally impressed to find work well under way on an independent water source – a borehole – which is part of the long-term management plan and nearing completion. The borehole is 185 feet deep and is being installed with an assured yield test of 5,000 gallons an hour, far more than the Club will ever need but nevertheless guaranteeing them a tested and no doubt comforting water source for the future. The contractors were doing a tidy job, with the accent yet again on minimal disturbance to players. Duncan's throwaway line – "all down to forward planning some three years ago" – appeared matter of fact, almost casual, but I sensed nevertheless an unrestrained feeling of pride in his comment.

Duncan is a keen golfer and succeeded in taking me to the cleaners for a modest wager, his belief being that without access and knowledge of the game – especially on home territory – it was less than easy to discuss any finer points of the course. Having finished our round I warmed still further to this very likeable personality when he confided in me that he held his employers in high regard. 'The Club is not run as a business', he asserted, 'but it is run in a totally business-like manner, and I'm proud to play a part in that business team'. I formed the view that his Club might well share that same pride in him.
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A Ransomes PLC Company
It outgrew three sites before being established at the East of England Showground: now the IOG's 45th Sports and Leisure World Trade Exhibition, on September 3rd, 4th, 5th, promises the lot.

by BILL MILLS and DAVID WHITE

There are still a few ill-informed people who believe that the game of golf originated in the Netherlands, from whence it was exported to Scotland. A likely story!

Certainly, the game was sufficiently well established in Scotland in the 15th century to be prohibited by the authorities, on the grounds that it interfered with the practice of archery. The ban, however, was not universal because it is recorded that James IV of Scotland was at this time having his golf clubs made by a bow-maker from Perth. Perhaps he sailed across to Holland for his round?

Whatever the origins, there is no doubt that the Scots - pushing out the frontiers of civilisation - took the game with them, which is why golf is now the most widely-played game in the world. However, in the rest of the UK, golf was mostly the preserve of the rich and leisureed, remaining such until the great social changes which followed World War II opened the game to a much wider and enthusiastic sector of the public.

It is ironic that golf was prohibited in Scotland during the 15th century because it clashed with archery practice and the defence of the realm, for some 500 years on the ⤵ 22
Two-hectare demonstration site will feature the latest in turf technology

21 - talk now is of converting parts of some surplus Ministry of Defence training grounds into golf courses!

The Institute of Groundsmanship, or the National Association as it was then, held its first exhibition of sportsground machinery and materials in 1938. This was so successful that a second and bigger exhibition was planned for September 1939. In the event, the little fracas started by Adolph Hitler in September of that year meant that exhibition number two was not held until 1947. By then many greenkeepers and groundsman had laid down their arms and picked up the tools of their trade once more, but it was a changed world for them as well.

Wartime research and development had produced engines, both petrol and diesel, which were more efficient and which had an improved power-to-size ratio. Research by ICI into increased agricultural crop yields had a spin-off in the discovery of weed-killers which were selective on either monocots or dicots. The story of DDT and the chlorinated hydrocarbons was another that emerged but has been told so often that it does not require further airing here. Suffice to say that they were efficient products of their time and it was to be many years before the potential dangers in their use were recognised.

The study of land drainage was becoming more of a science than an art, although there was - and still is - the touch of the artist in a well-laid system. The importance of correct sands in the construction and maintenance of greens, tees and bunkers was receiving critical attention and, all in all, a whole new world of technology was opening up.

As more new and proven products became available so also did the IOG exhibitions expand to accommodate them. This is the reason the show has outgrown three sites and is now established at the East of England Showground, Peterborough, where there is room for expansion well into the 21st Century. The 45th Sports and Leisure World Trade Exhibition, held on September 3rd, 4th and 5th, will be a comprehensive selection of the best (and safest) machinery, fertilisers, herbicides, pesticides, soils, sands and seeds for construction and maintenance, used by professionals.

On the two-hectare demonstration site, laser-controlled trenchers and graders, a variety of earth-moving, cultivating and turf conditioning machinery, plus the latest in spraying and irrigation equipment, will be seen in continuous operation under practical working conditions.

Assembled in one area are the cream of the horticultural colleges and advisory services, where information regarding training courses and advice on turf-related problems will be readily available.

All this, and much more, on show at what has been described as - the greatest show on turf.

Now there's a new multi-purpose machine for all year round groundcare - the Bucher Multi.

Built by the Swiss for all round adaptability, the Multi can take on cylinder, rotary or flail mowers for fast productive cutting in summer, or a front brush, or snow blade for cleaning up in winter.

Now, when you're looking for a machine that works like clockwork all year round, take a good look at the Bucher Multi - there's no machine more adaptable to your demands for all year round productivity and time saving potential.
What you can expect to see: a Greenkeeper International feature on who's showing what at the IOG Show

‘Exciting newcomers’ from Vitax

Two exciting newcomers into the VITAX SPORT AMENITY range will be shown at IOG.

Vitax Gro-Cover is a clear microperforated polythene fabric that provides an ideal protected growing environment. For grass seed establishment it gives between 4-7 days earlier germination plus greater uniformity of growth. It gives greater protection against birds, wind and washaway and enables seed germination in problem areas.

Vitax Weedblock is a highly porous landscape mulch fabric allowing maximum air and water movement to the soil, it is lightweight, easy to cut and gives dramatic reductions in site maintenance costs, eliminating herbicide maintenance treatments and reducing amounts of mulch material used.

Prototype marking machine unveiled

After months of research, design and testing, SUPATURF PRODUCTS LTD will be unveiling their carefully guarded prototype of a new Top Line marking machine. This will be alongside their other new additions, including the electric pump unit which can be fitted to an existing standard Top Line machine to automatically compress the air in the tank to the correct level. As more wetting agents come onto the market, Supaturf will again be challenging their effectiveness against their own Aqua-Gro.

Also shown will be a new adaptor for the Aqua-Gro Advantage, the system for applying Aqua-Gro wetting agent through a hose pipe. This fits into an applicator to facilitate a fast, secure connection to all main hose pipe fittings.

New concept for sportsturf

CAMBRIDGE ASSOCIATES are unveiling Geoffrey Davidson's totally new concept which is of major significance for sportsturf. Dual Plane Oscillation is a technique with a number of applications: 1) Low cost sand slitting - one rapid pass of the machine cuts the slit, excavates the soil and very tightly packs in the sand. Typical would be a width of 30mm, depth 300mm, and both can be greater or smaller. 2) Profound deep fissuring down to a depth of 450mm with horizontally oscillating wings on a vertically oscillating blade. 3) Wide warning tape simultaneously laid horizontally above deeper cable during installation by this trenchless technique.

Faster Veemo scarifier on show

SISIS will exhibit for the first time a hydraulic fully-mounted, triple version of their renowned Veemo scarifier. Close coupled to the tractor (27hp+), the fully floating units snugly follow ground contours and produce a high work rate at speeds up to 6mph – faster than comparable machines. The three 30' units produce an overall 76” -> 24
Whether you're constructing a new green, or repairing an old one, the final surface must be the same... pure, true and firm. And there's no better start than laying GREEN KING turf from Tillers.

That's because GREEN KING is grown using the best possible varieties of fescue and bent - Bardot, Sefton, Center and Oriflamme. Varieties that have been bred to survive under close mowing. Compact, dense and fine leaved.

And because GREEN KING is grown on sand you'll never get water standing on your greens. All designed to keep the members on the course, and not on your back.

Ask about our tees turf, too, by calling free on our Adviceline 0800 591666.

TILLERS pioneers in turf technology
Tillers Turf Company Ltd., Castlethorpe, Brigg, South Humberside DN20 9LG. Telephone: 0652 650555. Fax: 0652 650064.
IRONS

Beaver TM708. The legendary 7-gang hydraulic mower has a huge 16ft cut to mow fairways in championship time. Fully floating 8" or fixed 10" cylinder heads, with a choice of blade configurations and rollers, follow the fairway contours to leave a superb finish.

WOODS

Where the fairways stop, the Beaver T12 starts. With its 74" cut, hydrostatic transmission, low centre of gravity and 7" cylinders with 4 or 7 blade option, it's ideal for mowing around tees, surrounds, bunkers and fences.

See us on Stand M45-60 at the IOG Show
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See us on Stands G28 and 29 at the I.O.G

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See us on Stands D25, 26 and 44 at the I.O.G.
More irrigation innovation

WATERMATION will have on display their large and ever increasing range of sprinklers and controllers for sportsturf and landscape irrigation, with most of the equipment made in England by Watermation themselves. Always to the front when it comes to innovation in irrigation equipment, a visit to the Watermation stand (M30-31) is a must this year in order to see their new breakthrough in control, which Director Eileen Hawthorn assures us will make the greenkeeper’s life very much easier, something we all applaud!

Grinding without a strip-down

ATTERTON AND ELLIS will hone in on your attention whilst demonstrating the sharpening characteristics of their machines, capable of handling all sizes of cylinders and bottom blades. The company’s Express Dual cylinder grinding machine (pictured) is capable of both in-situ or plain cylinder grinding on a wide range of lawnmowers. When in-situ, the grinding cycle takes place without the usual strip-down, as the complete mower is located centrally on the grinder and locked into place. Separate cylinder grinding may also be undertaken when busy periods are over and the mower requires a full service. Their full range will be on working display, so sharpen up and make a visit!

Cost-effective tree moving

RUSKINS, specialists in tree moving, will display two new machines; the first being ‘Eager Beaver’, a versatile machine that combines the function of a tree spade, fork-lift and crane to provide a quick, efficient service to golf courses where large areas have to be covered and access is often difficult. Second is a combination of truck, tree mover and lorry loader. Trees can be lifted, rootballed, loaded and transported by a single operator. With these new machines Ruskins aim to offer a tree moving service that will be more efficient, practical and cost-effective than anything available hitherto.

Largest turf grower’s local service

ROLAWN is the only national turf company with a local service providing cultivated turf in any quantity direct to the end-user from its own network of depots. Customers may collect or have turf delivered, frequently within 24 hours of ordering, and they proudly boast a virtually uninterrupted turf supply throughout the year, with most of their land now under irrigation. With production approaching 3,000 acres, they are the largest European turf grower, achieving notable success in exporting greens turf to Ireland, and have a partnership agreement with a French turf grower. Rolawn ➢ 29
A GREEN MACHINE THAT DOESN'T COST THE EARTH.

Put other greens mowers alongside a Lesco and you'll notice the difference. Ours is simple in design, sophisticated in performance and built with that American expertise. Yet it has no fancy bodywork, no hard-to-get-at mechanics. So what you see, is what you get. That makes it the best value professional greens mower on the market today. There's a choice of diesel or petrol power and all the optional extras you'd expect from one of the world's leading manufacturers. Best of all is the price. It's as low as we can get without compromising on quality and you'll find that a contrast to some other green mowers we could name!

Call now for your local dealer details.

CDC Group plc, Chapel Works, Waldringfield, Woodbridge, Suffolk IP12 4PT. Telephone: 0473 36791
Advanced Top Dressers

New from CHARTERHOUSE will be their range of advanced Top Dressers, machines that incorporate all aspects of the Charterhouse robust design and high work rate and engineered to meet every need, from light top dressing to applying 400 tonnes in one day. Built to last and perform well, Charterhouse realise that speed and reliability are at the essence in these cost effective times.

Kubota to reveal new model

The wraps come off a brand new tractor by KUBOTA for the first time at IOG, with curiosity eating at the soul of journalists denied a sneak preview. With secrecy the Kubota watchword, one can expect the new model to be something quite exceptional and our curiosity knows no bounds. Also new will be a range of mowers and grass collectors which have been developed to meet the needs of the professional greenkeeper as well as local authority markets and the landscaping industry. The existing fleet of ride-on mowers, compact tractors, generators, tillers, brushcutters and hedge trimmers will also feature, the whole promising to be a veritable Kubota jamboree.

Tillers promise superior surface

TILLERS TURF LIMITED, one of the country's leading growers of top-quality turf, supply three grades: Green King for golf greens, Lawn King for lawns and golf tees, and Arena for landscaping and soccer pitches. All Tiller turf is grown on sandy soil with excellent drainage properties. Of particular interest to the golf industry will be Fibreturf, a natural turf system that combines the durability and easy maintenance of artificial playing surfaces with the playability of natural turf. Already proven at Sunningdale, the system comprises a sand rootzone, 3-4" thick and reinforced with artificial fibres, which is seeded or turfed. The result is a superior playing surface that drains freely and does not break up to produce divoting and erosion under heavy use. Maintenance can be cut by 50% or more compared with conventional sand/sand constructions.

Additions to Hayter Beaver range

HAYTER BEAVER will be occupying one of the largest stands, where visitors will see a number of exciting new additions in the Hayter Beaver Livery. Secrecy is the watchword at IOG this year and the company's most impressive developments are still closely guarded and will not be unveiled before the show. Following the outstanding success of the Hayter Murray 10/30 garden tractor, the 18/46 will be seen for the first time in the UK. This up-market machine is fitted with a Briggs and Stratton twin cylinder I/C engine.

WELCOME TO A WORLD WHERE WORMS AND INSECTS ARE LESS OF A PEST.

CROSSFIRE and CASTAWAY PLUS give effective, economical control of most turf pest problems. CROSSFIRE is a broad-spectrum insecticide for use where worm control is not needed. It gives specific and economical control of leather jackets and frit fly and helps in the establishment of newly sown turf areas.

CASTAWAY PLUS selectively controls casting worms yet leaves many non-casting species unharmed. It's unique liquid formulation is extremely easy to use. Castaway Plus is also available in CDA formulation. No water to add, no mixing, no handling of chemical - the product can be applied through most CDA lances with a droplet size of 200-300 microns.

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A CLOSE SHAVE

If you're looking for a fine cut mower for golf greens, bowling greens or cricket wickets, then you need look no further than the Allett Super Shaver. The Super Shaver can cut to within 1/16" and give a superb finish with 146 cuts per yard. All rollers are ground for absolute precision and the mower is powered by a Robin engine, which runs on lead free petrol.

For further details please contact:
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TEL: CORBY (0536) 68950. FAX: (0536) 201856.

See us on Stands L32 and 33 at the I.O.G.
The Allen 218Si mower

reserved for the Mustang ATM All Terrain Mower. Redesigned from the Tracer ride-on, the Mustang is a 42" ride-on, go-anywhere, machine powered by a Briggs and Stratton 16 hp Vanguard engine. Featuring ATV tyres and hydrostatic transmission, it will be right at home on slopes and softer ground.

Famous names’ complete range
Two famous names, **RANSOMES** and **CUSHMAN**, will feature prominently on Ransomes stand, for Ransomes acquisition of the Cushman Ryan group has further transformed the company from a grass cutting machinery specialist into the world’s leading manufacturer of equipment for all aspects of turf care. Ransomes now offer a complete range, from pedestrian and ride-on mowers to the Cushman multi-purpose Turf Truckster and Ryan aerators, power rakes and overseeders. Also shown will be equipment from Ransomes recently acquired company, Morel, which produces a range of leaf and refuse sweepers. As is always the case, Ransomes will also take the opportunity to launch new products at this year’s IOG.

Advances in turf preparation
Pre-turfing preparation times are being slashed with the introduction of the new service by **LAWN TECH** that will take advantage of a major advance in such preparation. The specialist operation is being established to support the company’s installation teams, where contractors and others are looking for speed with significant cost benefits. The service is being launched at IOG when the wraps come off a new machine, joining a family of Lawn Tech equipment that is helping them change the nature of the industry – as well as the landscape. Earlier innovations include the TIM750 machine – the first of its kind – able to lay continuous lengths of turf up to 30m long from an automated spool.

American import a ‘great success’
**CDC GROUP** have now completed one year importing Lesco from the USA. The 300 Greensmower has been a great success, with quality of cut combined with simplicity impressing on demonstrations. Greenskeepers have complimented on the ease of maintenance and the common sense of its design. CDC have proved that these machines can be competitively priced, the 300 coming in diesel or petrol or, as in deliveries to Ireland, even converted to LPG. The 500 is a lightweight fairway mower and is a realistic alternative to similar higher-priced equipment. It is based on the

![The TIM750 Turf Installation Machine](image)

![The 4 wheel drive 350D which will be on show at IOG](image)

The finest topdressing and root zone mix
When it comes to construction and maintenance of golf and bowling greens, Fairfield have the finest materials to help you achieve the finest finish. Use Fairfield root zone mix to construct your greens and a regular application of Fairfield topdressing to maintain them... and you'll have the finest greens around.

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* *
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It's an aerator...

4-wheel carrier...

The Ransomes-Cushman Turf Truckster is simply the most versatile vehicle ever seen on a golf course.

Available in 3 or 4-wheel versions, it's built tough like a truck. But a truck that thinks it's a fleet.

That rugged chassis will accept a dozen different turf care attachments. And most of them can be changed in minutes, without tools. So you

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△ A 3 or 4-wheel carrier...

The Ransomes-Cushman Turf Truckster is simply the most versatile vehicle ever seen on a golf course.

Available in 3 or 4-wheel versions, it's built tough like a truck. But a truck that thinks it's a fleet.

That rugged chassis will accept a dozen different turf care attachments. And most of them can be changed in minutes, without tools. So you

△ It's an aerator...
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Please send me full details of the Ransomes-Cushman Turf Truckster range, and ask my local dealer to contact me to arrange a week's trial without obligation.

GLB91

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get the right equipment for every job, with all the economy of a single, reliable power unit.

Developed and proven over almost 30 years of leadership in the USA, the Turf Truckster sets a standard that no one can match.

And when it has the spares and service support of Ransomes' nationwide dealer network, why have any truck with anything less?

A top dresser, sprayer, slicer, corer and more besides.
Here at Atterton & Ellis we have been making Grinders for over 100 years and although we say so ourselves, we are rather good at it and our Grinders prove it! It is hardly surprising that during this time we have made Grinders for just about every type of cylinder on the market and for most of the prominent Grounds and Golf Clubs around the country.

In fact, in our work shops at the moment we have Express Duals ready to go to America – the Atterton is well proven on the other side of the Atlantic too!

Our customers tell us the reasons we are still in demand 100 years on – our dedication to service, the quality of build, the value for money – they all add up to the finest Grinders available today.

We have constantly changed and adapted our manufacturing techniques to combine the best of yesterday’s skills with the benefits of tomorrow’s technology.

But more important than all that we are first and foremost Grinding enthusiasts and are happy to talk and give advice whatever your grinding requirements.

The Atterton Master leads the field – The Express Dual a technological revolution, in-situ and separate cylinder grinding – The Anglemaster, a bottom blade grinder to complement the best in cylinder grinding machines.

"UNBEATABLE PEDIGREE"

ATTERTON & ELLIS LTD
Manufacturers of Fine Grinders for over 100 years
Iron Works, Haverhill, Suffolk CB9 8QH.
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31 300 design and though lightweight, provides enough power to produce an unrivalled standard. The disengaging of outside units could not be easier. CDC intend to introduce the complete Lesco range over three years.

Workbenches good news for backs

With impending EEC Health and Safety Directives on lifting in mind, R+R (UK) LTD will be showing their range of Groundsman hydraulic workbenches. Designed to improve efficiency whilst reducing the risk of back injury, these have provided popular with anyone involved in the maintenance of heavy equipment. The 1m wide x 2.2m long Groundsman (pictured) will easily lift ride-ons, ATVs etc. with a payload of 400 kg and is available with smooth or anti-slip checker surfaces. Its smaller stablemate, the Junior Groundsman, is ideal for mobile operations or workshops with limited space.

Keep taking the green granules

SIERRA UK LTD will reveal details of their new golf greens fertiliser – Sierrablen Mini – the only controlled release nutrition for fine greens turf. Available this autumn, Sierrablen Mini (26:4:5+2Fe) combines tiny ‘green size’ granules with the unique nutritional benefits that Sierrablen Turfmix already brings to many fairways. Sierrablen Mini granules are small enough to remain in the sward all season without being dislodged by close mowing and without disrupting play of the greens. Also on show will be Sierra’s full range of specialist turf fertilisers including the recently launched Agroblen tablets – the latest in controlled-release long term feeds for soil grown trees and shrubs.

Computer programme for pesticides

RHONE-POULENC Environmental Products are pleased to be launching several new products at IOG. Datchem, ‘the expert in your office’, is the ultimate computer programme for anyone involved in the application of amenity pesticides. Datchem is packed with a range of features ensuring accuracy, efficiency and safety for the spray operator. They invite you to visit the Rhone-Poulenc stand to see them for yourself. The broadest range of CDA products available has yet another addition with CDA Castaway Plus and with

GOLF COURSE SIGNS

Designed to your own specification. Strongly manufactured. Maintenance free, chip resistant, club motif if required.

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A special spring and summer small granular fertiliser for all fine turf areas.

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The Vitax soil analysis service to A.D.A.S. methods.

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A cost effective autumn winter outfield granular fertiliser and pre-seed base.

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8-0-0 + 2.5% F.E. + Chelated trace elements
A fine turf fertiliser containing both organic and inorganic sources of nitrogen. Now with a full range of trace elements.

Three quality fertilisers from the Vitax key powder, microgranular and granular range

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VITAX

DESIGNED SPECIFICALLY FOR THE COMMERCIAL LANDSCAPE MARKET.

Weedblock is a highly porous commercial landscape mulch fabric which allows maximum air and water movement to the soil, via the thousands of microfunnels moulded into the fabric by a specially patented process.

PRODUCT FEATURES AND BENEFITS

Allows maximum movement of air and water to the soil, whilst blocking out over 92% of direct light, giving a high level of weed control.

Weedblock is a highly durable and flexible material, which is lightweight and easy to cut and install.

Dramatic reductions in site maintenance costs by eliminating herbicide maintenance treatments and reducing the initial requirements for bark, woodchip, or other mulches.

Conserves soil moisture.

Reduces plant losses.
the development of the Rhone-Poulenc closed system, the entire CDA range can now be used with minimal handling.

ATV is greenkeepers' workhorse

**ATV**

Polaris Big Boss, the 'turf friendly' ATV, is the ideal workhorse for professional greenkeepers. It is the only 6 wheeled genuine ATV on the market with a purpose built cargo deck. Available with 4 or 6 wheel drive, the Big Boss punches 22hp through automatic transmission to haul a heavyweight 725lbs payload, plus 850lbs towing capacity. Don't worry about grass damage! Even with optional diffs., the six 22" wheels, fitted with low pressure rough terrain or turf tyres, ensure that ground compaction is kept to a bare minimum. American built Polaris are distributed in Europe by Crayford Specialist Vehicles.

Vast areas of turf laid in minutes

**INTURF** at IOG claim to be bigger and better! See for yourself their range of high quality mature cultivated turf as supplied to sportsturf projects throughout the country. See the huge 25sq.yd rolls of turf that can be laid in minutes by a remarkable new machine. Talk to turf specialists who provide a full design and specification service across a broad range of sportsturf projects in the UK and abroad. Visit Inturf, the 'most dynamic force' in the sportsturf industry today.

Screener/shredder for golf courses

**GRADEALL INTERNATIONAL LTD** manufacture loose material handling systems and a range of static waste compactors. At the IOG Show they will be exhibiting the Gradeall SS100 Screener/Shredder, a machine designed specifically with golf courses in mind. Because of the size of the unit, it can be easily transported around the course. Features of the SS100 are: Fully Portable; Diesel Hydraulic; Two deck adjustable screen unit; Fines chute and Kubota engine. A compact machine with a three in one performance — it blends, shreds and grades.

Vacuum for litter and thatch

The Promark Turf and Litter Vacuum 1050 model is so new to Britain that the paint is barely dry! Distributed by **LANDTEC INDUSTRIES**, it will see the first light of day at IOG. Powered by a Kohler 18hp engine, the Promark 1050 can be towed behind a mini-tractor or ride-on mower, where its powerful vacuum efficiently removes thatch from fairways and greens — as well as leaves and pine cones — through a 1.5m wide intake scoop and 3m wandering hose. Vacuumed matter passes through an impeller housing, is mulched and then deposited in a 5sq.metre capacity hopper. Landtec will also demonstrate their Dosko Stump Grinders and Root Cutters and their range of geotextile fabrics and impermeable liners.

New range of soil-based products

**FAIRFIELD TURF** have a new range of soil based products on display, including an all new 'Soil Selector' detailing these products and prices: Rootzone Mix, Planting Mix, Emcaceous Mix and Rockery Mix, the former specifically designed for the golf course construction industry. Existing and improved products include Fine Turf topdressing.

See BIGGA staff at the IOG Show - we're on Stand E32. Come on down, you'll be more than welcome!
From dozens of different playing surfaces to re-claimed spoil heaps, from sand dunes to low maintenance highway verges, the J Team has the technology, the varieties and the mixture to give practically anywhere you can think of a strong, healthy grass covering.

As soon as you start thinking grass, call us in straight away.

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Branches at Haydock & Woodley

See Us on Stand PCS2 No 4-6 at the IOG Show

Unsurpassable for everything grassable.
37 and bunker sand, whilst good weather during spring has ensured excellent growth of their 'Super Range' of cultivated turves with ample acreages being available for the autumn. Noted for superb service, most Fairfield products are offered for delivery within 24 hours.

A first for John Deere

JOHN DEERE LTD, who entered the lawn and grounds care market five years ago, and who celebrate their Silver Jubilee this year, introduce no less than five new product ranges at IOG, the new additions being: four new LX Series lawn tractors, featuring an exclusive clutchless two-pedal speed and direction control; four new riding mowers, the SRX and GX models, with another industry exclusive in the foot-controlled variable speed drive system; two new 21" pedestrian lawn-mowers with John Deere engines and 'zone start' cut-out system and five new petrol engined trimmers/brushcutters - a first for John Deere in the UK.

Dig these tree spades

VERMEER EQUIPMENT (UK) LTD will be exhibiting Tree Spades; Wood Chippers; Stump Cutters; Trenchers and Trench Compactors at IOG, with the remarkable disclosure that more Vermeer Stump Cutters are sold throughout the world than all other makes combined! Their new, patented PRO series teeth for the 665B will be of particular interest. Vermeer Brushwood Chippers include self-powered and PTO units which feature hydraulic feed for safety and chip size control. There are eight models available and the 6201 is proving to be a reliable and well priced mobile unit that takes material up to 6" in diameter. The Vermeer TS 40 Tree Spade, mounted on a Unimog, will also be on display.

Cylinders under guarantee

SUPREME MOWING will be exhibiting superior replacement cylinders which they manufacture themselves and, of greater importance, guarantee replacement against breaking upon hitting any moveable object. Using only the finest quality British steel and advanced methods of production and heat treatment allow Supreme Mowing the total flexibility to meet any technical specification and size. Thus they offer the widest range and the speediest deliveries available. Second to none are their range of 'Leader' grinding machines, offering many features unequalled by any other machine, the ultimate in lawn mower grinders. As is their custom, yet another advancement in technology surrounding cylinder grinding will be unveiled at the Show.

'Number one planting media'

BENTLEY'S will be showing products to meet all the greenkeepers requirements for turf including fertilisers, composts, turf dressings, pesticides, herbicides and fungicides. Also featured is Bentley's 'Greentree' tree planting and mulching compost... the number one planting media used on many prestigious projects and made to their exclusive formula. This has a high fibre and high organic content made from re-cycled materials from renewable sources and offers a unique formulation which gives trees fast and initial growth whilst ensuring extended nutritional availability for 18-24 months.

Specialist soil care service

C&P SOILCARE LTD, incorporating Colin Pryce Terralift, is able to offer a complete specialist soil care service. After a site visit and soil sample analysis, recommendations for treatment can be made. Soil conditioners can be specially mixed by C&P and incorporates by Terralift or conventional means. A Terralift compressed air soil injection machine will be demonstrating its ability to inject products 90cms into the soil. It will also be seen root-feeding trees. A twin probed Terralift mounted on a compact tractor will also be on display. Greenkeepers are invited to discuss their particular soil problems with Colin Pryce.

Plants and unusual trees

BLAKEDOWN NURSERIES LTD provide a comprehensive range of stock from herbaceous plants to semi-mature trees. Besides Blakedown's main container shrub nursery near Kidderminster, they have a separate heather and alpine nursery, herbaceous nursery; and heavy standard tree nursery where top quality trees are grown from 12cm up to 30cm in girth. At their Knightwick Tree Nursery they have recently planted an arboretum featuring new, unusual and rarely used trees such as Acer platanoides 'Deborah', Malus baccata 'Street Parade' and Fraxinus excelsior 'Atlas'.

Get a taste for Rufford's...

RUFFORD TOP DRESS SUPPLIES LTD will be exhibiting at the IOG Show in Peterborough for the first time. Rufford welcome existing and new customers to their stand, who will be made even more welcome to taste the culinary delights of Margaret Jofford's cuisine which, reckons Peter Jofford, 'many customers will remember from years gone by.'

Peter, Rufford's MD and Chairman Frank Garvey, will be on hand to go through the expanding range of Rufford's quality top dressings, rootzones, sands and soil. Due to the 'rocketing success' of Ruffords they will all be there to show their appreciation to all their customers.

WESSEX Sweeper Collectors

The Wessex Sweeper is PTO Driven, has a big hopper which can be tipped from the tractor seat, and is designed to sweep clean even on undulating ground. 4ft & 6ft versions for tractors from 15hp

Optional gulley brush attachment
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Grown men are not supposed to hero-worship and upon reaching middle age there are few this reviewer holds in God-like awe. One can genuinely admire many men, golf writers like Longhurst and Darwin for example, or players like Harry Vardon, Bobby Jones, and Jack Nicklaus; though hero-worship is not something I reserve specially for them.

My hero - yes, I have one - is Harry Shapland Colt, the golf course architect who left an indelible mark on every course he ever touched. A golfer will find this man's genius in so many places that it is difficult to single out a single example, though Pine Valley springs to mind and is one Colt course I have played and would happily play to the exclusion of all others for the rest of my days.

Colt helped to change the face of some half million acres of this planet and his lasting legacy include such championship courses as Muirfield, Lytham St Annes, Wentworth, Hoylake, Sunningdale and Sandwich, together with lesser publicised gems the like of Swinley Forest, Tandridge and Worpsleidon. If you are not impressed you must be a golfer from a different planet!

Views such as mine are shared by every golf course architect that ever drew breath, none more than Fred Hawtree, himself an architect of great note and the author of Colt & Co, Golf Course Architects, which is undoubtedly the best book to come across my threshold in a long, long time. The British Association (now 'Institute') of Golf Course Architects says that golf's classic attitudes should still inspire modern design, and this first publication under Fred's own publishing imprint - Cambuc Archive - accepts that belief. On it, Colt virtually founding a profession. Fred Hawtree describes Colt's career from schooldays to old age; fits in a Wedge of Letters which he and partners Alison and Morrison exchanged between 1939 and 1951 and then sums up his legacies and adds three contemporary articles by him and biographer John Strawn, a writer who has drawn on practical experience in the US golf construction business and who takes us from the developers eyes through to evolution of the architect's imagination.

We meet the clearing crew - bulldozers crashing through the undergrowth - and see lakes dug and dirt taken to form the course's characteristic outlines, rolls and plateaux. The shaper, the artist whose brush is a giant earthmover, is here too, painting the architects desires with the earth as his medium. Of course, the greenkeeper plays a vital part and it all adds up to an (earth) moving story which will fascinate and amuse both golfers and those connected with the vast golf industry.


When the 'Big Three' really meant something, Gary Player was one of the famous trio and proved beyond doubt that a good little 'un was equal to any of the big guys in the world. He has gone on proving it through 40 or more years of top competitive golf and is still a force to be reckoned with, both in Regular and Senior Tour events. He has carved a whole new career that has his contemporaries reeling.

It is well known that Gary was and is a fitness fanatic and his daily regime still lasts an hour... though now fellow professionals who used to smile at his antics 20 years ago and dismissed him as some kind of crank follow him into the fitness caravan on the USA Seniors Tour.

The book, Gary Player - To Be The Best: Reflections of a Champion, is his autobiography, in which one of golf's immortals analyses his own success and that of other great players, to reveal what makes a champion both on and off the golf course. This is an intensely private story and covers both the elation of victory and the downside of a career where he made a few enemies and was the subject of death threats. For my money, he remains a figure of admiration and a truly great golfer. If I had to rely on just one person to play to the pin from a bunker - and my life depended upon the outcome - I'd choose Gary Player. Written with Michael McDonnell, a delightful and astutely observant golf correspondent for over 25 years, the book is sheer joy and a worthy addition to any golfer's library.

Gary Player - To Be The Best: Reflections of a Champion, is published in hardback by Sidgwick and Jackson at £15.99.

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DAVID WHITE considers the effects of the mini-industry in donated trees to golf courses and suggests a three-point guide to their maintenance.

Almost as popular as the perennial teak bench-seat, more and more greenkeepers are receiving donated young trees or saplings - given to the club in memory of a deceased member who found pleasure on God-given golfing grounds - or finances from a widow to purchase a tree which the donor hopes will flourish in perpetuity.

Casting a watchful eye over the growth of this almost inevitable mini-industry, especially in south and south western retirement towns, it seems to me that there is danger lurking at least three sides.

To begin, whilst varietal choice is often an emotive one - "dear old Marmaduke so much enjoyed the beauty of the willow" - the wise greenkeeper will attempt to bring influence upon the final variety of tree actually planted, based on his own local knowledge or perhaps guidance from an arboriculturist. After all, a pretty willow planted a few yards from the back of a green may look grand for a year or two, but as the roots begin to infiltrate the putting surface, Marmaduke's memorial will become a vastly expensive folly and his own local knowledge or perhaps guidance from an arboriculturist. After all, a pretty willow planted a few yards from the back of a green may look grand for a year or two, but as the roots begin to infiltrate the putting surface, Marmaduke's memorial will become a vastly expensive folly and the object of blasphemy.

Second, the positioning of any tree is of paramount importance and great thought should be taken before deciding on a final site. In considering shadows look to the sun for guidance, always remembering (forgive the hackneyed phrase) that big oaks from little acorns grow, and be vigilant in ensuring that the little sapling being planted isn't going to cause future generations of golfers a high degree of heartache. Placement to the sides and rear of greens may seem a smart idea at the time, but flow of air and restriction of natural light can play merry havoc with the health of a putting surface. Planting trees in properly spaced clusters, to the right side of an open fairway if the contours and sun permit, seems to me a bonny way of breaking the monotony of those often boring straight out and back holes, together with providing an added hazard for the chronic slicer. Try always to think naturally when planting, bearing in mind that trees don't grow in uniform lines, except on French roadsides!

Third, and most important of all, it is vital during the formative two or three year period of growth and development to ensure that a correct programme of maintenance is carried out. Rather like the golf course itself, young trees will prosper if care is taken and get very sickly if neglected. Imagine if you will a golf course untended for a month - is the picture of horror imprinted in your mind? - so it is with young trees.

To begin, check all small trees during their first weeks in the earth. Ensure they are firmly planted and carefully tread them in to keep the soil firm. Stems should be upright and although trees grow better without stakes, staking may be necessary - indeed almost obligatory - if we are to prevent errant golfers from hacking the youngsters to death! At the beginning the young tree will have been given its own little patch of ground, free from weeds and grass. Keep

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it that way! Trees growing amongst weeds find it tougher to extract moisture than those on bare soil and it is of immense benefit to remove all grass and weed growth over an area of at least one square metre. Dense grass, particularly short mown grass, is particularly harmful and will substantially reduce growth in formative years.

Mulching conserves moisture for the tree by suppressing weed growth, at the same time keeping the ground surface cool. Organic materials such as leaf mould, straw, bark or compost have much to commend them as their gradual breakdown will fertilise the soil. Avoid very fine grades of peat and especially lawn clippings as these invariably interfere with the transit of air and water into the soil. The use of clear polythene sheeting, tree mats or old fertiliser bags (print side down please), held in place with stones or soil, can also be utilised as mulch.

How much water do young trees need? Except in drought conditions, not much is the answer, especially if they are mulch covered. As they grow and become larger, a thorough weekly soil soaking during any dry period will however be beneficial.

I can hear the howls of protest from those whose working day just isn’t long enough and for whom new trees may well be just another headache to take on board. Take heart, for once planted, competition for water, light and nutrients amongst saplings can be very effectively controlled by the careful and diligent use of herbicides, such as Roundup PRO, which contain glyphosate. This is absorbed by weed and grass leaves and moves through the entire plant whilst remaining inactive in the soil and does not affect tree growth through roots. It can be effective on even the most stubborn of weeds, including brambles and bracken, though care should be taken to avoid applying herbicide to the tree itself.

A word or two on pruning, it being considered prudent to remove unwanted branches before they reach a thickness of two inches. Such action, whilst often looked upon as drastic on such tender life, lessens the risk of decay entering the plant. Remove one shoot if a double leader is growing, also dead or crossing branches. Remembering the height of a golf swing, keep lower branches clear but don’t exceed one third of the total height of the tree.

If your course already has trees which have suffered from stress and look set to die, consider the possible use of the innovative ‘Verti-Mulch’, common in the States and now available in the UK. The principle is to bore six holes around the drip line of the tree about 40cm in depth with a 6cm diameter. The majority of the bore hole is then filled with ‘Verti-Mulch’ and topped with sand. Water filters through the sand to the additive, which draws water like a sponge and provides nutrients to the stressed root system.

Finally, consider the option which tree surgeon Keith Banyard of Witchampton in Dorset took, that of transplanting local species of semi-mature white birch and English Oak trees to the Wareham course from a nearby estate. Experienced in handling such conservationist projects, he utilised a Vermeer TS 50 Tree Spade mounted on a tractor, which required only one person for the whole operation. The spade controlled the size of hole when removing the tree and caused little or no damage to the turf. The transformation was amazing, with more adventurous holes in play in no time.
One hundred years of engineering excellence and a record of innovation has put Kubota in a powerful position in Britain. Kubota compact tractors are leaders in the field. Kubota diesel and petrol engines provide the power for leading companies. And Kubota mowers — ride-on and walk-behind — are leading the way in small gardens and large estates. But the power of Kubota is evident not just in the products themselves. Kubota power has created one of the most extensive customer support resources in the country, with a massive investment in parts and service through a dealer network which is second-to-none.

These are powerful reasons for choosing Kubota. And they lead you to one conclusion. If you want to succeed, follow our lead.
Never underestimate the compact tractor, advises HUGH TILLEY. In many areas they are more than a match for their big brothers.

Compact tractors have become an almost uniquely Japanese phenomena, but there are several European models with similar size and feature attributes. In the UK compacts are marketed under their own names, for example as Kubota or Iseki, and/or in the livery of several major UK tractor suppliers, such as Ford, Massey-Ferguson and John Deere. The important feature of their development must be the Japanese dominance in small diesel engine design and production. Built up around their success is an entire UK industry devoted to producing attachments and implements, these ranging from cabs and controls through all types of mower to wrap-around loader/backhoe combinations.

Features which have contributed to this popularity are their manoeuvrability and ease of use, together with the fact that they offer most of the features expected from a modern tractor such as PTO, hydraulic linkage and external services, at a very competitive price. In terms of power, 'compacts' range from about 12 hp to about 40 hp or above, although it could be debated that they lose their compactness at the top end of this power range, equating to the smaller tractor in terms of price, weight and size.

The majority of compacts have a conventional clutch/gearbox transmission, however most manufacturers produce one or more hydrostatic models, generally in low or mid power ranges where the engineering is not too expensive or power loss too noticeable. The advantages of instant clutchless forward/reverse and infinitely variable speed for mowing or loader work are obvious. Selection of a conventional manual gearbox should take into consideration the work for which the tractor is required — will there be sufficient low gear ratios for core tining etc.?

Power is of vital importance in the ability to undertake the tasks required on a golf course, but weight usually conferred with greater power is also occasionally necessary for stability — and even for grip. Even so, compacts should not be under-estimated, because with four wheel drive, more efficient engine/transmission systems and a well set-up implement, most are able to compete with their bigger (and more expensive) brethren. There are three basic options for utilising tractor power: traction, power take-off (PTO) and hydraulics, these latter making ‘tractor’ a misnomer. Tractors have become prime-mowers and main sources of power — and this is particularly true with the compact tractor.

Traction is an essential component on many operations — perhaps trailer work typifies these on a golf course — but other draught operations include ground cultivation, scarifying and rolling. All modern tractors go back to the late Harry Ferguson’s principles of weight transfer — of imposing the implements weight on the tractor (rear) wheels to increase grip — in fact Mr Ferguson would thoroughly approve of the concept of the compact. The Ferguson type trailer has the axle set right at the back with coupling close under the rear axle to impose much of the load weight there. Four wheel drive did not come into the original concept, however it provides a spectacular advantage in grip and is not an expensive addition at ‘compact’ size. It also provides extra weight and strength for the front axle and power steering, all useful attributes for other applications such as front loader work. Another important factor in the grip equation are the tyres. Traction tyres are essential to maximise grip, especially when on bare soil, but they are not user friendly. The simple
COMPACT TRACTORS

45 → answer is to have two sets of wheels - or buy a set of wheel chains (sold for forestry).

The power take off, invariably abbreviated to PTO, has become perhaps the most important point from which to extract power from the engine and is usually the most efficient. Rear PTO is standard, but front and mid PTO options may be available and found ideal for mowers and other implements, perhaps with limitations of power output and/or speed. It may be possible to mount an extra hydraulic pump or similar to the front of the engine crankshaft and this can be useful for uprating performance of loaders or for powering a hydrostatic mower. The British Standard PTO speeds are 540rpm, or 1000rpm (for higher power output), but some tractors offer other variations - which may need adaptation to the implement. ‘Live’ PTO drive is also an essential modern requirement - with the PTO having an independent clutch.

A three point linkage was the operation system devised by Harry Ferguson for implement carriage and control - this having become standardised in categories (Zero, One and Two) according to power and size - so that in theory any implement should fit any similar category tractor. In practice this does not always work, but the exceptions are reasonably rare. More frequent are variations between link end and PTO measurements. Lift control may be a simple spool valve or a quadrant and lever - normally controlling the position of the links - however higher specification models also have, or can have, draught control to automatically adjust the depth (draught) according to tractive effort.

Of growing importance are external hydraulic services, used to operate front loaders, lift and fold mowers, control slitter depth and tip trailers. These services - and the use and abuse of them - contribute to more problems in compact tractor operation than any other cause. Often this is due to a lack of specification or knowledge by suppliers of tractor and implement. A crucial fact is to realise the difference between single and double acting spool valves and hydraulic rams. Spool valves vary in type and operation so it is essential to ensure the right one is matched to each specific implement.

Cab or no cab is another question of individual preference and use, ROPS being the compact norm. A top specification cab provides a (relatively) quiet, cool, dry and clean environment without too much impediment to getting on and off, but adds over £1,000 to the price.

A loader can be extremely useful on a compact, however if required for intermittent use ensure that it is readily detachable. For satisfactory service it should be fitted to a robust tractor or have adequate chassis reinforcement, for many compact tractors owe much of their light weight and price to the use of pressed and folded steel in place of traditional castings.

Compact tractors offer exceptional value for money and great versatility and can undertake most of the tasks required on a golf course. However, they should not be expected to do the same work that is expected of a 50-70 hp tractor, nor with implements designed for such vehicles.

TRADETOPICS

The buoyant Jacobsen division of Textron has announced a joint marketing agreement with the turf care equipment manufacturers, Smithco. The agreement covers the international distribution of the complete Smithco range and will be available under the newly created name of Jacobsen-Smithco, the products to feature under the familiar Jacobsen orange livery.

Pictured after signing the agreement, are Rene Orban, Bill Kenney, Dick Miller and Tom Carter.

Marketing Link and Milliken Chemicals, through their UK distributor, Farmura Ltd, have launched a "Better-Way-to-Spray" campaign to introduce greenkeepers to the benefits of Blazon spray pattern indicators. Greenkeepers who purchase 12 litres of Blazon before September 30th will receive a golf towel and the opportunity to join the BIGGA delegation to the GCSSA Convention in New Orleans. The successful winner, chosen in a draw by BIGGA Chairman, George Malcolm, will be invited to Aldwark Manor to receive the prize.

Fisons Horticulture have appointed Avoncrop Amenity Products of Sandford, Bristol, as a main distributor of Fisons professional turfcare and amenity products. Avoncrop will cover the south west and south of England.

In the Tillers Fibreturf competition held at the Landscape Industries Exhibition, the £100 prize for guessing the number of fibres in a 10 litre bucket of Fibreturf rootzone was shared between John Churchward of Torquay and Mr Kennedy of Worcester &G.C.C. They were nearest to estimating 858,500 fibres which, if laid end to end would contain enough fibres to join London with Moscow! Tough stuff indeed.

Turf Irrigation Services, the UK's major Toro Irrigation distributor, have appointed Irsirve of Preston as an Authorised Area Dealer and Installer operating in Lancashire and Cumbria.

Industrial Power Units (IPU) have set minds at rest following the closure of JLO GMBH and the news that Technomotor UK will distribute JLO spares in the UK from October 1st.

IPU is a diverse company and ILO sales represented only 15% of their overall business. Having the Dorf range of grass maintenance equipment and, more recently, having added Ferris rotaries to the stable, IPU are very confident of their future and only recently delivered six Ferris 36" Hydrostatic rotaries to Mid Glamorgan's maintenance wing, Transplant. Our picture shows the handing-over.
The midrange maestros – the Iseki TU range offers you a choice of manual or hydrostatic drive, with models from 19-27 horsepower all designed for more productivity and performance, whatever the task.

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Iseki TA Tractors mean big productivity on courses or in parks – three models from 33 to 48 HP, all with four wheel drive and Iseki shuttle drive gearboxes.

The original compact tractor – these 16-18 horsepower machines offer you real versatility with 2 or 4 wheel drive and front, mid or rear mounting points.

Iseki have a range of tractors to suit your needs. From 14-48 horsepower you’ll find no more versatility, no more technical excellence, no better support and no better finance schemes. That’s why Iseki are the driving force – because no one looks after your compact tractor needs more than Iseki.
Tackling Thatch

by ANDY COLE, Sports Turf Research Institute

Thatch is a term used loosely in greenkeeping circles to describe the layer of accumulated organic matter (old leaves, stems and roots) found between the soil and its live vegetation cover. Thatch is often used to describe all deposits of fibre, but a clear distinction would be helpful from the start and the following definitions can be used as a guide:

**Mat/Litter**
Generally found in less intensively managed turf, where the sward is cut perhaps once a week without boxing off the clippings and very little additional mechanical work undertaken. This results in a loose build up of grass clippings and decaying plant debris in between the grass stems at the base of the sward. It is more characteristic in old and neglected lawns or areas of turf which are not so intensively managed, such as semi-rough.

**Fibrous Thatch (Fibre)**
Fibre is more commonly found under acid, moorland turf which tends to favour the finer Agrostis and Festuca grass species. It develops as a hard, brown, often dry layer and is sometimes referred to as resembling coconut matting with its rough, wiry texture. In dry weather, these fibre layers can make the turf prone to drought stress and show symptoms of dry patch, particularly on featured areas; the fibre drying out and acting like a thatched roof. Mechanical aeration and treatment with a proprietary non-ionic wetting agent can be employed to overcome the symptoms by aiding water penetration.

**Spongy Thatch (Thatch)**
Thatch is used to describe the yellow/brown, foul smelling, moisture retentive material producing anaerobic conditions often associated with wet, compacted, poorly drained soil and waterlogged throughout most of the year. Poa annua invariably predominates the sward, since this species survives better under these conditions than the finer grasses, but questions still arise as to whether Poa annua causes thatch or whether thatch is encouraged by Poa annua.

Leaf growth is most productive in the spring and early autumn (less so in mid-summer) while root growth more so through late autumn and early winter, ie. when not very cold. The life-span of each leaf, root, rhizome is relatively short and a continuous cycle of tissue production and death takes place to perpetuate these perennial grass species. Natural decomposition of plant organic matter depends on environmental conditions and seasonal fluctuations, with thatch accumulation resulting from tissue production proceeding at a rate in excess of that for decomposition.

Whether turf thus develops thatch or not depends mainly on plant growth rate, the composition of the plant tissues, maybe the quantity and type of pesticide being used, as well as fertility, aeration, temperature and moisture in the thatch environment. Under intensively managed turf, scarification/vericutting also has a role in keeping thatch build-up under control.

Decomposition of plant material is carried out by soil micro-organisms, microfauna and macrofauna in succession; no one species seems to have all the necessary enzymes for turf care professionals

**PROBLEM**
- Grass Composition
  - Annual meadow grass overwatered and overfertilised promotes rapid accumulation of thatch. Thatch in turn promotes shallow rooted species, hence more thatch – the problem feeds upon itself!
- Thatch
  - Restricts root penetration, therefore less drought tolerant. Pitchmarks, soft in winter, surface moisture encourages moss.
- Compaction
  - Restricts water movement, promotes shallow rooting and annual meadow grass, generally poor growing conditions.

**CURE**
- Grass Composition
  - Improve grass composition by sound management practices to promote bent and fescue species.
- Thatch
  - Removal of existing thatch by hollow tine aeration. Encourage natural thatch breakdown by getting air into the surface by regular aeration. Prevention of further accumulation by verticutting, etc. and again by sound maintenance.
- Compaction
  - Relief of compaction by slit/solid tine; Vertidrain, Twose Vibrating mole plough, compressed air.

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What the eye can't see...
required to break down the components of higher plants. Certainly, the sequence and interactions are complex and different from one habitat to another but is thought to be initiated by fungal activity, bacteria and nematodes feeding on the bacteria/fungi. A succession of micro-organisms is essential if total decomposition is to be achieved, each group feeding on the residues remaining from a previous groups' activities. More detailed research is required to determine closer relationships.

Micro-organisms require nitrogen to decompose organic matter, which is itself rich in carbon. A low C : N ratio (< 20 : 1) favours decomposition by micro-organisms. Unfortunately, nitrogen can be rapidly leached out of the thatch layer which allows the C : N ratio to become rather high. It has been shown that when frequent, moderate applications of fertiliser are applied, thatch decomposition can be accelerated, but if there are excessive fertility levels, turf production rates are increased but not decomposition rates. Therefore more organic matter (thatch) becomes deposited and nitrogen in the soil is not available to the micro-organisms in the thatch.

Where fibre is a problem, with a tough, hard, brown fibre layer in the turf, over-acidic conditions could be added to the situation - breakdown often being most rapid at about pH 6.0, the rate decreasing rapidly as acidity or alkalinity is dramatically increased. In rare cases it may be necessary to raise the pH level, but the side effects could prove disastrous, particularly on fine turf with increased annual meadow grass, worm and weed activity, with the possibility of take-all patch developing. Lime is therefore only recommended after careful consideration and not as a matter of routine.

Temperature, moisture and soil aeration all play a significant role in the thatch situation. Dry conditions may inhibit thatch breakdown and under prolonged dry weather the thatch can be difficult to re-wet, the surface actually repelling water. Excessive moisture and lack of air in the soil, either as a result of over-watering, heavy clay soil or compacted layers, produce the characteristic anaerobic, foul smelling, spongy thatch, which can often be reduced through better management practices or installation of a drainage system as required. All biological activities are temperature dependent, therefore increased thatch production is to some extent counteracted by increased microbial activity and temperature becomes less significant than aeration and moisture.

In practice, sound basic maintenance work can be geared to minimising thatch problems, for example minimising

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Addition of a sandy top dressing dilutes thatch and increases its permeability

49 - ing the use of water and fertiliser to maintain grass growth but not force a lush sward. Scarification/verticutting also has an important part to play during the growing season to lightly flick through the turf, removing creeping growth and surface litter. A comb attachment for the mower is useful in this respect.

A more thorough verticutting treatment in early autumn, setting the blades to cut into the turf, can be beneficial, but may not resolve the problem alone. Hollow tine aeration in the autumn or spring is very helpful as this physically removes a small proportion of the unwanted fibrous material, which can be replaced with a more free-draining sandy top dressing - a type of soil exchange. It must, however, be appreciated that hollow tining using 12mm diameter tines at 50mm centres removes only 5% of the surface, which is a relatively small proportion and must therefore be continued over a number of years.

More recently, with the introduction of the Coremaster 12 fitted with quadra-tines, it may be possible with severe problems to hollow tine through the summer without undue surface disruption, this coupled with monthly top dressing. Hollow tining can also be used to relieve compaction or barriers near the surface, but for deeper seated drainage problems the use of sub-aerators such as the Verti-Drain or Twose Turf Conditioner is useful. Solid or slit tine aeration must also be carried out on a regular basis to relieve surface compaction and permit air into the soil to promote natural thatch breakdown and encourage deeper rooting.

The addition of a sandy top dressing dilutes thatch and increases its permeability, providing a more open texture which can be attacked by micro-organisms. Top dressing with a sandy soil is also believed to prolong the available nitrogen supply to the thatch layer, which in turn promotes more decomposition. The objectives are to intersperse sandy top dressing with the thatch to keep it open and promote natural breakdown - not just to bury it. Aeration through the winter helps with the 'mixing process', as well as promoting air circulation.

Where the thatch layer exists for several centimetres, such as on an old golf green, it may be possible to cut the turf thinly; cut and discard the layer of thatch, rake up the turf bed and replace the turf or, indeed, remove the turf and thatch in one go and either seed or turf. A drastic measure perhaps, but not to be discarded in extreme circumstances. It should be realised, however, that unless the cause of the thatch is eliminated the thatch will merely tend to accumulate once again after the turf has been replaced. Conventional maintenance should be stepped up before such measures are considered.

The author, Andy Cole, until recently an advisory agronomist with the STRI, is now a lecturer in greenkeeping at the Warwickshire College of Agriculture.
A better way to SPRAY

With concerns running high in respect of the long term impact of pesticides on the environment, public discomfort regarding chemical pollution of waterways, and increased legislation restricting the transportation, use and storage of hazardous substances, there has never been a better time for greenkeepers to take stock of their spraying practices.

Surveys by university researchers have shown that on average, spray operators overlap their chemical applications by 25% to 30% more than the manufacturers' recommended rate. This is an alarming fact from both an environmental view and in terms of wastage and cost. In addition, the potential damage that can occur to fine turf if double dosing takes place under conditions favourable for damage puts this area into the high risk category.

Yet surprisingly, though the chemical debate has been with us for years and more people are worried about the role of chemicals in recreational areas, greenkeepers in the main still rely on sight and 'experience' when it comes to judging the application of sprays. Judging the correct application of solutions comprising 99% clear water is very risky: spray becomes almost invisible when applied to grass, making it impossible for the operator to follow the spray line accurately, causing an inevitable overlap.

In the past the practice of drawing chains behind the sprayer to mark bout width margins on the turf has been tried with little success. Anyone who has seen chains snaking across a fairway and knocked off line by every hump, hollow or twist will soon realise that the chain does not reflect the true spray margin and can be almost impossible to see.

Another method, originating from the agricultural industry, uses a special piece of equipment which produces in a transportable tank a foam mixture that is pumped out of pipes at the ends of the boom. This foam is dropped as 'blobs' - at intervals behind the sprayer - with the object of marking the position of the spray boom width. Though clever in its conception, this method rarely works well in practice due to factors such as variability of time the 'blob' takes to disappear (golfers do not take kindly to seeing fairways and greens festooned with foam balls) and the lengthy set-up and clean down time.

There is also a significant investment in the initial capital outlay and on-going maintenance. Even if it could be argued that 'blobs' give the operator some guidance on spray bout width, it does not identify any 'skips' or misses due to uneven ground or reveal problems due to faulty spray equipment.

It may have been argued in the past that the chain or 'blob' method of identification was better than nothing. However, neither alternative has widespread appeal and both have their detractors, who see them as flawed.

In the early 1980s some greenkeepers on the other side of the Atlantic, fed up with the 'blob' or chain methods, were obtaining industrial dye products in an attempt to colour their spray solution, which could then be seen by the operator during application. However, many of these were found to be unsuitable - they caused not only long-term staining of the grass, adjacent walkways, fencing and stone.

Cost savings indicator

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Cost savings indicator

Top picture: See clearly where you have sprayed.
Centre: Blocked or clogged nozzles are easily spotted.
Bottom: Spray pattern indicators can be used to check spot treated areas.
Keeping in touch with news and comment from the regions

**MIDLANDS**

June was bustin' out all over at Great Barr GC on the 4th, with the morning round of our Summer Tournament interrupted by a heavy hailstorm, which left the course white in a matter of minutes. There were several players in 'the hunt' after the eventual morning round, the afternoon being more enjoyable as the weather improved.

In the event a winner emerged in the guise of Ted Evans, with Steve Wood a close second. The Gross prize was won by Paul Luffman.

The course was in excellent condition and a credit to the greenkeeping staff. For this we thank Great Barr GC, also for granting us the use of course and clubhouse and for catering that was second to none. Finally, a thank-you to our trade friends for supporting us so well.

Our next tournament will be at Edgbaston GC on August 20th and we look forward to meeting all of you again.

Best wishes go to Rhys Thomas on his new job as head greenkeeper at Great Barr GC.

**DEAN CLEAVER**

**SOUTH WEST**

'Drought? does anyone remember a drought? Certainly in the Cotswolds the last six weeks have been a total wash-out. My neighbour (a keen gardener, few of us left!) was spotted staggering around his lawn with an umbrella, retrieving his garden sprinkler.

Knowle on June 5th for our match Greenkeepers v Secretaries, was another fine example of a summer's day with incessant rain and a strong wind. But, as they say, it's an ill wind etc. etc. and the weather obviously upset the secretaries more than the greenkeepers, (you don't get cold winds and driving rain in nice warm offices or bars!), and thanks to our super-sub Chris Light, the head greenkeeper at Knowle, who came in with the best score of 36 points, we greenkeepers managed to beat the secretaries by just 11 points.

Thanks were also due to Chris, Kevin and the rest of the Knowle staff for the outstanding condition of the course and to the Club itself for the warm hospitality extended to both teams. We are also extremely grateful to Derek Holloway for organising the match and to Monro Horticulture for providing every member of the winning team with a prize.

I hope that you have all found entry forms coming through in order and if any of you have slipped through the 'regular entry' system and would like to have forms, please give me a call on 0285 651908.

Finally, congratulations to Laurence Pithie on becoming Britain's first Master Greenkeeper. Lawrence tells me it was eight months hard slog to prepare for the written exam, which he described as 'tough but fair'. Another first for the South West.

**PAUL WORSTER**

**SCOTTISH REGION**

The Scottish Region Championships were held at Alloa GC on June 25th, the previous weeks having been the wettest recorded in June for decades and many Clubs were forced to postpone events due to torrential, almost tropical downpours and cloud-bursts that could flood a course in minutes. June 24th was a dry exception and so on the 25th it was with a sense of trepidation that we arrived to black skies and the Ochil Hills barely visible through mirk and gloom.

However, 9.30 came and the first 3 ball away to nothing more than a light spitting of rain and high hopes. Ha, fooled again! By 10.30 the rain was a constant downpour with the 14th green – viewed from the clubhouse – looking more like a curling pond in summer than a golf green.

All eyes on 'you're truly' as a mini-conference took place with head greenkeeper Duncan Piddie. Suspend play was the verdict.

On again by 11.40, the troops were still not convinced. Duncan Peddie and assistant Alec Nimmo, with the able help of Kevin Brunton (Souters) and Andrew Meenmuir (STS), both ex greenkeepers, checked the greens. Our grateful thanks to you, lads. Was the Reg. Admin. right? of course he was, for by mid afternoon it was shirt sleeves aft a sunshine finish for everyone.

Though finishing later than planned, it turned out an excellent day and we were soon ready for the presentation, made perfect by the gracious attendance of Allon Club Captain, Alan Goodwillie, who on this, their centenary year, presented each winner with a copy of the Club's history.

Exactly 100 golfers took part in the tournament, which may be a record. Originally 109 players were drawn but the conditions seemed to make some of our respected trade members a bit under the weather and unfit for play!

We must thank Alan Goodwillie and his council for their courtesy in hosting the Championship, also club secretary, Alan Frame and green convenor Jackie Vetch, who joined us for our day.

To Margaret Harrison, club manageress, and her staff for friendly service, hospitality and delicious meals and Duncan Peddie – happy birthday Dunc-to you and your crew for the excellent condition of the course.

The trophy table at The Scottish is a sight to behold. So many marvellous trophies to win and each containing a voucher contributed by our Scottish patrons – all generous to a fault.

On a personal note, my thanks to Cecil George and Jimmy Neilson for their valuable assistance and to my wife, Edna, for her hard work and support in dealing with 100 golfers. It was good to have old friends amongst us including Joe McKean, whose golf was curtailed by an accident with his caddie car (we hope you are healing nicely Joe!), and George Hampton, 'laughter is the best medicine', eh George? As usual, George donated a generous prize as did Kevin Brunton of Souters.

It was a long day but one to be remembered. Let us herald the Scottish Champion for 1991, Gordon Moir of Fraserburgh, with a scratch 75. Well done Gordon. Further results were: Best nett; Wilson Morrison (Royal Aberdeen) 70. Best head greenkeeper: Duncan Peddie (Alloa) 80-9=71. Best assistant: Stewart Crawford (Ratho Park) 78-7=71. Best apprentice: Neil Chrichton (Tulliallan) 80-8=72. Veteran: Harry Diamond
June 19th saw 39 competitors take part in the Iseki regional finals, played over Keswick GC in the Lake District. Overall, the event was a success and the level of play was excellent. The competition was very tight, with only losing match was that of Brian Turner and Gordon Smith against Tyrells Wood secretary, Paula Humphries and Stephen Manning, when they did the honourable thing by accepting defeat. Thus the greenkeeping team won 5 of 7 with one half.

I should like to thank Tyrells Wood GC for ensuring the re-instatement of a match that had lapsed over the past few years, the Club caterers for laying on a splendid meal, my staff for producing a course which met with approval all round, and most of all to Tyrells Wood Secretary, Paula Humphries, without whose help the event would not have been possible.

Thanks for this report, Bert. Others, please contact me on 025 125 4287 with any news.

PHIL BALDOCK

NORTHERN REGION

June 19th saw 39 competitors take part in the Iseki regional finals, played over Keswick GC in the Lake District. Qualifiers had travelled far and wide to attend, but it was Jimmy Richardson’s team of 12 men from the North East that took the bulk of awards, including the section team prize. Receiving an engraved salver as section secretary, Jimmy was pleased to see that his team took all three places in category 1 and second in category 2 – a fine result and an indication of what can be done when you’ve time to practice!

NORTH EAST

1st Hugh McLaughie (Petersfield) 78-5=73.
2nd Brian Hillen (Drumpellier) 98-20=78.
3rd Steven Frost (Royal Aberdeen) 100-20=80.

Finally, best wishes to Neil Crichton, who leaves Tulliallan to take up a position in Dorset. Hope you’ve got your passport Neil!

Elliot Small

AYRSHIRE

At the end of yet another excellent year of work by the staff of Ayr Technical College, the greenkeeping students were presented with their trophies and certificates at a special invitation day. I was especially pleased to have three of my own Kyle and Carrick staff receiving awards. It’s also nice to see the more experienced men still willing to go through the college system and do so well.

Trophyes were awarded to: Brian Porteous (New Galloway GC) The BIGGA Cup for Best Student plus Employed Cup. Colin Smith (Kyle and Carrick/Dalmilling GC) Employed Cup. Colin Smith (Kyle and Carrick/Dalmilling GC) Y.T. Cup. Colin Smith (Gourock) 3rd:

I have just enjoyed an excellent day of golf at the Scottish Regional Tournament at Alloa and proved the old saying: ‘beeware the wounded’. If I can win a prize carrying a duff leg and back then there’s hope for the rest of you yet!

DUNCAN GRAY

SURREY

After a great time in Canada, I’m back! Busily setting up for a qualifier for The Open. The news below comes courtesy of Bert Watson, who after a tough day travelled to Edinburgh immediately after the event. Finally to Bert Cross, who acted as official starter before playing a round himself – Thanks to you all.

I’m sure competitors will agree that Tim Jones and his staff prepared a good test of golf, with Mr & Mrs Wallace in fine style and to the limit. Thanks to them all and to the Club for making us feel so very welcome.

On a final note, the Iseki final at Hillside will see regional team captains playing for The Regional Prize. As usual, we have the youngest team captain, I feel sure we’ll be in a good position to win. So team, keep practicing.

HOWARD MADDIE

LONDON

The London section held its second competition of 1991 at Porters Park GC on June 4th. This 16 hole Stableford was won by Ted Dickinson of Hatfield and County GC with 38 points (on countback) from Martin Smith of Porters Park GC. In third place came Daniel Branson, also from Porters Park GC, with 32 points. Best guest was Tony Kelly with 38 points.

The course was in superb condition, and our thanks go to Martin Smith, whose enthusiasm never seems to falter, and his team of fine greenkeepers. The competition was well supported by our trade members: Parkers; Euroturfcare; Sta-Brite; CMW and Pattisson. Our thanks to them all.

The National Conference for 1992 will be held in Cirencester from 27th to 29th March. Greenkeepers considering attending would do well to make a strong effort.

ANDREW PHILLIPS

NORTH WEST

In June I had the pleasure of meeting both David White (the editor) and Tom O’Brien (the head greenkeeper) at Royal Birkdale for a preview of the course prior to The Open Championship. Tom and his staff are doing a grand job and the course is a credit to them year round. I really cannot imagine how Tom manages to keep so cool, when vehicles loaded with scaffolding are pulling in, and the usual peace of the course is shattered, but he does, and is a credit to our profession.

Beautifully manicured fairways and greens could be viewed from almost every sand dune and even the menacing bunkers looked tidiy with their deep faces closely mown. For my part I just drank in the whole scene and admired the work of some true professionals.

Can I remind you that a team of 16 is required for the Roses Match on Thursday August 22nd. Any player with the ‘killer’ instinct can contact me –

GREENKEEPER INTERNATIONAL August 1991 53
Dear [Name],

53 >«* tact me on 051 724 5412. One point I must make is that in the North West alone almost 70 members have not paid their subscriptions. This is an alarming figure and we need to take action to ensure that all members are up to date with their payments.

I now hold a comprehensive range of official BIGGA merchandise and these may be ordered by calling me on 0274 590463.

BOB LUPTON

EAST OF ENGLAND

The fresh winds and showers at Blankney proved an ideal test of golf for our Purdy's Trophy in May. The course was in first class order and had more grass than most of us had experienced during the cold, dry spring. Conditions made for a tight competition with both Richard Owens and Don Dykes retuning nett 71's. On this occasion Don took a bow to youth - losing on count-back, with Richard retained the trophy for the second time in succession. This competition also gave us our qualifiers for the Iseki regional final.

Our thanks must go to Tony Fox for his excellent organisation and for the warm and friendly hospitality that is the norm at this Lincoln Club.

The Iseki regional final was held at Belton Park on June 24th and although we had a reasonable blow and odd showers the scoring was excellent.

We must congratulate our member, Graeme Patrick, in qualifying, with David Salisbury and Charlie MacDonald both achieving reserve slots. Charlie returned a gross 73 nett 69.

COLIN SWINGLER

SUSSEX

Our June meeting was held at the delightful Pycombe Golf Club, with 24 members battling it out against old man Par and a strong wind. Perhaps we were fortunate in seeing no rain. Our thanks to Adrian for the direction of the course and to all within the clubhouse for caring for us so well. The meeting was sponsored by Farmura and we thank them - especially Jim Coppen for presenting the prizes. The winners were: 1st C Tate 38 points. 2nd S Wells 33 points. 3rd P Ray 32 points. Guests and Trade: 1st G Ogilvie 31 points. 2nd D Haskall 25 points.

DEREK COOMBER

NORTHERN

Tuesday June 11th saw our President, Bill Mountain, hold his annual President's Day at Lightcliffe GC. Many thanks to all at Lightcliffe, especially head greenkeeper Adrian, for an excellent course. Award winners were: Clive Walton (Calverley) - best gross and the Jubilee Cup. Nick Leauman (Ganton) - best nett and Cup. 2nd: Nick Hannan (Moorfoot) 3rd: David Spurden. In the second division Daniel Rowse took top honours followed by Telford Jarvis and Colin Garnett. Well done lads.

Our next golf date is Invitation Day at York Strensall. I have encountered a problem with the Roses Match, the list of players/ members wished to play having disappeared from my computer. Please call me for this event - August 22nd at Croxall Heath - which is sponsored by our friends at Pattisson.

I must congratulate our member, Graeme Patrick, in qualifying, with David Salisbury and Charlie MacDonald both achieving reserve slots. Charlie returned a gross 73 nett 69.

GORDON MITCHELL

DEVON and CORNWALL

The grapevine has been working overtime in recent weeks, with Stanley West - who were Ransomes dealers for the South West - going into receivership and Monro Amenity Care, closing. We shall miss both, although many friends good fortune, with the hope that they may soon be 'back on the road again'.

On a brighter note, Pat Field wishes to thank all section members who knew her from Robins and Greenslands for their help and support over the years. Pat has found herself a part-time job which should serve well until she finally retires. Our congratulations to Terry Farkins of Torquay GC, who has been selected to represent Cannington College in the 1991 Toro scholarship award - best of luck, Terry.

Also congratulations to Chris Pine, who has qualified for the Iseki final, and to our team, who after listening to my 'let's do it to them before they do it to us' pep talk, managed to win the team shield. Our thanks again to P J Flegg and Devon Garden Machinery who look after us so well.

RICHARD WHYMAN

GREENKEEPER INTERNATIONAL August 1991

54 - AROUND THE GREEN

The National Tournament in Harlech soon - courtesy of ICI - is having his handicap 'adjusted'. Well done Mike and all the best.

Erringtons of Elvington brought the TORO Hydroject to The Leicesterhire recently and the demonstration proved a great success.

We had an enjoyable and interesting evening at W. Hewits and Son in Leicester, given for head greenkeepers and green chairmen, with a walk round their very large premises and a showing of the various top dressings which they mix with great accuracy by using computers. This was followed by a talk on CSH10 given by Jon Allbutt. All who attended found this very worthwhile, especially in view of all that is happening on the front of health and safety law. The evening rounded off with an excellent buffet served by the young lady of Hewits. Credit also to VATS for supporting us by bringing in John Allbutt - I am sure other sections would find a similar evening most worthwhile.

Finally, congratulations to Steve Goode on his appointment as head greenkeeper at Scratc patches.

GORDON MITCHELL

MIDLANDS REGION

The first qualifying Section Committee Members golf competition, sponsored by ICI, was held at Moor Hall GC on June 18th. Open to committee members only, the course was won by Mike Hughes from the Midlands section with the team event going to David Heads and Barry Holt from BBB0 section. Dave Siddon of ICI presented the prizes and thanked Richard Minton - also of ICI - for organising the competition, Pete Woodward - course manager at Moor Hall - for excellent playing conditions, the indoor staff for a fine meal and finally Moor Hall GC, its captain and committee, for granting courtesy of the course. The regional final of the Iseki Championship was held on June 24th at Belton Park GC, Steve Broad of Broad Spectrum giving thanks to Belton Parks' captain, Keith Findlers, for the courtesy of the course and to head greenkeeper Colin Swingler and his staff, for the excellent playing conditions. Tony Snaith of Iseki presented the winners prizes and wished qualifiers good fortune in the finals at Hilside on September 12th.

The section team prize was won by the East Midlands and the following section was the winner: 1st: R McKeown, MA. 2: P Sewell, EM. 3: M Emery, EM. Reserve: C Maclodan, EOE. Category two: 1: B Piggott, MA. 2: G Patrick, EOE. 3: A Cutler, M. Reserve: D Salisbury, EOE. Category three: 1: R Saunders, MA. 2: M Bindley, EM. 3: E Porter, EM. Reserve: M Billings, EM.

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Championship Links, 36 Holes, with a 9 Hole Pitch & Putt
Applications are invited from Head Greenkeepers and Assistant Greenkeepers for this position. Salary negotiable. Accommodation may be provided.
Applications should be received in writing on or before Friday 6th September 1991 and include a full CV, stating present salary. To:
The Secretary Manager
Royal Portrush Golf Club, Dunlucne Road, Portrush, Co. Antrim BT56 8QI

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### ASSISTANT HEAD GREENKEEPER

You will be working with the Head Greenkeeper in a team of up to 14, where you will be fulfilling the function of Assistant Head Greenkeeper together with one colleague. Depending on your development you will have the opportunity for rapid promotion.

General terms of the offer are:

<table>
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<tr>
<th>Salary</th>
<th>up to DM 39,000 (ca. Sterl. 13,300) per annum</th>
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<tr>
<td>Profit Share</td>
<td>Discretionary Profit Share</td>
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<td>Additional</td>
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<td>Contributory Pension Scheme</td>
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<td>25 days Paid Vacation per annum</td>
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<td>Based in Southern Bavaria</td>
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<td>Company Sponsorship for Further Education</td>
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In both positions, we are looking for team players with enthusiasm and drive to ensure their and the Group’s long term success.

If you are interested please respond in writing with full CV to:

Sven Moos, Managing Partner, Golf Care GmbH Golflatzpflege

Irmgardstrasse 22

8000 Munich 71, Germany

or call Sven Moos on 010 49 89 7900052 with any questions you might have.

### HEAD GREENKEEPER

You will be responsible for the maintenance of two clubs and will have a team of up to 14 to coordinate and lead. You will be directly responsible to the Managing Partner. General terms of the offer are:

<table>
<thead>
<tr>
<th>Salary</th>
<th>up to DM 72,000 (ca. Sterl. 24,500) per annum</th>
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<tr>
<td>Bonus</td>
<td>Discretionary Performance Bonus</td>
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<td>Profit Share</td>
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<td>Contributory Private Health Insurance</td>
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<td></td>
<td>Based in Southern Bavaria</td>
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<td></td>
<td>Experience in Germany would be beneficial</td>
</tr>
</tbody>
</table>

### ROMILEY GOLF CLUB

require an

**ASSISTANT HEAD GREENKEEPER**

to join an ambitious and progressive team.

Applicants should be City & Guilds qualified or equivalent, have a sound knowledge of modern greenkeeping methods, including maintenance of machinery and irrigation systems.

The successful applicant should be capable of leading a team, after initial guidance from the head greenkeeper.

Salary negotiable, no accommodation available.

*Send full CV to:*

The Secretary

Romiley Golf Club

Goosehouse Green

Romiley

Cheshire

### MOUNT JULIET

**Assistant Superintendent required**

For this prestigious Jack Nicklaus designed 18 hole World Class Golf Course, 3 hole Teaching Academy and Practice Area.

A formal greening qualification is preferred but proven experience of working to high standards in the management of the course will be equally acceptable.

The successful candidate shall be fully capable of deputising for the Golf Course Superintendent and have the ability to teach and motivate staff.

*Please apply with your full CV to:*

Mr Aidan O’Hara,

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require a

COURSE MANAGER

This is a new appointment with full responsibility for the management of an 18 hole golf course in a magnificent setting overlooking the Clyde estuary and Loch Lomond. The successful candidate will be fully involved in the planning and execution of expansion and development anticipated in the near future.

Applicants must be experienced in all aspects of course management with the proven ability to control and motivate staff.

Salary is negotiable in accordance with qualifications and experience. Accommodation or relocation assistance will be offered to the suitable candidate.

Applications in writing with full CV and references should be sent to:

The Secretary
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The successful applicant will be expected to travel extensively throughout Great Britain, Ireland and Europe. Conditions of employment and salary will be negotiable. Apply in writing with full CV to:

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KOSAIDO

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From persons of proven ability with appropriate qualifications and experience in all aspects of course maintenance related to a parkland course.

An ability to supervise and motivate staff are essential qualities required, together with a comprehensive knowledge of machinery and its maintenance.

The salary is circa £14,000 per annum depending on experience and qualifications.

Three-bedroomed flat accommodation on site is available if required at appropriate rental.

Due to the early retirement of the present post holder, the club wishes to make an immediate appointment.

Full details of the post and of the club, together with an application form are available from:

The Secretary/Manager
Vicsars Cross Golf Club Ltd
Tarvin Road, Great Barrow, Chester CH3 7HN
Telephone: (0244) 335174

THE PUCKRUP HALL HOTEL GOLF COURSE Tewksbury

require a
HEAD GREENKEEPER

This is an excellent opportunity for a fully qualified greenkeeper to develop and manage a newly constructed golf course due for opening in 1993. The approved greenkeeper must be fully conversant in all matters relating to turf culture, machinery purchase and management.

The golf course is the first to be developed for the Country Mansion Hotels Ltd., by the newly formed Golf Design Partnership, architect Simon Gidman, and is being constructed to international standards of design and specification.

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Please reply in the first instance enclosing CV and other relevant experience to:

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The Golf Design Partnership
10 Newland Mill
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Applications are now invited for the challenging position of Course Manager at the Staverton Park Hotel and Golfing Complex in Northamptonshire.

This eighteen hole par 71 Parkland Golf Course is in excellent condition and now needs a committed and enthusiastic Course Manager to further improve and develop on what has been established by our previous Course Manager.

The ability to control costs sensibly and motivate staff are essential along with the eye for great attention to detail.

The course adjoins the Staverton Park Hotel which is establishing a reputation as one of the finest golfing hotels in the United Kingdom.

This is an exceptional opportunity for the right candidate. Salary negotiable according to qualifications and previous experience. This is a live-out position.

Please reply in writing in the strictest confidence to:
Mr S. Essex, General Manager, Staverton Park Hotel and Golfing Complex, Staverton, Daventry, Northants, NN11 6JT.

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requires a GREENKEEPER

To maintain 9 hole par 3 golf course. Must have at least three years experience. Salary: £10,000 - £13,000 pa negotiable. No accommodation. Please apply to:
JLS Golf Centre, Thong Lane, Gravesend, Kent DA12 4LG

ALFORD GOLF CLUB
require a HEAD GREENKEEPER

Applications are invited for the above position to take charge of our 18 hole Parkland Golf Course. A thorough knowledge of modern greenkeeping practices, irrigation systems and construction methods, along with the ability to organise and motivate staff are essential. Salary is negotiable according to qualifications and experience.

Apply in writing to:
The Secretary, Alford Golf Club, Montgarie Road, Alford, Aberdeenshire AB3 8AE.
Our 1991 Regional Seminar is to be held on Wednesday November 20th at the Warwickshire College of Agriculture, Moreton Morrell. Speakers so far include David Senior, Vitax, on Fungal Diseases, Robin Hume on Turf Irrigation, Michael Boddy, George Walker and Sons, on Trees, Barry Cooper on Surveying for Drainage and our own Education Officer, David Golding.

ROGER WILLARS

SOUTH WALES

The regional Iseki qualifier held at my home on June 27th is detailed in the South West course on June 27th is detailed in the South West weather and an invasion of over sixty experts, certain amount of fear and trepidation that I might have been a problem but which turned out fine. The sun shone and everyone enjoyed a grand day of golf.

RESULTS

G Cox 78, H Morgan 74, G Price 80, J Carter 84, T King 70, M Davies 78, H Parry 81, J Bartlett-Jones 83, M Norfolk 81, C Hallett 83, T Millar 87, D Jones 81, P Swain 74, Team score (3rd overall) 789. The national Iseki qualifiers are T King and P Swain.

My thanks to Iseki on behalf of the section for their sponsorship generosity.

PHILIP SWAIN

SOUTH WEST and WALES REGION

Following two weeks of rain the sun shone for our regional Iseki final at Tredegar Park GC, and proved once again to be an excellent day both for golf and for social activities. One change from previous years was the replacement of nearest the pin and longest drive with an Inter Section competition. This created much friendly rivalry and at the end only 20 shots separated first from last.


Our thanks to Iseki and especially Ian Pogson, who presented the prizes and claimed to have hit the final green in one - a golfing career highlight!

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GORDON CHILD

SOUTH EAST REGION

There is something quite special about Ham Manor GC, the venue for the South East regional Iseki qualifier. For a start, it is in a delightfully scenic area. Second, it is one hell of a golf course, tough but fair with prolific rough and exquisite greens. Third, it has as its head greenkeeper a wizard of the links, one George Bartlett. In George's case there is a genuine feeling amongst his peers of awe and admiration for the man and his golf course. Quite simply, he performs daily miracles! All power then to George and his dedicated team for our exposure to his particular form of spell binding magic.

RESULTS: Category 1 - 1st Darren Burdis (London) 75-6=79. 2nd Martin Smith (London) 75-5=70. 3rd Alan Sheppard (Kent) 76-4=72. Category 2 - 1st B Washbrook (London) 82-17=65. 2nd M Private (Sussex) 78-10=68. 3rd Steve Denton (E. Anglia) 83-13=70. Category 3 - 1st Phillip Hirst (Kent) 94-23=72. 2nd P Ray (Sussex) 91-19=70. 3rd N Brown (E. Anglia) 92-20=72. Team award: Sussex. (Apologies for missing Christian names, these were not forthcoming.)

An unfortunate incident occurred which in some ways served to highlight a problem which may come up from time to time. One competitor, playing to a given BIGGA section handicap of nine, declared in passing to his playing companions that his Club handicap was seven. The outcome of this, brought in under rule 6-2b, meant disqualification. In the player's case, he quite innocently thought that he should play to the handicap of his BIGGA section; however - the Rules of Golf state "that if a handicap is recorded at a higher than that to which he is entitled, the player's responsibility to ensure accuracy.

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