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The official monthly magazine of the British & International Golf Greenkeepers Association

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The advertising copy deadline for inclusion in the January 2004 edition of Greenkeeper International is Monday 8 December 2003

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Circulation is by subscription. Subscription rate: UK £42 per year, Europe and Eire £55. The magazine is also distributed to BIGSA members, golf clube, local authorities, the turf industry, libraries and central government.

ISSN: 0961-6977 © 2003 British and International Golf Greenkeepers Association

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(10) Launch of a new membership benefit...

TOP OF THE RANGE

This state-of-the-art Sony Walkman,

Atrac3plus, portable CD Player has a CD reader and rewritable function. It comes complete with Sony, SonicStage 'SIMPLE BURNER' software so you can create your own CD compilations - up to 30 albums on one disc. The Player has a jog proof protection function and is supplied with headphones and an AC adaptor. To win, all

you have to do is enter this month's Buyers' Guide competition sponsored by Greenlink International.

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nte rate

December 2003

Your next issue of Greenkeeper International will be with you by 9 January 2004

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Gives members an insight into the new Discount Card which is about to be launched.

Continue to Learn: Golf Course Design - An Evolving Art Form

Roland Fream looks at the history of golf course design and how a return to affordable golf is the future.



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Around the Green

Features Listing Helping you track down some of Greenkeeper International's past articles.

As I see it ... BIGGA National Chairman, George Brown, reflects on another funny old year.

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Ransomes Jacobsen Scholar, Judith Colley, outlines the work she has been able to carry out on the strength of receiving her scholarship.

Cover photograph by David J. Whyte

Welcome

PUSH THE BOUNDARIES

If I were to list the names Michael Weir, Jim Furyk, Ben Curtis and Shaun Micheel what would they mean to you? Now I'm pretty sure the golfers among you will be able to say that they are the winners of golf's four majors in 2003, but you have to admit that it helps that the names are listed together and in order.

If the names had been thrown at you at the beginning of the year I'm sure you would have heard of Jim Furyk, he was after all, already a Ryder Cup player and you may have known Michael Weir, as he had won the 2000 American Express Championship at Valderrama and was one of a very small band of top quality left handers. However, I'd bet bucket loads that Ben Curtis and Shaun Micheel could have walked past you in the clubhouse without a second look. They probably still could!

Talking of betting it would be interesting to learn what a 10p accumulator would have reached on a successful prediction of the 2003 Major Winners. Having said that I don't think you would have believed your crystal ball. Let's face it, no Tiger, Ernie, Phil, Vijay or Sergio, you've got to be kidding?

I'm equally sure that this time last year Ben and Shaun didn't have "Win a Major Championship" as one of their goals for 2003.

And I suppose that should be a lesson to us all. We may not know what we are capable of and it may be that if we were to push ourselves forward and accept challenges we might not be found wanting. Holding back because we might fail or, worse, be found out, is a failing we succumb to all too often as unfortunately we seem to think it's better to have abstained than to have tried and failed.

I find with the magazine that often people with a great tale to tell are reluctant to put pen to paper or digit to keyboard. Don't be. If what you want to say is worth saying we'll find a way of making it publishable. It's the same in other areas. Why not enter your club in the Environment Competition? What's the worst that can happen? I'll tell you. You don't get through the first round of judging but you will have spent time considering and assessing your club's current environmental projects and needs which must be a good thing. Why not investigate the Master Greenkeeper programme? You may have to collect a few more credits before being able to move to the next stage but by doing so you are already setting out on a voyage of self improvement. It's the same with preparing to move on in your career. Putting in the work will open doors.

The point is, as Ben and Shaun found out this year, you won't discover the limit to your expectations if you don't push them and you might have an awful lot more inside you that you ever believed.

The great thing is that trying doesn't do any harm but a great deal of good.

Scott MacCallum, Editor

RETIREMENT AFTER 51 YEARS

Etesia's UK Sales & General Manager, Robin Taylor, is retiring, following a career spanning 51 years devoted to the agricultural engineering and outdoor power equipment industries.

He joined Etesia in 1991, initially as Southern Area Manager before becoming Sales Manager and eventually rising to his current position. At that time Etesia was a new manufacturer which had entered the highly competitive UK garden machinery market just three years earlier.

"In those days, Etesia's UK operation mainly consisted of just me and a van covering the whole of the country, appointing dealers and doing demonstrations. We had just one product – the Hydro 100 ride-on mower. The machine had been developed as a result of extensive research and development – its unique feature was that it would cut and collect without clogging...even in the pouring rain! Some days I got very wet demonstrating - but the mower performed so well, it virtually sold itself!" recalled Robin.

For the past 12 years Robin has been responsible for firmly establishing Etesia. "Etesia owes a great debt of gratitude to Robin for his hard work and diligence in setting up and expanding our UK operation. His wealth of experience, tenacity and tireless energy over the years have contributed to Etesia's success and recognition as a leading brand, especially in the commercial sector. We wish him a well-earned and very happy retirement," said Managing Director, Patrick Vives.



WORTHWHILE TRIP



As part of the planned expansion programme into Europe, Hunter Grinders were exhibiting for the first time at the Elmia Park & Golf Show in Jonkoping, Sweden. The show proved one of Hunters most successful and ended with Golf Maskiner, the well known distributor of grass care machinery, being appointed to handle Hunter products in Sweden.

Peter Jonsson, Managing Director of Golf Maskiner was pleased with the development.

"We like the product very much and can see a very healthy market in Sweden. Following discussions with the Company, we are confident that Hunter Grinders can offer us the sales and engineering back up that only comes from trained experienced staff. Since the show we have already confirmed three sales and anticipate many more for the coming year."

The enthusiasm for the Hunter Grinders machines was attributed to a number of factors

such as the rapidly expanding golf market in Sweden.

Many of the greenkeepers who attended the show were surprised and delighted to see another grinder manufacturer who advocated relief grinding as the preferred method for sustained accuracy and sharpness. They were also impressed with the robust construction of the Jupiter 2000 and the fact that it will relief, spin and sharpen cylinders and bottom blades on the one machine.

"We went to Sweden with a completely open mind" said Keith Cann-Evans, Managing Director for Hunter Grinders.

"The hands on knowledge of the visitors to the show and their well-founded enthusiasm for relief grinding was impressive. We are looking forward to establishing ourselves very quickly through Golf Maskiner as the leading supplier of mower grinders in Sweden."

HUGH MARSHALL



BIGGA Life Member Hugh Marshall has died after a short illness. He was 82.

Hugh began greenkeeping at East Kilbride GC and moved to England in 1962 when he became

Head Greenkeeper at Cleckheaton & District GC. Six

years later he moved to Alwoodley GC in Leeds where he remained until his retirement in 1988.

As a Northern Committee man for many years Hugh was a staunch supporter of the Association and a regular in national BIGGA golf matches where he was often in the prizes.

In his retirement he returned north of the border to Ardossan where he remained until his death.

He leaves his wife Ann, daughter Fay, son Peter, a former greenkeeper at Moorallerton GC and now working in the trade, and four grandchildren; Craig, Scott, Ann and Elizabeth.

GRINDING A RESULT

At a recent Bernhard's demo day Jim McKenzie, Courses Manager of Celtic Manor and Stephen Bernhard joined forces to show the benefits of sharpening and promote non-contact cutting as the way forward.

"What we are trying to achieve is to get the mower to cut like a scythe," said Stephen,

Managing Director.

"Before Mr Budding introduced the mower this is how all grass, including golf greens, was cut.

"Our concept is to sharpen the mower and set the blades with no-contact so they function like a scythe. Critically this ensures the grass is cleanly cut like a scalpel."

Jim backed up this theory.

"Grass is a much better quality. On the agronomic side less damage is caused to the grass so it makes less demand for water and fertiliser. Importantly this makes the recovery process quicker".

"Machinery-wise we are making huge savings as we need less spare parts for our mowers.

With less mechanical stress there is a reduction



in fuel, reduced engine wear and overheating hydraulics. This definitely saves my staff time and me money over the old method," said Jim.

"Setting up the mower with contact is like driving a car with the hand brake on," said Stephen.

"With metal rubbing on metal it is only a matter of time before the blades become dull and lose that critical sharp cut".

"A contact set up means the blades drag the material across its surface, which has the effect of making the grass bleed. This makes the grass far more susceptible to disease, it requires more water and loses definition as it actually grows more rapidly to try and recover."



ASSOCIATE DIRECTOR



Eamonn Wall & Co, has promoted Mark Gordon to the position of Associate Director.

Mark, 31, joined the firm in 1997 and has been operating successfully since then throughout England, based centrally in

Nottinghamshire. After graduating from Aberdeen University he gained a few years practical experience in the woods and on large contracting projects. He became a Chartered Forester in 2002 and now co-ordinates the firm's English team providing its existing and new clients with a complete woodland consulting and contracting service.

He is a keen arboriculturist and woodland designer who uses modern technology to promote successful landscape management. He is based at the firm's Retford Office.

BACK IN EUROPE



Barenbrug has appointed Gerard van Klooster as Product Development Manager for Europe.

For the last three years Gerard has been Research Director for Barenbrug USA, where he set up a testing

facility and research department in Virginia.

Previously he spent 10 years as head of the company's Dutch research department. He will now be based at Barenbrug's headquarters in the Netherlands, with responsibility for the process of innovation and product development of grass species, varieties and specific mixtures. He will also play an active role in the introduction of new products for the international market.

"I am delighted to be working for Barenbrug in Europe again, and to have an exciting new challenge of developing new products," said Gerard.

"Developing new varieties is a fascinating process, and it's so interesting to work with new species such as crested or tufted hairgrass. At Barenbrug we continually look at new species as they can help us to give the customer the solution to their problems," said Gerard.

Commenting on the appointment, Barenbrug UK Managing Director, Paul Johnson said, "Having Gerard on board is an important addition to Barenbrug's UK operation. The expertise and advice he can provide will help to continually improve the total package of services we offer to UK customers."

PACE OF PLAY WORKSHOP

Slow play on the golf course is recognised as an issue facing golf course managers worldwide. A unique three day workshop has been developed at St Andrews Links to look at practical ways of improving the pace of play on the golf course.

As the largest public golf complex in the world with over 200,000 rounds of golf a year, the impact of pace of play presents a continual challenge. The Trust has taken successful measures in recent years to improve performance on the Links and has developed this workshop in order to share expertise.

The workshop is an opportunity to exchange experiences and look at practical solutions to improve the pace of play. Aimed at Course Managers and Directors, it is being held at St Andrews Links with involvement from the Royal and Ancient Golf Club in February 2004.

STRATEGIC ALLIANCE



Former rivals Imants and Redexim, two of the world's leading manufacturers of aeration and decompaction machinery, have announced a 'strategic marketing alliance.

▲ Felix Peters

The union brings together two companies with a vast wealth of knowledge and experience in the manufacture of specialist turf care equipment.

"We have been considering our strategy to target the world markets for some time now. Imants have been highly successful in Europe for many years, but we fully recognised our limited impact in the USA and the rest of the world. This joint marketing venture will give us immediate access to Redexim's worldwide dealer network and will enable us to pool our unrivalled experience in design and development of high quality turf machinery for the mutual benefit of both companies," said Felix Peters, Managing Director of Imants, based at Reusel in Holland.

The Imants rotary decompactors and the Rotoknife slitter/aerator will be marketed as own brand by Redexim, alongside the very well established and highly popular Verti-Drain aerator. However, Felix is quick to point out that the UK, Ireland, Holland and other well-established markets will be specifically excluded from the deal.

"Imants is a highly innovative and progressive company and therefore, direct contact through our own extensive dealership network is essential to us as many significant improvements and design changes are customer driven at Imants," he said.

Imants will continue to manufacture the rotary decompactors and Rotoknife at its manufacturing facility in Reusel. The machines will then be shipped to Redexim HQ in Zeist, Holland, for distribution to its dealers throughout the world.

Redexim already market a wide variety of machines on an international basis including Verti-Seed, Rapid Core, Turf Tidy and the Rink range of top dressers.

RUNNING MAN



Hot on the heels of Eric Barber's World Championship winning performances as featured in last month's magazine comes news of another feat of endurance.

Steve Suttle, Head Greenkeeper at North Foreland Golf Club in Kent. completed the London to Brighton Road Race in seven hours, 35 minutes and 49 seconds to finish 16th but missed out on a silver medal by a mere 49 seconds. It was the 10th time 45 year-old Steve has completed the 54.1 mile race with his best time coming in 1988 when he posted six hours, 42 minutes and 25 seconds while his best finishing position was 7th in 2001.

Any disappointment he felt in missing out in the medals disappeared however when the team scores were added up and it transpired that Steve's team, Thonet Roadrunners AC, had won the team trophy. The Len Hurst Belt is 100 years old and is the most prestigious trophy ever won by the club.

"It compares to a non league club winning the FA Cup," said Steve.

While the London to Brighton distance is the equivalent of two marathons Steve is also quite adept at the "shorter" marathon distance with a best time of two hours 46 minutes and 50 seconds while only last September he ran three hours, three minutes and 23 seconds.

WELSH RFU CHARITABLE TRUST GOLF DAY

South Wales Section's local Toro and Massey Ferguson distributor Ted Hopkins & Son contributed to the Welsh RFU Charitable Trust Golf Day which was held over the new Welsh National course at the Vale of Glamorgan Resort by sponsoring six teams of four people.

Pictured below is the winning team of Peter Lacey, Steve Mills, Tim Lawrence, AGCO, and Jamie Probert, receiving their first prize of golf bags from the Chairman of the Coors Brewing Company.

In the background (back left) is former Wales and Llanelli international, Rupert Moon.

The charity raises money for those people injured as a result of sporting activities and the day raised over £5000 for the cause.



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ANY IDEA?

During the hot summer months a small number of lady members at Bridgnorth Golf Club in Shropshire contracted a sever rash on their legs between their ankles and knees. This rash has proved to be particularly persistent and is still in evidence some two months after it first appeared.

"All the ladies in question wore long trousers - it was on one of the few rainy days in August. As far as we are aware only six ladies have been affected and we have no reports that any of the men have suffered a similar rash.

Clearly chemicals/ fertilisers are the first place to look but non had been used for a fortnight prior to this incident," said Gordon Kelsall, the Club Secretary.

"We wonder if any of your readers have had any similar experiences during the hot summer months. We would be very interested to hear from any clubs who have had similar problems," he said.

Gordon Kelsall. Hon. Secy, Bridgnorth GC, Stanley Lane, Bridgnorth, Shropshire, WV16 4SF.

NEW VENTURE



Rob Lupton, former Northern Region Administrator and Northern Section Chairman has teamed up with the IdealsUK Group, to expand their business in the south east. Working from Essex/Suffolk Rob will be

selling to the industry such items as workwear, health & safety equipment, workshop tools and equipment.

"We will basically be a one-stop shop for anything Greenkeepers may require - using my 35 years of experience to assist in any way I can," said Rob.



REAR OF THE YEAR

Chris Yeaman, Course Manager at West Linton Golf Club, near Edinburgh, is a popular man around town. Well he is with the older women, with whom he is now known as "Rear of the Year".

Chris made a starring appearance in the town's 'Calendar Boys' calendar - the male version of the famous WRI nude charity one which became the film Calendar Girls.

Appearing in all his glory, except for a pair of socks and golf shoes, in September, Chris is pictured tending the flag and his rear end has come in for some favourable comments from the townswomen. In fact he is regularly asked for his autograph.

The calendar, which features 50 West Linton males, is raising money for breast cancer and such has been its popularity Chris has appeared on GMTV in nothing but his birthday suit - fortunately shielded from full view - and interviewed by none other than Eamonn Holmes.

"The interest in the calendar has been amazing and we are delighted with how much money we've been able to raise," said Chris' wife, Carol, who added that the idea for the calendar had come before the famous WRI one had become known about. Chris, who was on a golfing holiday with his son in Portugal

when Greenkeeper International called, presumably to get away from the media attention, is joined in his picture with some of the West Linton members, two of whom didn't discover they would be posing nude until they were actually on the green.

"Two dropped out and they went to the clubhouse and asked if anyone wanted their picture taken. The two volunteers didn't know what they had let themselves in for," said Carol.

The caption for the picture reads "Nine ball at sunset".

"The local sheltered housing residents have asked Chris to go along and sign autographs for them. As long as he wears only his underpants," joked Carol.

Calendars are in short supply but if anyone wishes one they can be obtained by contacting Chris or Carol. Tel: 01968 661313. Cost is £6 with £5.50 of the proceeds going directly to breast cancer charities.

PREPARING FOR 2006

The Royal Liverpool Golf Club (Hoylake) has signed an agreement with Toro to help prepare its famous links course for The Open in 2006 - 39 years after it last hosted the championship in 1967.

After assessing a number of different manufacturers, the club has signed a five-year deal with Toro that will see the company's turf maintenance machinery used exclusively in the runup to The Open. All the club's course machinery will be replaced within two years.

"We have used some Toro in the past, but with The Open coming up we needed to find one manufacturer which could give us the best deal for both high-quality machinery and support. We took 12 months to assess Toro against other manufacturers and it came out top for ease of operation, maintenance, quality and value for money." said Links Manager, Derek Green.

The deal covers a wide range of equipment, including greens, tees and fairway mowers, as well 8 Greenkeeper International



as the Sidewinder units with sideways-shifting cutting units for surrounds and aprons and Workman utility vehicles.

As the second oldest golf club in England, the Royal Liverpool is a leading example of traditional

golf at its best. The 18-hole championship links course on the Wirral, also home to the Amateur Championship, is eagerly looking forward to the 2006 Open.





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Clive Osgood; David Robinson; Richard Stillwell Stephen Dixon; Ian Semple; Paul Jenkins; Robert Hogarth; R Steele; Lee Relf; Raymond Warrender; Nichollas Gray

With Christmas just around the corner and Continue to Learn alongside BTME & ClubHouse in January, Ken and Sami are very busy making sure that they have got everything in place to ensure the smooth running of the National Education Conference, Workshops and Seminar programme.

National Education Conference

Please note that the National Education Conference will be held on 19 and 20 January in Hall D of the Harrogate International Centre (HIC) and not in the Majestic Hotel. Registration will be in the Main Entrance to the HIC, opposite the Moat House Hotel. Registration will commence at 8 a.m. on Monday 19 January.

Workshop Programme

The three one-day workshops will be held on Monday 19 January in the Harrogate Moat House Hotel. Registration will be in the Main entrance to the HIC, opposite the Moat House Hotel. Registration will commence at 8 a.m. on Monday 19 January.

Seminar Programme

All Seminars, including the Key Note Seminar will be held in Hall D of the HIC. The Presentation of Master Greenkeeper jackets and the Presentation of prizes for the 2003 BIGGA Golf Environment Competition will be held in Hall D, commencing at 10.30, on Wednesday 21 January.

Extra Seminar Sessions

As was announced in this column last month, we have arranged some extra sessions to add to the advertised Seminar Programme. Delegates will be able to discover what the Futures sub Committee is all about by attending the Seminar at 4 p.m. on Wednesday 21 January in Hall D. This Seminar will be followed at 5.15 p.m. by the BIGGA Annual General Meeting. Members will need to show membership cards to gain entry to the AGM.

I am pleased to be able to announce that a series of Seminars will be held on Tuesday 20 January, also in Hall D, on the subject of Golf Club House Design, Development and Re-development.

The programme will be:

Tuesday 21 January 2004 Harrogate International Centre Hall D

incounty = i s	andar j 2001 manogate meenadonal centre man p
1.30 p.m.	Financial Potential of Existing and Proposed Golf Facilities
1.55 p.m.	Food and Beverage Operations
2.15 p.m.	Refurbishing Locker Rooms and Changing Facilities
2.40 p.m.	Extending an Existing Clubhouse
3.05 p.m.	New Projects and Redevelopment – Where to Start
3.30 p.m.	Questions to the Panel
Entrance	to the Seminar Hall will be through Hall Q of the Harrogate Inte

ernational Centre. These Seminars are free of charge.

There are still places left at Continue to Learn 2004. However, remember, that the deadline for Conference, Workshop and Seminar Bookings is 9 January 2004. Call Sami on 01347 833833 to check for availability.

Regional Training

The Regional Training Courses for Spring 2004 have been organised. The following courses have places available:

Fire Safety & Manual Handling Next Steps in Management Skills **Communicating with Committees** The Influential Manager **Integrated Pest Management**

18 February 24 & 25 February 16 & 17 March 25 & 26 March 14 April

Lingdale Golf Club, Leicester Wokefield Executive Centre, Reading Shirley Golf Club, Warwickshire De Vere Carden Park, Chester De Vere Carden Park, Chester

Other courses requested by Regions and Sections have been arranged, however, they are already fully booked. Call Sami on 01347 833800 to check for availability.

Careers' Fair

Sponsored once again by TORO, the 2004 Careers Fair will be situated in Hall D of the HIC. Visitors will be able to gather information about jobs in Greenkeeping and Golf Course Management, in Golf Course Machinery Sales and Support, in Agronomy, in Further and Higher Education, in Professional Golf, and in Golf Club Administration and Management. Delegates will also be able to refine their CVs, learn how to write the all important letter of application and gather some interviewing tips. The Careers Fair will run alongside BTME & ClubHouse on Tuesday 20, Wednesday 21 and Thursday 22 January.

Golf Environment Competition

The BIGGA Golf Environment Competition 2004 will be launched at BTME & ClubHouse. Sponsored again by Scotts UK Professional Products and Syngenta Professional Products and supported by the R&A, this Competition allows you to test your progress in Environmental Management and also gives you the chance to win a weather station plus a cash prize of £2000. Pick up a leaflet from the BIGGA Education and Training Stand Q8 during BTME & ClubHouse.



Rachael and Gemma welcome 64 new members to the Association and would like to introduce a new membership benefit.

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Privilege Platinum Card also offer a "Discount Guarantee" which guarantees to find you a discount for the goods you want in your area, so if you can't see what you want on the website, ring the helpline and they will find it for you.

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DECEMBER' S MEMBERSHIP DRAW WINNER

Just introduce one or more new greenkeeping members to BIGGA and your name will be placed into a draw to win a fantastic BIGGA Clock/calculator/calendar and alarm. Our congratulations go to Hugh Knowles of Pyrford Golf Club.



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For every £100 worth of vouchers that you purchase from Privilege Platinum Card they will send you an extra £7 of vouchers absolutely free. This gives you more money to spend in a wide range of High Street stores such as JJB sports, HMV and the Carphone Warehouse. Please do not present your privilege card at the till in these shops, to get your discounts you must purchase the High Street Vouchers.

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If you recommend to Privilage Card a business which then goes on to offer discounts you will receive a High Street Voucher as a thank you. Look on the website for more details.

HOW DO I GET MY PRIVILEGE CARD?

If your membership is due for renewal shortly you will be sent your card with your 2004 membership card. The cards will also be available for collection at BTME and Clubhouse on the BIGGA stand. If your membership is not due for renewal in the next few months and you cannot get to BTME then please give us a call and we will send your card out to you.

Please note that an administration fee of £5 will be charged for replacing any lost or stolen cards.

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Message of the **Month Winner**

Each month the person who has written the best message on the BIGGA Bulletin Board, which is found on the BIGGA website www.bigga.org.uk, receives an 18 litre Gelert Rucksack featuring a multi function organiser, 2 mesh pockets and a grab handle. (Rucksack supplied may be a different colour to that featured).

Our congratulations go to December's winner, Michael Branson from Keswick Golf Club, whose message was posted on 28th October under the 'Education and Training for Greenkeepers' section.

Money off Subscriptions

If you pay for your own subscription then don't forget to claim a refund of 22% of your subscription amount from the tax office. If you paid for your own subscription last

year then we will enclose a form with your renewal which will help you to do this. If you would like a form sending out to you to claim on previous subscriptions please call 01347 833800 and ask for Membership Services.

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5 10

Course Feature

Short Move Long on Benefits

Scott MacCallum travelled to Dundee to meet Paul Murphy whose short journey eight years ago has been long on benefits.





▲ The 7th green

▲ Snow is a big problem at Downfield, but they have come up with solutions

When Paul Murphy was Head Greenkeeper at the Dundee District Council run, Camperdown and Caird Park golf courses his near neighbour was the highly regarded Downfield Golf Club, one of the finest inland courses in the country.

Eight years ago when the Course Manager's job came up at Downfield it coincided with Paul's completion of an HNC and a feeling that it was time to look to progress his career. One letter of application and an interview later and he had moved a short distance geographically but a long way in career terms. Since then both Downfield Golf Club and Paul himself have achieved a great deal.

"I had quite a bit of security with the District Council but I felt very restricted in what I was able to achieve there but within a week of coming here I knew that I'd made the right move. It was just a feeling that I had and I've never regretted moving to Downfield," he said.

Among the highlights was the 1999 Open Championship at Carnoustie when Downfield was a final qualifying course and will be remembered as the course over which Paul Lawrie became the first qualifier in the modern era to go on to lift the Claret Jug.

"Paul Lawrie loves Downfield. He'd already won a Scottish event over the course and really liked the tight fairways and firm greens," said Paul, who also mentioned that Peter Alliss is also a fan having recorded an 'A Round with Alliss' series with Greg Norman at the club in the 1970s.

"Some of the members thought the pros would shoot really low in the Open Qualifier but I told them just to wait and see and in the end the lowest score over the two days was 67, the same as it was at Carnoustie, regarded as the toughest of all Open venues, during The Open itself.

"We actually played a competition over the course a few days later as it was set up for the Qualifier and most members found it too difficult," said Paul of the par-73 parkland course.

On a tour of the course early last month the colour in the trees was still evident and the golfers were still enjoying a stiff test of golf and fine putting surfaces and fairway shots from their own plastic mats. Mats were introduced for the winter months prior to The Open qualifier as we felt there was not sufficient time for the course to recover from divot damage before the spring. "It was one of the more unpopular decisions that had to be taken to achieve our goals. It is now accepted that during the winter months mats are required on most courses in our area.

"The first thing an older member said to me when I arrived was that I'd do fine if I didn't cut down any trees or make them play from mats," smiled Paul.

That they both happened early in his Downfield career says much for his abilities both as a greenkeeper and as a diplomat.

"When I arrived, with the support and help of my Chairman of Greens, Doug Smith, and experts like Steve Isaacs, then of the STRI, we looked at the course and identified areas where our attention had to be turned."

Among these were areas where trees had grown too close to greens causing problems with shade.

"Taking down mature trees is never going to make you Mr Popular so the answer is always to call in the professionals. In the case of trees it was the Council, who have their own Arbor Squads, who I'd worked with while I was with the Council, and I contracted them to take the major trees which were shading the greens".

"I reported to members, kept them informed and told them the reasons why it was happening but a couple of members still called the Council to let them know the trees were being taken down and asking if it was the right thing to do. The Council was able to say that yes it was the right thing and that they would be doing the work," said Paul, proving the benefit of going through the proper channels.

His knowledge of tree management and previous Council experience has brought about a system at Downfield which must rank with any in the country.

"I realised with trees that you must have a structure in place so in conjunction with the Council (Doug Shearer and Eric Hamilton) we undertook a survey which has resulted in a map upon which every



A Paul Murphy



Path to the 11th

plantation is featured to scale. Each plantation is numbered and we know exactly how many trees are in each one. Jonathan Smith, of the Scottish Wildlife Group, has asked if he can use this as a working document to take to other clubs," explained Paul, who has a eight man team to look after the grass, and in autumn, leaf factory.

"We also have some major trees out on the course and each one has a tag on it with a number. Then, on another file, the tree is listed together with its height in metres, and an 'A', 'B' or 'C' score for general condition; the leaves, the branches, the bulbs and the trunk. Those trees which are receiving straight 'Cs' will be removed."

The survey took around four years to complete but now it is working and Paul doesn't get asked why work is being done on trees anymore and the plantations contain much healthier, stronger trees, growing in more spacious surroundings giving more room for the flora and the fauna to flourish underneath. A five year grant was also obtained from the Woodland Grant Scheme to help finance these projects.

An added benefit to all the tree work was that one of the first purchases Paul made when he arrived was a chipper and now all the paths are covered in environmentally friendly and free wood chip which doesn't damage machines and which is so much more attractive to the eye than the quarry dust which had been used before as well as mulching in the shrub beds which reduces the need for weeding.

Paul worked closely with Doug Smith in designing and rebuilding three of the course's greens, the 5th, 8th and 13th. Doug has also built his own golf course in the shape of Drumoig on the other side of the River Tay, near St Andrews.





Health and safety documents on display for all to see

"A lot of architects may feel that we should have got the professionals in but as a private members club we have a limited budget to work with. As well as feeling confident enough to produce a green which, when finished, you have improved on what was there, and it looks natural in its surroundings it means we have completed a successful project."

One of the greens has been moved forward to reduce some of the shaping problem while another - the 8th - has been made into a double green with the 10th. It was just a coincidence that both greens add up to 18 like the double greens at St Andrews. It has made it easier to maintain this green now that all the golf traffic is directed to an astro turf path to the right of the green rather than wearing a track between the 8th and the



The club has a superb policy on tree management

10th greens prior to joining them up," he explained, adding that all the work is carried out in-house.

"The club knows the standards the team can achieve and are happy that the team is the right size and come with the levels of quality wanted by the members."

Much of the work has been made easier because of Doug's other golfing interests.

"We mixed the rootzone to my spec. at a screening plant at Drumoig and we had a big 360 excavating machine doing the shaping work on the new greens. Because we had the machinery we were able to do both the 5th and 8th greens at the same time - the team was working on one green



Great Golf Course Experience

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MUL



Clearance work

while the machine was working on the other. We had the greens up and down and ready for play for the start of the new season. I don't know where the club would be without Doug. I also borrow other machinery from him including the Graden and all I have to do is pay for the blades."

Another area upon which Paul has produced improvements are the tees, around 10 of which have been rebuilt.

"These had always been a problem as, with the best of intentions, bits had been added to save money in the past. I decided that we should produce a specification for tees which would mean they would all be built to the same standard as well allowing us to give the club accurate costings for future work," said Paul, who brings in a laser level to ensure they are spot on and uses LevenSeat USGA rootzone as a growing medium on top of a stone carpet.

Being so high up, the course is 500 feet above sea level and north facing, and being on the east of Scotland where the east wind keeps temperatures low the course does suffer.

"I couldn't believe how long snow lay here when I started. It must be longer than anywhere else in Dundee as the trees hamper the snow from thawing.

"For that reason we took a conscious decision on certain greens, and only when conditions are right, do we clear the snow off, crack the ice which has formed and remove it the following day.

"It has been a bit of a godsend because we were finding that if we hadn't done this it would have caused ideal conditions for snow mould or as in the case of ice scorched turf from the glasshouse effect of the sun shinning down on the ice.

"As well as a green, tee and tree improvement programme I was also keen to set up a conservation policy which would create habitats for flora and fauna which would enhance the golf course rather than have a negative effect. One of the projects was to reintroduce a curling pond which was used when the land was part of the Camperdown estate before Downfield was built. The shape was still there but it had been overgrown by scrub and was a complete eyesore. By clearing the scrub to the shape of the original curling pond and felling some trees to let light into the area we created a pond which transformed the area as well as creating another habitat within the course. It is hoped that members can take advantage of the curling rink during the winter period, providing them with some alternative entertainment when winter strikes."

The geographic and climactic conditions always make Downfield a "late" course but the aeration work Paul and the team have carried out has produced a financial windfall each spring so far.

"Meadowgrass is never going to survive here and what I found when I arrived was that the edges of greens were quite good but the centres were thin and yellowing because there was so much meadowgrass in them.



Removing ice from the 5th green

What we've managed to do through a more intense aeration policy, overseeding pure bent and plugging from the edges to the centres is turning them around from 70-30 in favour of meadowgrass to 60-40 in favour of bents. This work is ongoing and what we have now is more of a blend of grass which has a strong deep rooting system which we were able to achieve through creating air spaces within our soil to encourage the roots down. With the result we now have greens that you can play on through the winter months, which are firm and free draining only being rested for frost and snow".

"Not long after I arrived Doug told me that the greens were good at the start of the season but that they would go back which was due to the high poa content. I told them that they were stronger and they wouldn't go back. Each year I've won the pound bet that rides on the outcome," said Paul, as he looked at the seven Scottish pound notes which are displayed on the wall. He fully expects it to be eight early next year.

Around the maintenance facility things are currently hectic as lorries bring in landfill from a nearby housing development. Paul has negotiated with the builders to offer the facility which is being used to build up an area designated for a turf nursery at no cost to the club and a little profit.

Inside the modern facility all general health and safety and risk assessment information is displayed on the walls together with all the time sheets for each individual piece of machinery.

"I knew someone had to tackle health and safety and with a package put together by Elmwood College I made sure the club office and kitchen were up to speed and knew what was expected of them. We're all employed by the club and I felt it was only fair that as I had the knowledge I should put it to good use for the benefit of the club as a whole.

"Lots of places might be doing their risk assessments and heath and safety work but where is the evidence? We have all our boards on display as the most effective way of ensuring the best practice is carried out is to have everything in full view. Everybody knows and there can be no excuses," said Paul, who is currently about to start a Level 4 course at Elmwood having just completed a fast track Level 3 to go with his HNC.

Education is also high on the agenda in the form of in house training using my assessors role and sending the staff to college. This has helped to raise and maintain standards to the benefit of Downfield as well as producing highly skilled staff who are a credit to the club.

Downfield is an extremely well run club and no more so than within the greenkeeping side where Paul has moulded the best of his Council experience to the attributes of a members' club to produce an excellent package.

Not bad for the man who made that short journey across the fence eight years ago.

GOLF COURSE DESIGN – An Evolving Art Form

Not only was the United Kingdom the source of the origins of golf as a recreation, sport and pastime, it was in the environs of these early courses that select people began to consider themselves as golf course designers. The original Links courses, such as St. Andrews and Prestwick, were usually the work of nature.

As interest in golf and the demand for more courses emerged, it was from St Andrews that Old Tom Morris and his followers became designers. Finding sites was not difficult. Ample adaptable or suitable land was at hand. Little was expected except for a flat area to tee it up and another flat area with a hole to putt out. In between the two flat areas generally remained in its natural state.

In the early decades of the last century, more sophisticated expectations led to a more focused emphasis on the design of a course. In part, golf was spreading in popularity beyond the borders of Scotland. Lands without the Links character were available within forests, heathland, or farm fields closer to the cities. Now, more thought was needed to get 18 holes placed upon the land as these sites were not 'natural' for golf. Harry



Colt was an early practitioner. James Braid, Alistair MacKenzie, Hugh Alison, Toomey and Flynn were emerging. Charles Blair Macdonald was establishing his reputation as well as Tillinghast.

Golf remained a sport and, for some, an obsession. Turfgrass was what was originally onsite or was a mixture of fescues or brown-top bent that enterprising seed houses, such as Suttons, were marketing. Mowing was often animal or human powered. Irrigation was at the whim of Mother Nature.

Sometime later, MacKenzie laid down Royal Melbourne, Cypress Point and Augusta National, this with Bobby Jones. Donald Ross began his tenure at Pinehurst. George Thomas did some wonders on the US Pacific Coast. Other golf architects, working between the World Wars, travelled





Roland Fream looks at the history of golf course design and how a return to affordable golf is the future

▼ Bunker at hole 5 greenside, Shore Gate Golf Club, Cape May County, New Jersey



outward to the colonies and territories promoting golf as others promoted capitalism, empire and occasionally democracy. Simpson, Hawtree and Commander Harris were prominent as professional golf architects.

The 50s and 60s saw an explosion of golf development. Much of this growth was in America, initially driven by images of Eisenhower and Palmer strolling fairways together. Increasing economic well-being, together with political stability, went hand-in-glove with golf. For the most part, courses were modest in image and construction costs. Mowing putting greens at five or six millimeters was considered normal. Yet the numbers of players grew as the number of courses swelled. This was the age of Robert Trent Jones.

Contrary to the development of the private golf club in Europe and Asia during the middle of the 20th century, the American attitude of building public or daily-fee courses broadened appeal by making golf more accessible. The British history of open public golf had similarly encouraged more players. More courses meant more golfers.

In the 70s and onward, the focus shifted to golf as a status symbol and as an enclave for the rich and fortunate. Private clubs multiplied. Status and image became more of a focus than strategic and challenging play. How much to spend was less of a question than how big and grand can the latest private clubhouse palace be. Length became more of a measure of stature than finesse. Maintenance expectations increased annually, particularly in mid-April following the Masters Tournament at Augusta. The 'Immaculate Perfection' and 'money is no-object' maintenance demonstrated there became the benchmark for other clubs seeking enhanced stature. Cost be damned – build big and maintain big. Luxury and status took command.

This quest for the most, the best, the toughest, and perfectly maintained was nicely joined by the emergence of the professional golfer as the architect. Maybe this was only a throwback to Tom Morris and James Braid. However, eager agents and marketers pushed the necessity of having a known-pro attach his signature to the scorecard or sales brochure as the means of certifying the stature and quality of the golf course. Brand identification overtook logic and financial reason. Affordable golf disappeared. Stereotyped design became common.

Few golfers today, whether they are pro, scratch or double-figure players, have the intellectual and creative components necessary to conceive unique or aesthetically dynamic courses from their own effort. Hitting a golf ball well does not automatically provide one with aesthetic insight, creativity or an environmental understanding. Very good players achieve their talents with repetition, consistency and uniformity of effort. These are only three factors that have little or nothing to do with creative inspiration, artistic perception and insight to the unexpected challenge of nature or geography.

 Bonari Kogen Golf Club. Hole 9 – fairway shot. Fukushima Prefecture, Japan



 Shore Gate Golf Club. Hole 9 greenside bunker – par 5. Cape May County, New Jersey



The overall number of golfers has not increased significantly for five years or more. The 1997 economic meltdown across Asia put an end to much of that growth. Six years earlier, Japan imploded due to obscene excess in golf development and membership prices. Even today, approximately half the courses in Japan are technically bankrupt. Hanging a famous pro's name on the course did not help the profitability. Add in assorted matters of terrorism, infectious diseases and distressed airlines and golf suffers along with the rest of the economy. In Europe and America during the 90s, the urge to join famous name player with big-budget golf often led to bankruptcies and empty tee times. Having huge clubhouses only added to the profit drain.

Having a name brand pro attached almost insured the owners' quest for costly Augusta-style immaculate perfection in maintenance. Turf breeders sought and delivered finer grasses that could be cut closer. Manufacturers responded with even more sophisticated and demanding machinery. Mowing to two millimeters is not a job for grandad's push-reel

Maybe It's Time to Look into an Aeration System



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▲ Bonari Kogen Golf Club. Hole 17 from rear of green – par 4

mower. Providing highly sophisticated turfgrass maintenance results is attainable only with increased expenditures.

Declining play in the late 90s into the 21st century continue to point to the culmination of brand name design, excess cost to developers, excess of clubhouse and excessive maintenance goals.

High cost to create and maintain courses pass directly through to the golf club membership and annual fees. High costs pass directly to greens fees at daily-fee courses. Triple digit greens fees do not encourage additional play in most markets. Needing a substantial three-figure greens fee to pay off the construction loan, the maintenance costs and for clubhouse operation has been harder and harder to realise as play volume moderates or decreases.

Recent technological 'advances' in golf ball, club, shaft and expectations are contributing to the decline in play. Costly equipment combined with high greens fees leads to fewer rounds being played.

To succeed, golf must be a profitable business. Those exceptions where the golf course is a status trophy for a wealthy individual and profit is not the goal are few and far between. For the majority of owners, making a profit is the only way to keep the doors open and the greens mowed.

Those in the golf industry now need to consider what can or should be done in the



coming years. Moderation of the inter-related golf costs will be the only way to connect with the next generation of potential new players. Playable turf should be preferable to immaculate turf. Increasing play now is more important than building new courses. Improving existing golf facilities to counter and accommodate technological advances is a prime need. Renovation, remodeling and repositioning to counter green creep and ProV1 ball advances will keep golfers satisfied so long as the cost to play is reasonable.

The golf architect leads and follows the trends in golf. Golf architecture clearly evolves. Now is a very good time to reconsider what is a good and desirable product. Moderation has its place. Affordable, enjoyable golf is attainable and essential for the future of this fine game.



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Harrogate week is next month and BTME & ClubHouse look set to be bigger and better in 2004 than ever before. What can visitors expect?

BTME & ClubHouse expands year on year to reflect the immense diversity of machinery, products and services required by the professional greenkeeper and golf course secretary to stay ahead of the game. As the exhibition grows in stature so does the audience. Visitors from local authorities, parks and gardens, football, rugby, and cricket clubs wander through the exhibition halls alongside the groundsmen from castles, theme parks and racecourses.

This year's exhibition will be the biggest yet. It will occupy 9000 square metres of floor space at Harrogate International Centre with around 250 exhibitors spread across the full range of interests. BTME has steadily grown and become established as the largest indoor turf exhibition in Europe and with the addition of ClubHouse a "one stop shop" has been created for sports clubs from turf management to locker rooms.

The second exhibition in 1990 attracted 4062 visitors, more than doubling the 1989 attendance. Out of the 80 companies who exhibited in 1990 many have continued to show their support and are still exhibiting in 2004 These include:

AFT Trenchers, Better Methods, British Seed Houses, Cooper Clarke, Farmura, Hayter, Hunter Grinders, Inturf, John Deere, Kubota, Lely/Toro, Lindum Seeded Turf, New Holland, Ransomes, Scotts (ICI), STRI, Supaturf, Tacit, Trelleborg and Vitax.

BTME & ClubHouse grows and develops each year. New companies are coming on-board all the time to join established exhibitors.









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Lindsey Teak, Locker Solution, Logocloth, Prism Graphic Resources, Range Servant, Zero Gravity Products.

Another new feature for BTME & ClubHouse 2004 is the introduction of an 18 hole competition. Each visitor will receive a score card at all the main entrances and the challenge is to complete the score card by visiting the participating stands which represent each hole and have the card stamped. Having completed every hole, the visitor should go to the BIGGA stand in Hall Q where the card can be posted thus ensuring entry into the draw for a luxury holiday.

Located in Hall B will be an Internet Cafe, supported by pitchcare.com. An ideal location to relax and have a coffee while waiting to check e-mails and contact the office.

This year's Education Conference, "Continue to Learn", is presented by BIGGA in association with The Greenkeepers Training Committee and supported by The John Deere Team Championship. The National Education Conference theme, "Golf - Sport and Business", recognises that the playing of golf and the business of golf are inseparable. The keynote speaker, Alvin Law, will be presenting "No Such Word as Can't" - supported by Ransomes Jacobsen.

BIGGA is committed to the continual growth of BTME & ClubHouse, enhancing the whole experience for visitors and exhibitors alike. Part of that commitment is to draw many new visitors to both exhibitions and exceed the 10359 visitors in 2003.

BTME & ClubHouse promises to be the Greatest Show on Turf.

HIGHLIGHTS OF THE WEEK

The National Education Conference supported by The John Deere Team Championship.

Monday 19 and Tuesday 20 January, Hall D, Harrogate International Centre.

Workshop Programme Supported by The John Deere Team Championship Monday 19 January, The Moat House Hotel.

Education Dinner Monday 19 January, The Majestic Hotel.

Keynote Speaker Supported by Ransomes Jacobsen. Wednesday 21 January, Hall D, BTME & ClubHouse.

Seminar Programme Wednesday 21 and Thursday 22 January, Hall D, BTME & ClubHouse.

Careers Fair

Supported by Toro. Tuesday 20, Wednesday 21 and Thursday 22 January, Hall Q, BTME & ClubHouse.

Internet Cafe

Supported by pitchcare.com Tuesday 20, Wednesday 21 and Thursday 22 January, Hall B, BTME & ClubHouse.

The Exhibition Banquet Thursday 22 January, The Majestic Hotel.

ALVIN LAW, Keynote Speaker



Following the presentations of the BIGGA Awards on Wednesday 21 January in Hall D, Alvin Law will present his inspirational and motivational speech entitled "No Such Word as Can't"

Alvin is a prime example of what is possible when you believe in the power of Positive Mental Attitude. One of the most highly sought after inspirational speakers in Canada, Alvin challenges and

motivates people to recognise, celebrate and overcome their own individual obstacles whether real or perceived.

The Keynote Session is supported by Ransomes Jacobsen and entry to this Seminar Session is free of charge to all visitors to BTME & ClubHouse.



NEW FOR 2004

BTME & ClubHouse Seminar - Tuesday 20 January 2004 Hall D, Harrogate International Centre

GOLF CLUB DESIGN, DEVELOPMENT AND REDEVELOPMENT

Programme:

- 1.30pm Financial Potential of Existing and Proposed Golf Facilities Sarah Payne, FPD Savilles Leisure
- 1.55pm Clubhouse Food and Beverage Operations TBD, De Vere Belfry
- 2.15pm Refurbishing Locker Rooms and Changing Facilities John Gibbs, Quality Lockers
- 2.40pm Extending an Existing Clubhouse TBD, Woburn Abbey Golf Club
- 3.05pm New Projects and Redevelopment Where to Start Charles Mador, Charles Mador Architects and Howard Swan, Swan Golf Design Ltd
- 3.30pm Questions to the Panel
- 4.00pm Visit BTME & ClubHouse Exhibition

Look Who's Exhibiting...

2iC International Irrigation Consultant 3-2-GO

MJ Abbott Ltd Action Caddy Ltd Advanta Seeds UK Adverttees.com Aebi & Co. AG AFT Trenchers Air-Eze Ltd Air-Seal Products Aitkens Sportsturf Ltd Allen Power Equipment Ltd Allett Mowers Allied Turf - Tech Amenity Land Services Ltd Amenity Technology Angus Horticulture Ltd Arden Lea Irrigation Ltd Askham Bryan College Assoc of Golf Club Secretaries Avant Tecno (UK) Ltd Avoncrop Amenity Products GW Axup & Co Ltd Barcham Trees Barenbrug UK Ltd Barrelfield Golf Ltd BATgolf.com Bathgate Leisure Bayer Environmental Science Berkshire College of Agri Bernhard & Co Ltd Blec Landscaping Equip Co Ltd BMS (Better Methods Europe **Border Signs** Boughton Turf Management Boyd Golf BIGGA British Seed Houses Ltd Bywater Services Ltd Campey Turfcare Systems Cannons Turf **Charles Mador Chartered Architects** Charterhouse Turf Machinery Club Car - Ingersoll-Rand Complete Weed Control Cooper Clarke Group Ltd Countax Ltd Course Care Cranfield University at Silsoe **CSC** Amenity DENNIS Doma Shopfitters Ltd

Eagle Promotions Ltd Earthquake Turfcare Ltd East Riding Amenity Eastern Connections Econoplas Ltd **Ecosolve** Limited Elmwood College Endsleigh Sports Insurance English Golf Union Enko Products Euro Cap Ltd European Golf Machinery European Inst of Golf Course Architects European Turf Technology European Turfgrass Evenproducts/Logic Irrigation Fairfield Control Systems Fairway Credit Farm & Garden Machinery Farmura Ltd FernHouse Marketing Fieldens (Wheeles Tyres ATV Fleet (Line Markers) Ltd **Floratine Products** FMW & Distinct Foley United Gambetti Barre UK Ltd Garfitts International Ltd GCSAA Gem Professional Genus Cubicles & Lockers **Glen Farrow Global Organic Services** Golf Finance Ltd Golf Management Europe The Golf Sign Company John Greasley Ltd The Green Approach Greenkeeper International The Greenkeepers Training Committee Greenkeeping Magazine Greenlink International Ltd Greenscape (UK) Ltd Groundsman Industries Ltd GSB Loams Ltd Hardi Limited Hayter Ltd Haztek International Headland Amenity Horsepower UK Ltd Hunter Grinders Ltd

Imants ING Lease The Institute of Groundsmanship Institute of Horticulture Inturf Irrigation Control Ltd Irrigation Supplies Ltd Jaymac Security David Jenkins Turfcare Equipment John Deere Limited Johnsons Sport & Amenity Grass Seed Kubota (UK) Ltd Landscape & Amenity Management Lantra Awards Laster UK Lewis Equipment Ltd Lindsey Teak Lindum Seeded Turf Ltd Links Leisure Lloyds & Co Letchworth Ltd Locker Solutions Ltd Logocloth Major Equipment Ltd Mantis UK Ltd Massey Ferguson (AGCO) Maxxis International UK McCormick Tractors Merrist Wood College MJT Contracts Ltd Mox UK Ltd Myerscough College New Holland North Staffs Irrigation **Novozymes Biologicals** Nu-Gro Corporation Ocmis (UK) Ltd On Course Matting Ltd Pentagon Amenity Marketing Power Seeds UK Prism Graphic Resources Pro-Tine Proturf Ltd **PSD** Agronomy Rain Bird Europe Range Servant UK Ransomes Jacobsen Ltd RC Marble & Sons Ltd Reaseheath College **Rigby Taylor Ltd** Ritefeed **Rix Petroleum Rogers Sprayers Inc**

Rufford Soil Technology Ruston's Engineering Co Ltd Same Deutz-Fahr UK Ltd

Saxon Industries The Scotts Company (UK) Ltd Seoul Nassau (UK) Ltd SGM Hire Sheltons Sportsturf Drainage Solutions Sheppy Humber Palmers Sherriff Amenity Services Silesia Grill Systems Simon Tullett Machinery Co Sisis Equipment(Macclesfield Speedcut Contractors STRI Supaturf Products Ltd Swan Golf Designs Ltd Swan Plant Services Ltd Symbio Tacit Talbot Farm Landscapes Tarmac Topsport Tenax UK Limited Terra-Vac Terrain Aeration Services Tildenet Ltd Together in Golf **DW** Tomlin Tonick Watering Ltd Top Green SAS **Toro Products** Tower Chemicals Ltd Trelleborg Wheel Systems True Surface Rollers **Turf Masters** Turfcare Group Turfmech Machinery Ltd Turftrax Ground Management Tym Tractors Verde Sports Ltd Vitax Ltd Warwickshire College Waste2Water Europe Ltd WBB Minerals White Horse Contractors Ltd Wiedenmann UK Ltd Wolf Garten Yamaha Motor UK Ltd Zero Gravity Products

List updated 21/11/2003

OURSE COT



Huxley Golf

JOHN GREASLEY LIMITED

Telephone: 0116 269 6766 Fax: 0116 269 6866



British & International Golf Greenkeepers Association

Greenkeeper International has long been regarded as the market leading publication and a must read magazine for everyone wishing to keep up to date with developments within the turf industry.

Editorial covering interviews with Course Managers and Head Greenkeepers at courses around the UK and beyond, technical articles from some of the foremost authorities in their fields, information on new developments, BIGGA and member information and news make Greenkeeper International the definitive publication. Accept no imitation.

Come and pick up the latest issue from the BIGGA stand.



Bernhard and Company Ltd

CLEAN CUT COURSES

SEE Bernhard and Company Ltd's easy-to-operate grinders Express Dual and Anglemaster 3000 - used at top tournaments world-wide.

Considerably cutting the cost of mowing, regular use of these grinders dramatically improves the health of grass.



Stand: B31

For superlative results there is a range of dedicated packages, to suit different budgets, including Express Dual and Anglemaster, Blade Rite, Gear Rite, Rapid Relief, Rapid Facer and Rota Master.

FREE DEMONSTRATIONS are offered - so clubs can see the difference!

Telephone Kim on: 01788 811600 www.bernhard.co.uk



witness state-of-the-art turf care in operation. The respected and established Drill'n'Fill and Deep Drill aerators are renowned throughout

Ecosolve

the UK and Europe. Championship to council courses all use the machines. Shouldn't you too?



Now accompanying these are some equally innovative products never before seen in the turf market - WormZtat is a soil tonic that will help turf recover from the effects of worms and prevent their damaging activity. Nutrieau is a breakthrough in the struggle to establish and maintain turf grass plants in tough conditions. This product accelerates seed germination and establishment of the mature plant without inducing soft & fleshy cell structure in the plant. It is ideal for alleviating drought stress too, as it has unprecedented water retentive capacity.

Ecosolve are exhibiting their unique Ecosol Aero-fil System and products at

Harrogate for the 3rd year and urge every greenkeeper to visit this stand to

Come and visit us for an informative yet relaxed chat and see our results!

Tel: 01367 870165 Fax: 01367 870271

Stand: M3

ByWater Services Ltd - Wash Water Recovery



Manufacturers of the Oasis range of waste water treatment plant. Specialists in closed loop wash water recycling. Systems including the amazing Enzymatic and ad hock systems to suit individual site requirements. Turnkey solutions available.

We look forward to welcoming you to stand Q22 where you can view the Enzymatic and obtain information on the range.

Tel: 01530 563388 Fax: 01530 563399 Email: sales@bywaterservices.co.uk

Econoplas Ltd

Econoplas is breaking new ground in the area of land drainage, and its innovative product aquadyne has already attracted interest from Greenkeepers, groundsmen and turf management consultants across the UK and abroad. Developed by John Gaskarth, the system is flexible, low cost, easy to install with minimal disruption to sporting environments, particularly to golf courses where members can enjoy their game as work progresses.



Has tremendous potential for professionals involved with sports turf management



Single Slab Matrix

Fairways & Sports pitches



Heavy Wear Areas



Econoplas Ltd, Unit 5a, Plaxton Park Industrial Estate, Cayton Low Road, Eastfield, Scarborough, North Yorkshire YO11 3BY Telephone: 01723 586611 Fax: 01723 586543 Email: john@econoplas.freeserve.co.uk

Double Slab Matrix

Stabilisation & Reinforcement

Stand: Q38

Stand: Q6

CANNONS TURF LTD Quality Cultivated Turf

TURF & SERVICE

TO MEET YOUR NEEDS

Cannons Turf Ltd

Cannons Turf is an established business that has been growing quality turf since 1988. Product excellence and unparalleled service has always been our priority. Our range of turf covers from football pitches and golf greens to house lawns and large landscaping projects. As an extra service, we are pleased to offer mulch and stone products to compliment any landscaping project.

Cannons Turf Ltd, Abbey Farm, Kirskstead, Woodhall Spa, Lincolnshire LN10 6UH

Telephone: 01526 354411

Gem Professional

For a range of fertilizers that offers consistency and reliability then look no further than Gem Professional on Stand A25.

The current range of granular fertilizers and turf dressings will continue to meet market requirements and microbial product developments ensure we will stay at the forefront of the market. Our range is designed so that whatever your need, we have a product to satisfy.



We look forward to welcoming you to stand A25 to discuss your turf care requirements.

Tel: 01254 356611 Fax: 01254 356677



Hayter Ltd

A comprehensive range of commercial turf care machinery, suitable for both golf and municipal applications, will be on display. Designed for high output and easy maintenance, many of the products shown will be of particular interest to those responsible for the maintenance of fine turf. From ride on fairway mowers to pedestrian rotaries for the maintenance of the smallest areas, Hayter have a machine for all areas of the course.

Contact: Barbara Garton, Hayter Ltd, Spellbrook, Bishop's Stortford, Hertfordshire CM23 4BU

Telephone: 01279 723444 Fax: 01279 600338 E-mail: sales@hayter.co.uk Web: www.hayter.co.uk



John Deere Limited

The company's new fairway mowers will be officially launched at BTME.

These include the improved 3225C and 3235C five reel cylinder mowers, designed to further improve productivity and quality of cut on golf courses and other amenity turf areas, while the brand new 3245C is a five gang rotary mower for semi-rough grass. Details of all types of equipment finance will also be available from John Deere Credit.



Tel: 01949 860491 Fax: 01949 860490

Euro Cap Ltd

Euro Cap's Sales Office, Embroidery Unit and warehouse in Rotherham is now fully operational and proving to be a big success. Stocks are up to full capacity and with the on site embroidery unit, Euro Cap are able to offer a UK next day sample service and a fast turnaround on orders up to 1000 pieces.

Euro Cap operate a number of Tajima embroidery machines, and in house embroidery, punching and digitising is also available.

Xtreme Cap, a Cotton/Nylon mix giving a lightweight breathable cap available with sandwich peak as standard in five colourways. New for golf, the Drimate Golf Towel, and the Euro Caddy battery powered golf trolley at an exceptional price.

EURD CAP LTD Contact our Northern Office Sales Team on: 01709 871244 Email: clive@eurocapltd.com

Stand: Q109

General Legal Protection Limited

General Legal Protection, providers of legal and domestic assistance to BIGGA members, will be on the BIGGA stand together with their chief employment adviser, Maggie Lawton, to help answer any employment problems.

Details of all products and services available to BIGGA members will also be available

Stand: Q129

General Legal

PROTECTION LIMITED

Heath Lambert

Heath Lambert Group is Europe's leading international insurance broker and one of the world's largest. Through a network of over 20 offices in the UK, the Group focuses on commercial and industrial insurances, but also undertakes personal lines and corporate financial services activity. The Group is a leading player in many sectors, including property, construction, motor fleet, professional indemnity, liability, risk management and claims management.

Contact: Andrew Lawrence, Tower House, Merrion Way, Leeds LS2 8PQ Tel: 0113 2461313 Email: alawrence@heathlambert.co.uk Web site: www.heathlambert.com



Massey Ferguson

Included in the Massey Ferguson exhibit at BTME 2004 will be Compact Tractors featuring the MF 1235 with independent PTO, new Front Cut mowers, Ag.TV's with their unique racking system and the versatile light weight utility MF 2200 Series tractor ranging from 55hp to 80hp.

For further details contact: AGCO Limited, UK Sales Department, Banner Lane, COVENTRY CV4 9GF Tel: 024 76851202 Fax: 024 76852021 Web : www.masseyferguson.com





Simon Tullett Machinery

IN THE ROUGH?

Get out of it with the STM range of heavy duty grasscare machinery. There are the SCAG Zero-Turn pedestrian and ride-on mowers; machines built to last and provide hours of reliable use. All the cutting options are available - traditional flail, cylinder, cutter bar and rotary. ALSO there's the new HUMUS cutting head that can be used on the SCAG range or tractor mounted. This is an entirely new cutting method that is effective, reliable and safe and can be used for heavy scrub clearance or as an ordinary mid-season cutting head.



Wolf Garten

After a year of successful trials, WOLF Garten continues to prove itself as a supplier of high quality specialist controlled release fertilisers. Our unique range of fertilisers and grass seed



mixtures are used in the renovation works on over 1,000 sports pitches throughout Europe each year. WOLF Garten also supplies a range of supporting turf renovation equipment.

Our team of specialist advisors looks forward to welcoming you to stand M17.

WOLF Garten Limited, Crown Business Park, Tredegar, Gwent NP22 4EF Tel: 01495 306600 Fax: 01495 303344 Email: info@wolf-garten.co.uk

Stand: M17

Toro Products

TORO UNVEILS REVOLUTIONARY GREENSMOWER CUTTING UNIT THAT CLIPS CLOSER THAN EVER BEFORE



Toro is launching a revolutionary new cutting system that enables its ride-on greensmowers to shave golf greens closer than ever before. The unit will clip down as low as just 1/16th of an inch, which is 1/32nd of an inch lower than was previously possible.

The company is introducing the unit to meet the move by greenkeepers for faster greens that take advantage of new plant cultivars that can be cut right down. It features the popular Dual Point Adjustment System from the acclaimed Greensmaster 1000 pedestrian mower and offers a single, high-performance cutting unit with a choice of 8- or 11-blade reels.

Also making their debut are the new-look Workman 3000 and 4000 range of utility vehicles, plus the new ProCore 648 pedestrian green aerator which will core faster and wider than anything else in its class.

Contact details:

Toro commercial, irrigation and consumer products are distributed throughout mainland UK by Lely UK. Toro commercial products in Ireland are distributed by Lely Ireland.

Lely (UK) Limited Station Road St Neots Cambs PE19 1QH Tel: 01480 226800 Email: toro.info@lely.co.uk Lely Ireland Limited Kilboggin, Nurney Co. Kildare Ireland Tel: 00 353 (0) 4552 6170 Email: info@lely.ie

Stand: M12

TurfTrax Ground Management Systems Limited

TurfTrax Ground Management Systems Limited is the largest independent specialist sports soils consultancy group in the UK, employing leading soil physicists and sports surface consultants.

Over the last six years, our scientists have developed and refined a number of unique golf course construction and remediation technologies as well as providing the most detailed soil surveys available anywhere in the industry.

Email: colin.hood@turftrax.co.uk www.turftraxgms.com Tel: 01234 821750

Ransomes Jacobsen Ltd

ALTERNATIVE POWER AND INNOVATION

The year's exhibition stand will feature alternative power for golf turf maintenance applications and MagKnife, the revolutionary new system for attaching the bottom blade to cylinder mowers.

Key products using alternative power include the Jacobsen E-Walk all-electric, greens mower; the Jacobsen E-Plex II electric triplex greens mower and the new electric flexi-head walk behind Jacobsen Tournament Cut.

A visit to Hall A Stand 23 is not to be missed.

JACOBSEN Contact: Selina Flynn, Ransomes Jacobsen Ltd, Central Avenue, Ransomes Europark, Ipswich, Suffolk IP3 9QG Tel: 01473 270000 Fax: 01473 276300

Email: sales@tip.textron.com Web: www.ransomesjacobsen.com

Stand: A23

Scotts

Stand: B34

RANSOMES

Stand: C20

Scotts UK Professional

Scotts UK Professional will be featuring a number of new products on their stand this year. Firstly we are pleased to announce the launch of the new Greenmaster range, showing the way forward in fine turf nutrition. There will be a live demonstration of the Scotts' weather station and we will be giving advice on the world's best selling turf fungicide, Heritage, which now has on label approval for Take-All disease - the only turf fungicide to do so. Also we are

Tel: 0871 2205353





BIGGA was formed as a professional organisation in 1987, being an amalgamation of three similar volunteer-led national associations. It has now over 7000 members, organised into five regions and twenty-seven sections.

Its main objectives and activities are:

Come and talk to us about any of the above on stand O128 - 129

Greenkeeper





Come along to our stand and we will explain it all!

introducing Greenmaster Blade, an organic microbial activator.



18

New for BTME & ClubHouse 2004 is the introduction of The 18 Hole Competition.

Every visitor to the show will receive a score card in the carrier bag given out at all the main entrances. The challenge is to complete the score card by visiting the participating stands and have the card stamped. Having finished the score card, a visit to the BIGGA stand in Hall Q to post the entry will ensure a place in the draw for a luxury holiday.

TURN OVER TO SEE THE FABULOUS HOLIDAY YOU COULD WIN FOR FREE...







Enter the 18-hole competition and you and a partner could be jetting off to the luxury beaches of Barbados for a Thomson's Faraway Shores holiday at the Barbados Beach Club.

The Barbados Beach Club's outdoor swimming pool overlooks the golden sands of Maxwell's Beach. Sit by the pool and sip a local cocktail while listening to the sounds of the waves lapping against the shore.

Spend two whole weeks on this all-inclusive holiday relaxing and soaking up the sun. Why not take a spot of afternoon tea, or a dive with a scuba lesson in the pool. Join in with the weekly rum punch party and take advantage of free food and drink all holiday – all included in this fantastic prize.

Whether it's excitement and water sports you're looking for or time to relax and do absolutely nothing, this fantastic prize is ideal for all.

Package includes 14 nights in the Barbados Beach Club, all inclusive full board accommodation, upgrade on your room to Double Deluxe, flights, insurance, in-flight meals, all airport taxes together with transfers from the airport in Barbados to the resort.



Greensmaster 3250-D This highly-productive ride-on Greensmower is recognised the world over for producing the best quality of cut for tournament play.



Reelmaster 5500-D With ample power and big reel diameter for high productivity, the 5500-D follows ground contours smoothly to give the finest of cuts.



It's because we put quality first, that Toro performance will last and last.

For match perfect play, only quality machines will give superior, reliable performance out on the course. That's why paying a little extra up front for a Toro product will reap long term dividends with savings in operating costs, high residual values and enhanced performance. With the purchase price of a new golf mower usually representing no more than 10 per cent of the total costs of grass mowing with the machine during its lifetime, Toro machines cost no more than their competitors. So for quality that lasts, just call 01480 226800 today.

HOW TO ENTER

On arrival to the BTME & ClubHouse exhibition, you will be handed a BIGGA goody bag. In this will be your scorecard for the 18-hole competition.

Listed on this card are names of various companies and their stand numbers. Simply visit these stands to get the card stamped.

Once you have had all 18 holes stamped, fill in all your details and post in one of the entry boxes. Boxes will be placed on the BIGGA stand and at various exit points.

The winner will be selected at random and announced in the February issue of Greenkeeper International.

Make sure you enter and have the chance of winning the holiday of a lifetime.

Please note:

- Winner is to choose the dates of travel and BIGGA will arrange subject to availability.
- Holiday must be booked at least six weeks prior to departure date.
- Prize is valid from 1st February 2004 to 15th December 2004. Holiday must be taken within this time or forfeit.
- · Flights depart from either Gatwick or Manchester.
- Rainy season in Barbados: End May to September.
- Recommended time to go: February to April or October to December. (These dates are recommendations only).
- All Thomson holiday terms and conditions to be issued to winner on presentation of prize.
- · Prize cannot be exchanged for money.
- In the event of a cancellation on the winner's behalf, any money refunds will be paid to BIGGA.
- In the event of uncontrollable cancellation on Thomson's behalf (e.g. Hurricane), an alternative will be arranged for the winner by BIGGA.









Reelmaster 3100-D Sidewinder An innovative trim mower with the Sidewinder cutting system of reels which move from side to side for superior trimming right up to the edge.



Toro offers a complete range of innovative, high quality irrigation products and systems, including upgrade controllers, to help grow and maintain the best turf.

TORO Commercial and Irrigation Products distributed by Lely (UK) Limited St Neots, Cambridgeshire PE19 1QH. Tel: 01480 226800 Email: toro.info@lely.co.uk TORO Commercial Products distributed by Lely Ireland Limited Kilboggin, Nurney, Co. Kildare. Tel: 00 353 (0)45 526170 Email: torosales@lely.ie www.toro.com



BE A PART OF THE GREATEST SHOW ON TURF!

GGA TURF MANAGEMENT EXHIBITION

EDUCATIONAL SEMINAR PROG

20-22 JANUARY 2004 HARROGATE, ENGLAND

Decision makers visit BTME & ClubHouse



• 250 Exhibitors - See it, feel it, try it - BUY IT!

8

ClubHouse

- National Education Conference
 Workshops and Seminars
- Entertainment
- Education dinner with speaker
- Banquet with Bootleg ABBA

FOR EDUCATION CALL SAMI Tel: 01347 833833 Email: sami@bigga.co.uk TO EXHIBIT CALL PAULINE Tel: 01347 833830 Email: pauline@bigga.co.uk

www.bigga.org.uk

KNOWLEDGE IS THE KEY TO FUTURE SUCCESS



Education & Training for Professional Greenkeepers

As a member of the Greenkeepers Training Committee, BIGGA is actively involved in raising the Standard of Greenkeeper Training. The range and quality of training now available means that there is a training course for every greenkeeper which should improve the quality of greenkeeping and help to produce better quality golf courses.



Golf Course Managers should ensure that their staff are trained to the highest standards, beginning by selecting a training provider that meets the criteria laid down by the GTC.

There is a clear link between education, training and economic success and if you think that training is expensive then try ignorance.

Ken Richardson Education and Training Manager, British and International Golf Greenkeepers Association Tel: 01347 833800 Email: education@bigga.co.uk Website: www.bigga.org.uk The Greenkeepers Training Committee (GTC) is continually striving to raise the standards of Golf Course Maintenance and Management and they are totally committed to ensuring that the range of



qualifications are relevant to the Sportsturf sector and used by employers for recruitment and by trainees for their own personal development.

The Government endorsed awards range from National/Scottish Vocational Qualifications (N/SVQ's) to the more academic Higher National Certificate (HNC)/National Diploma (ND)/Higher National Diploma (HND) in Golf Course Management and the Degree in Sportsturf Science.

The qualifications are continually under review by the Lantra Sector Skills Council (SSC) in association with the GTC. The quality of the delivery of these awards by the network of GTC Approved Training Providers is also constantly monitored by the GTC.

For up to date independent advice on qualifications, education and training courses contact the GTC on: Tel: 01347 838640 Email: golf@the-gtc.co.uk Website: www.the-gtc.co.uk



Education & Training - The Key to Professionalism

BIGGA has shown its commitment to Greenkeeper Education and Training by investing heavily in Conferences, Seminars and Training Courses. Companies and individuals can show their commitment by contributing to the BIGGA Education and Development Fund through the BIGGA Golden and Silver Key Membership scheme.

This ring fenced fund supports a range of training resources such as Regional Training Courses, Education Conferences, Workshops, Training Vouchers, a Lending Library, Videos, Careers Advice, Books, Booklets, Educational Posters and Field Guides.

The BIGGA Education and Development Fund gives companies, groups and individuals the opportunity to show their commitment to the



greenkeeping industry by making donations, gifts and bequests which will improve the skills and knowledge of greenkeepers, enhance the status of greenkeeping and ensure the highest standards of golf course maintenance.

Education and Training - the key to a great future for greenkeepers, golf clubs and the game of golf. Unlock the doors to progress through the BIGGA Education and Development Fund.

For further details on BIGGA Golden and Silver Key Membership please contact the Executive Director on 01347 833800.

GREENKEEPER TRAINING

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abingdon:witney college	ABINGDON AND WITNEY COLLEGE Warren Farm Campus, Horton-cum-Studley, Oxford OX33 1BY Contact: Alan Brown or John Revis Tel: 01865 351794 Fax: 01865 358931 Email: john.revis@abingdon-witney.ac.uk Web: www.abingdon-witney.ac.uk Information: Warren Farm Campus is the base for Abingdon and Witney College's education and training in Greenkeeping, Sportsturf, Amenity horticulture and allied land based courses for the whole of Oxfordshire. Courses include:- NVQ Levels 2 & 3 in Sportsturf, Landscaping and Nursery. We also offer a range of short courses for the Industry including Health & Safety, pesticide training and chainsaw operation. For more information contact either Alan Brown or John Revis on Tel: 01865 351794 or Fax: 01865 358931.
ASKHAM BRYAN COLLEGE	ASKHAM BRYAN COLLEGE Askham Bryan, York, North Yorkshire, YO23 3FR Contact: Central Admissions Tel: 01904 772211 Fax: 01904 772288 Email: sf@askham-bryan.ac.uk Web: www.askham-bryan.ac.uk Information: National Certificate in Horticulture, National Diploma in Horticulture (Golf Course Management): part-time study, Higher National Diploma in Horticulture (Golf Management Option) all available full or part time. Block release courses: NVQ Level 2 Greenkeeping, NVQ Level 3 Greenkeeping and Sportsturf Maintenance, NVQ Level 4 Amenity Horticulture. Short courses: FEPA spraying, chainsaw and brushcutter courses.
BCA	BERKSHIRE COLLEGE OF AGRICULTURE Hall Place, Burchetts Green, Maidenhead, Berkshire, SL6 6QR Contact: Andy Williams Tel: 01628 824444 Fax: 01628 824695 Email: enquiries@bca.ac.uk Web: www.bca.ac.uk Information: Located in the Thames Valley, BCA has excellent resources for horticultural based training including a six-hole golf training facility opened by HRH The Duke of York. Programmes include the First Diploma, National Certificate and National Diploma in Horticulture, with Landscape Design and Greenkeeping options plus Higher National Diploma/Certificate programmes. Part-time programmes include NVQ Level 2 and 3 Amenity Horticulture, Sports Turf. Residential accommodation is available.
Brooksby Melton College	BROOKSBY MELTON COLLEGE Brooksby, Melton Mowbray, Leicestershire, LE14 2LJ Contact: Jo Lees Tel: 01664 850850 Fax: 01664 855355 Email: course.enquiries@brooksbymelton.ac.uk Web: www.brooksbymelton.ac.uk Information: Situated on the A607 between Leicester and Melton Mowbray. Programmes available include NVQ Levels 2, 3 & 4 in Greenkeeping. Work based emphasis for all of these programmes. Short courses available in Arboriculture/Chainsaw work, TDLB training and Pesticide application training.Amenity Horticultulture NVQ Levels 2, 3 & 4.
Cannington College college of the countryside	CANNINGTON COLLEGE Cannington, Bridgwater, Somerset, TA5 2LS Contact: Enquiries and Enrolment Tel: 01278 655123 Fax: 01278 655055 Email: enquiries@cannington.ac.uk Web: www.cannington.ac.uk Information: Cannington College is recognised as a Centre of Vocational Excellence for greenkeeping and sports turf science. Its resources include a nine hole, 18 tee golf course, fully automated driving range Golf Club within the college grounds. Courses: City & Guilds National Certificate in Horticulture (sports turf) management), BTEC National Diploma in Horticulture (sports turf), BTEC National Diploma in Sport & Exercise Sciences (golf), Certificate of Higher Education in Golf Course Management, Foundation Degree in Golf Course Management, Foundation Degree in Turfgrass Science and Technology, NVQ Level 2 in Amenity Horticulture (sports turf option), NVQ Level 3 in Amenity Horticulture (sports turf option), British Turf and Landscape Irrigation Association (1 week course), FEPA Training, Chainsaw Certification, Off-Road Vehicle Certification. Note: Certificate of Higher Education & Foundation Degrees available as part time options.
-\$-	EAST DURHAM AND HOUGHALL COMMUNITY COLLEGE Houghall, Durham, DH1 3SG Contact: Ian Lacy Tel: 0191 386 1351 Fax: 0191 386 0419 Email: enquiry@edhcc.ac.uk Web: www.edhcc.ac.uk Information: Full-time courses: National Certificate in Horticulture/Greenkeeping and Groundsmanship - 1 year. Part time courses: Greenkeeping and Sportsturf maintenance NVQ Level 2 - Day Release. NVQ Level 3/4 Greenkeeping and Sportsturf Maintenance Day Release. Short courses: FEPA Modules, Chainsaw certification, Tree inspection, Horticultural Machinery, Safe Lifting and First Aid.
Hadlow	HADLOW COLLEGE Hadlow, Tonbridge, Kent, TN11 OAL Contact: Norman Croasdale Tel: 01732 853241 Fax: 01732 853207 Email: sally-flanagan@hadlowcollege.ac.uk Web: www.hadlow.ac.uk Information: National award and National Diploma in Horticulture. NVQ Level 1 Horticulture, NVQ Level 2 & 3 in Amenity Horticulture in Hard Landscaping, Sports Turf and Production Horticulture.
COLLEGE DIOUCESTERSHIRE University of the West of England	HARTPURY COLLEGE Hartpury House, Gloucester, Gloucestershire, GL19 3BE Contact: Rosalind Camp Tel: 01452 702132 Fax: 01452 700629 Email: enquire@hartpury.ac.uk Web: www.hartpury.ac.uk Information: Courses available: College Certificate Greenkeeping , First Diploma Amenity & Landscape Horticulture, National Award Amenity & Landscape Horticulture, National Award Greenkeeping & Groundsmanship, National Certificate Amenity & Landscape Horticulture, National Certificate Greenkeeping & Groundsmanship, National Diploma Amenity & Landscape Horticulture, National Diploma Sport (Performance and Excellence)(Golf Studies). Work Based Training NVQ's, RHS examinations City & Guilds, TDLB Assessor Awards as well as a full range of amateur, leisure and day release courses.
GUILDFORD COLLEGE Merrist Wood CAMPUS	MERRIST WOOD CAMPUS OF GUILDFORD COLLEGE Worplesdon, Guildford, Surrey, GU3 3PE Contact: Joe Paulin Tel: 01483 884088 Fax: 01483 884001 Email: jaulin@merristwood.ac.uk Web: www.guildford.ac.uk Information: Part-time courses: NVQ Level 2 Sportsturf college day release and workplace visits/assessments at Merrist Wood and at Crawley, Level 2 Edexcel first Diploma college day release, also full-time for those without qualified workplace accessories, NVQ Level 3 Sportsturf college day release and workplace visits/assessments, Level 3 Edexcel National Award college day release for those without qualified workplace assessors, Edexcel HNC Turfgrass Science and Management college day release over 2 years plus various short courses throughout the year. Edexcel HND Turfgrass Science and Management college day release. Please contact us for up-to-date listings, qualifications and advice. Career Evenings held monthly at the college.
Myerscough	MYERSCOUGH COLLEGE Bilsborrow, Preston, Lancashire, PR3 ORY Contact: Colin Stanfield Tel: 01995 642222/642305 Fax: 01995 642333 Email: mailbox@myerscough.ac.uk Web: www.myerscough.ac.uk Information: Full time courses; BSc (Hon's) Turfgrass Science, Foundation Degree Sportsturf Science - online option by distance learning, ND Turf Science & Sportsground Maintenance: Natinal Certificate in Groundsmanship and Greenkeeping, also Sports Turf Mechanisation option: First Diploma in Greenkeeping; Turf Science: NVQ 2, 3 & 4 Greenkeeping Management delivered both in the work place and over the internet using the colleges "Mollent System". Part-time courses NVQ Level 2 & 3 Greenkeeping and Sports Turf Maintenance (Day/block release or Fast track work-based training qualification). All higher education courses can be accessed on a part time basis.: HNC Turf Science: FEPA Short courses. NPTC Certificates of competence in the safe use of mowers and turfcare equipment. Careers mornings monthly on saturdays.
Nescot Extent college of higher and Further education	NESCOT - NORTH EAST SURREY COLLEGE OF TECHNOLOGY Reigate Road, Ewell, Epsom, Surrey, KT17 3DS Contact: Mr Colin S Smith Tel: 020 8394 3220 Email: info@nescot.ac.uk Web: www.nescot.ac.uk Information: NVQ Levels I, II and III in Amenity Horticulture (Greenkeeping options). Part time Day Release. Duration: Two years to Level II. FEPA Spraying Courses. Also available - RHS General and Advanced Certificates in Horticulture. RHS Diploma in Horticulture.
OAKLANDS COLLEGE	OAKLANDS COLLEGE St Albans Smallford Campus, Hatfield Road, St Albans, Hertfordshire, AL4 0/A Contact: Helpline Tel: 01727 737080 Fax: 01727 737752 Email: help.line@oaklands.ac.uk Web: www.oaklands.ac.uk Information: Full time courses: National Certificate in Greenkeeping and Sports Turf Management. Part-time courses: leading to NVQ Level 2 & 3 Greenkeeping, Modern Apprenticeships. Evening Courses: leading to NVQ Level 4. Short Courses: Pesticide, Chainsaw.
Plumpton College	PLUMPTON COLLEGE Ditchling Road, Lewes, East Sussex, BN7 3AE Contact: David Blackmur Tel: 01273 890454 Fax: 01273 890071 Email: enquiries@plumpton.ac.uk Web: www.plumpton.ac.uk Information: HNC (Sportsturf, subject to validation) National Diploma in Amenity Horticulture, National Award (Garden Design), First Diploma in Horticulture. Part time courses: NVQ Level 2 in Amenity and Sportsturf; NVQ Level 3 Landscaping and Sportsturf; NVQ Level 4. Also available are RHS General and RHS Advanced; IOG National Technical and Intermediate National Diploma. Short courses are also available for FEPA spraying and chainsaw.
REASEHEATH	REASEHEATH COLLEGE Nantwich, Cheshire, CW5 6DF Contact: Chard Spicer Tel: 01270 613236 Fax: 01270 625665 Email: chards@reaseheath.ac.uk Web: www.reaseheath.ac.uk Information: (Full time) National Diploma in Amenity Horticulture, Greenkeeping & Sports Turf (part time) NVQ Levels 2/3 in Amenity Horticulture: Sportsturf; HNC in Golf Course Management. Flexible learning options. Short courses: FEPA, Chemical Safety, Safe Lifting, Chainsaws, Off-road Vehicle Driving, First Aid, NPTC Certificate of Competence.

ENGLAND

Training providers guide Available courses guide

This guide is not exhaustive and a full list of GTC approved training providers can be obtained from the GTC. The Greenkeepers Training Committee (GTC) are continually reviewing the approved status of training providers offering greenkeeper training courses. Anyone with a query regarding greenkeeper training should contact the Greenkeeper Training Committee at Aldwark Manor, Aldwark, Alne, York YO61 1UF, Tel: 01347 838640 or visit their website at http://www.the-gtc.co.uk

SPARSHOLT	SPARSHOLT COLLEGE HAMPSHIRE Sparsholt, Winchester, Hampshire, S021 2NF Contact: Ray Broughton Tel: 01962 776441 Fax: 01962 776587 Email: rbroughton@sparsholt.ac.uk Web: www.sparsholt.ac.uk Information: NVQ Level 2 Greenkeeping Practice, NVQ Level 3 Greenkeeping Supervision, City & Guilds Pha Management Studies, National Diplomas in Golf Course Management and Golf Studies, National Certificate in Greenkeeping and Sportsturf Management. GTC: Greenkeeping Certificate, GTC: Certificate in Golf Course Supervision, FEPA: Short courses, Chainsaws. Phase IV and NVQ Level 2 are offered on block release and day release. Full resident facilities available. Sparsholt College provides education and training in the land-based industries.
The College of West Anglia	THE COLLEGE OF WEST ANGLIA Milton Campus Contact: Bob Young Tel: 01223 860701 Email: enquires@col-westanglia.ac.uk Information: The College of West Anglia offers a full range of courses for Greenkeepers including; NVQ Level 2 Sportsturf (Greenkeeping and Groundsmanship), NVQ Level 3 Sports Turf Maintenance. GTC craft Certificate, GTC Certificate in Golf Course Supervision, TDLB Assessors awards. FEPA, Chain Saws, MO1. Other Courses: National and First Diploma in Horticulture and Garden Design.
Warwickshire COLLEGE	Programme also distance learning option); NVQ Level 2 & 3 Day Release and Workbased Option (we come to you); two year ND in Horticulture with Turf Option; BTLIA Certificate Irrigation, Short Courses: Computing for the Greenkeeper - various times throughout the year - ring for details, FEPA: Spraying Certification, Chainsaw Certification; TDLB: First Ai
Writtle COLLEGE A partner institution of the University of Essex	indiageneric use (nons) conductore and randomy management. The conductore and randomy management into a one of service engineering, this
NORTHERN IRELAND	
College of Agriculture, Food Brossen and Rural Enterprise Greenwoon Logby	GREENMOUNT COLLEGE Antrim, County Antrim, Northern Ireland BT41 4PU Contact: Paul Campbell Tel: 028 9442 6870 Email: paul.campbell@dardni.gov.uk Web: www.greenmount.ac.uk Information: Day release courses to (a) NVQ Level II Greenkeeping & Sportsturf, (b) NVQ Level III Golf Course Supervision, (c) Advanced National Certificate in Horticulture (sportsturf), (d) Higher National Diploma turf options, (e)FEPE, Health & Safety and a range of short courses.
REPUBLIC OF IRELAND	All and the second s
REPUBLIC OF IRELAND	TEAGASC COLLEGE College of Amenity Horticulture, National Botanic Gardens, Glasnevin, Dublin, DUBLIN 9, Republic of Ireland Contact: Pat Suttle Tel: 00353 18460644 Fax: 00353 18460524 Email: psuttle@kinsealy.teagasc.ie Web: www.teagasc.ie Information: Courses offered: Level 3 Certificate in Greenkeeping. Level 3 Certificate in Golf Course Management. National Diploma in Horticulture (Greenkeeping Major offe
	Contact: Pat Suttle Tel: 00353 18460644 Fax: 00353 18460524 Email: psuttle@kinsealy.teagasc.ie Web: www.teagasc.ie Information: Courses offered: Level 3 Certificate in Greenkeeping. Level 3 Certificate in Golf Course Management. National Diploma in Horticulture (Greenkeeping Major offe
elmwood	Contact: Pat Suttle Tel: 00353 18460644 Fax: 00353 18460524 Email: psuttle@kinsealy.teagasc.ie Web: www.teagasc.ie Information: Courses offered: Level 3 Certificate in Greenkeeping. Level 3 Certificate in Golf Course Management. National Diploma in Horticulture (Greenkeeping Major offe
elmwood	Contact: Pat Suttle Tel: 00353 18460644 Fax: 00353 18460524 Email: psuttle@kinsealy.teagasc.ie Web: www.teagasc.ie Information: Courses offered: Level 3 Certificate in Greenkeeping. Level 3 Certificate in Golf Course Management. National Diploma in Hortculture (Greenkeeping Major offered: Level 3 Certificate in Greenkeeping. Level 3 Certificate in Golf Course Management. National Diploma in Hortculture (Greenkeeping Major offered: Level 3 Certificate in Greenkeeping. Level 3 Certificate in Golf Course Management. National Diploma in Hortculture (Greenkeeping Major offered: Level 3 Certificate in Greenkeeping. Level 3 Certificate in Golf Course Management. National Diploma in Hortculture (Greenkeeping Major offered: Level 3 Certificate Greenkeeping: Block Release 5 VQ Level 11, SVQ Level 11 Sportsturf block release and Outreach available, and SVQ Level IV, HVC/D Course Management available as full-time, block release and distance learning. HNC Golf Facility Management, PDA for football and cricket available both block release and Outreach. FEPA and COSHH, chainsaws, tree climbing and rescue techniques and Health and Safety short courses also available.
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Contact: Pat Suttle Tel: 00353 18460644 Fax: 00353 18460524 Email: psuttle@kinsealy.teagasc.ie Web: www.teagasc.ie Information: Courses offered: Level 3 Certificate in Greenkeeping. Level 3 Certificate in Golf Course Management. National Diploma in Horticulture (Greenkeeping Major offe ELMWOOD COLLEGE Cupar, Fife, KY15 4JB Contact: Ann Bain Tel: 01334 658842 Fax: 01334 658888 Email: abain@elmwood.ac.uk Web: www.elmwood.ac.uk Information: Full time National Certificate Greenkeeping: Block Release SVQ Level II, SVQ Level III Sportsturf block release and Outreach available, and SVQ Level V, HNC/D Course Management available as full-time, block release and distance learning. HNC Golf Facility Management, HND Golf Facility Management, PDA for football and cricket available both block release and Outreach. FEPA and COSHH, chainsaws, tree climbing and rescue techniques and Health and Safety short courses also available. GOSTA TRAINING LTD 50 Brook Street, Glasgow, G40 2AB Contact: Chris Bothwell Tel: 0141 556 3999 Fax: 0141 556 4999 Email: learn@gostatraining.co.uk Information: SVQ II, III and IV also Modern Apprenticeship in Sportsturf including other options and GTC Training Manual. Attendance Day/Block release from November - March, Distance Learning also available. Short courses with certification include Peticides, Chainsaw, First Aid, Risk Assessment, Abrasive Wheels, Full Range of Machinery Courses, Manual Handling and Fire Extinguisher training. Consultancy service for Health and Safety Policy development, Site Risk Audits, Machinery Permit to Use system, COSHH and Noise Assessment. LANGSIDE COLLEGE Rutherglen Campus, Buchanan Drive, Rutherglen, Glasgow, G73 3PF Contact: Colin S Urquhart Tel: 0141 647 6300 Email: curquhart@langside.ac.uk Information: SVQ, SGA, HNC, HND, Full time and part-time courses in Greenkeeping, Groundsmanship, Golf Course Management, Horticulture, Land and Environment and
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Contact: Pat Suttle Tel: 00353 18460644 Fas: 00353 18460524 Email: psuttle@kinsealyteagasc.ie Web: www.teagasc.ie Information: Courses offered: Level 3 Certificate in Greenkeeping, Level 3 Certificate in Golf Course Management. National Diploma in Horticulture (Greenkeeping Major offered: Level 3 Certificate in Greenkeeping, Level 3 Certificate in Golf Course Management. National Diploma in Horticulture (Greenkeeping Major offered: Level 3 Certificate in Greenkeeping, Level 3 Certificate in Golf Course Management. National Diploma in Horticulture (Greenkeeping Major offered: Level 3 Certificate Greenkeeping: Block Release SVQ Level II, SyoTestuf block release and Outreach available, and SVQ Level IV, HNC/D Course Management available as full-time, block release and Gistance learning, HK Golf Facility Management, PM Golf Facility Management, PM for forball and cricket available both block release and Outreach. FEPA and COSHH, chainsaws, tree climbing and rescue techniques and Health and Safety short courses also available.
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Contact: Pat Suttle Tel: 00353 18460644 Fas: 00353 18460524 Email: psuttle@kinsealyteagasc.ie Web: www.teagasc.ie Information: Courses offered: Level 3 Certificate in Greenkeeping, Level 3 Certificate in Golf Course Management. National Diploma in Horticulture (Greenkeeping Major offered: Level 3 Certificate in Greenkeeping, Level 3 Certificate in Golf Course Management. National Diploma in Horticulture (Greenkeeping Major offered: Level 3 Certificate in Greenkeeping, Level 3 Certificate in Golf Course Management. National Diploma in Horticulture (Greenkeeping Major offered: Level 3 Certificate Greenkeeping: Block Release SVQ Level II, SyoTestuf block release and Outreach available, and SVQ Level IV, HNC/D Course Management available as full-time, block release and Gistance learning, HK Golf Facility Management, PM Golf Facility Management, PM for forball and cricket available both block release and Outreach. FEPA and COSHH, chainsaws, tree climbing and rescue techniques and Health and Safety short courses also available.



Welsh College Of Horticulture Northop Mold, Flinishire CH7 6AA Contact: Graham Wright Tel: 01352 841034 Fax: 01352 841031 Email: graham.wright@wCoh.ac.uk Web: www.wcoh.ac.uk Information: Full-time - Higher National Diploma in Turf Management. Part-time - Day release Higher National Certificate in Turf Management. Block Week - NVQ Amenity Sportsturf Levels 2-3. Briefing Days - NVQ Level 4, TDLB Assessor Courses A1 Assessors Award and V1 Verifiers Award. Pesticides Training, Abrasive Wheels, Basic Operation Courses. Day Courses - FEPA, Chainsaw Certification, First Aid, C.I.E.H.

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For further information contact: NPTC, National Agricultural Centre, Stoneleigh Warwickshire CV8 2LG Tel: 024 7685 7300 Fax: 024 7669 6128 Email: information@nptc.org.uk Website: www.nptc.org.uk








Letters

YOUR LETTERS ARE REQUESTED!

Send to: Scott MacCallum, Editor, Greenkeeper International, BIGGA HOUSE, Aldwark, Alne, York YO61 1UF, or email them to: scott@bigga.co.uk

Appalling

The editorial decision to publish the article "Girl Power" in an attempt to be amusing is appalling. If you need telling the reasons why then in the words of the Editor albeit for a different subject, "The long term consequences should be of concern to everyone" in the greenkeeping profession.

Malcolm Searle, Bury St Edmunds, Suffolk

Making the Case for Bio Stimulants

I am writing with regard to the article written by Bob Taylor of the STRI about what does the future hold in the October issue.

The STRI trial with bio stimulants did not show positive results but I think greenkeepers might like to know of my experience. I have been Course Manager at the Royal Automobile Club for 26 years and we have

always had problems with root growth even though analysis shows the soil to be good

Frequent aeration did not seem to help. Last autumn we started to get problems with grass cover which was made worse by continuous winter play.

After discussing the options with our consultant we started a programme of adding

mycorrhizae and soil microbes and reducing other chemical use. This September we started to apply compost tea brewed in a Symbio Xtractor to increase fungi, protozoa

It took several months for real improvements to show but now the rootzone has changed colour from grey to light brown and smells healthy. We now have roots going

through the rootzone into the clay, grass cover is superb, fertilisers last much longer and From what I have seen adding microbes and using compost tea with good greenkeeping practice is part of the future.

Bob Wiles, Course Manager, The Royal Automobile Club, Epsom

Bob Taylor Replies ...

The article on Organic Products-What's the Hype About, published the in October edition of Greenkeeper International was always going to generate a predictable response particularly from those with a vested interest in the manufacture and sale of these products. If the article is seen to be out of date and erroneous it is only so as a result of a lack of available independent meaningful data which we at the STRI have requested repeatedly to back up the claims being made. However, Novozymes are currently having trial work conducted on new products by the STRI and possibly other producers may be having similar work conducted by other organisations which should help in the availability of independent data.

The article was compiled from numerous sources including recent editions of the USGA's Green Section Record, personal and culminated experience from within STRI and from the trial work conducted both at STRI and in Australia. Interestingly, it was only having completed the seminar on this subject in Adelaide this year at the AGCSA Conference that I was informed of their current trials on this subject which they have carried out totally independently. Although some greenkeepers at the conference intimated to me that they have had some success with microbial products, the results of the Australian trials revealed no significant effects and in essence therefore were not dissimilar to those of STRI. I have found a similar response among British greenkeepers where some appear to see some benefits while others see none.

Clearly from an ecological and environmental point of view, any biological product that helps reduce the amount of pesticides and other chemicals including nitrogenous and phosphatic fertilisers must be welcomed. However without meaningful data substantiated by research how can consultants advise on the pros and cons of the products available.

My own personal view is that the use of microbial products will over time become increasingly important, particularly so given the likely withdrawal of many other chemical products we have become so reliant upon. On existing greens that have become compromised, lacking strong microbial associations, microbial products may find their niche. On healthy surfaces, however, where microbial populations are strong, their value is likely to be reduced. At the end of the talk in Adelaide I asked the question, "What future for microbes?" This section was for some reason omitted at source from the article printed but basically I do see a role, particularly on new sand-based constructions where initial microbe populations are likely to be low. Introducing microbes here may accelerate turf establishment. Ensuring strong microbial populations through the growing and establishment phases may also suppress disease. The presence of a healthy soil fauna is likely to be essential for seed germination, seedling establishment and in encouraging greater rooting depth. While writing this, it did cross my mind that composted material produced in-house would give similar effects "at little cost". This does raise the question therefore, "Are commercial microbial suppliers likely to experience a new level of competition in the near future given the current resurgence of interest in composting organic materials and the European legislation that beckons".

My article was written to stimulate thought and interest, and in the main to re-emphasise the need for ongoing intensive cultural practices. Indeed, there can be no substitute for traditional greenkeeping even if it is now being cosseted by modern mechanical equipment.

I am pleased to see that Symbio are hosting seminars on their products through November and I do sincerely hope that the apparent wealth of data currently held within this and other organisations and repeatedly requested by STRI can be made more available to those of us working within the field.

Bob Taylor, STRI

Compact and Bijou

Roland Taylor looks at the range of compact tractors currently jostling for position in a crowded market

My dictionary defines "compact" as 'having parts or units closely joined', 'occupying a small volume because of efficient use of space'. Both definitions apply to most modern tractors, regardless of their output. Today, the term compact does not necessarily mean a small tractor when it comes to the power it delivers. Over the last two decades diesel engines have come down in actual size, while horsepower has risen.

With the changes that have taken place in agriculture, manufacturers, who previously showed little interest in the groundcare market, are now producing model ranges specifically designed for it. This has meant an increase in competition with the result that innovation is to the fore, as companies strive to retain or gain market share.

The same also applies to tyre companies and, as a result, larger tractors fitted with the correct tyres can now be used on areas where previously it was not possible without damaging the turf and the rootzone layers.

It is also necessary to take into account the power requirements of modern machinery necessary to maintain a course in good condition, especially when it comes to aeration and dealing with compaction. Often this equipment now needs plenty of both engine and pulling power to do the job satisfactorily. For this reason alone it is necessary to find the right tractor for one's own specific requirement. This involves comparing ground weight and the soil types it is likely to be used on.

The following is to whet your appetite, with a selection of models that are now available (plenty are not included simply due to lack of space) plus some experiences your peers have discovered with specific tractors.

JOHN DEERE

This year saw the launch of two new large chassis compacts - the 4610 (44hp) and 4710 (48hp).

There is a choice of transmissions. The eHydro(tm) combines all the benefits of a gear driven tractor for accurate speed control when using coring or deep aeration equipment, plus the flexibility of hydrostatic transmission, when using a loader.

PowrReverser(tm) transmissions is the alternative and provides clutchless shuffling between 12 forward and 12 reverse speeds, plus additional 12/12 creeper gears.

In addition there is the eMatch(tm) which enables the operator to customise the tractor's transmission response for the specific jobs the tractor is carrying out. The system matches the speed and loading and combined with optional cruise control, gives great accuracy with less operator fatigue, especially when working at low speeds.

John Deere has restyled the Standard models in their 5015 series. These new look tractors are available on turf tyres, with either two or four wheel drive. They have a wider cab with improved all round visibility and a low



John Deere 5515 tractor

noise level of 78dB(A). There is a choice of five synchronised transmission systems.

Woking Golf Club is the oldest heathland course in the country and is rated among the top UK 100.

This spring they took delivery of two John Deere tractors, the 4410 (33hp) and a 72hp 5410.

"Our previous equipment could not be relied upon and we were wasting valuable time. The tractors are much more efficient, easier to maintain and very operator friendly. This means we can get the work done faster, leaving more time to spend working on the courses," said Head Greenkeeper, Jon Day.

The smaller tractor with an Aercore 1500 has been used on the greens throughout the summer. In addition to operating spiking, slitting and sarel rolling, it also powers a Tornado side blower and Sisis Variseeder.

For general grounds maintenance work, the larger 5410 is used with an assortment of attachments including Turfmech TM5 vacuum collector, 2-metre Vertidrain aerator and Earthquake subsoiler.

Jon Day concluded that both tractors cope easily with all the jobs they required them to do and by running them on turf tyres they could be used anywhere on the course without causing damage.





ACGO (Massey Ferguson)

A three cylinder liquid cooled Iseki diesel has been chosen to power the new MF GC2300 mid range compact tractor. This latest addition is part of a new company policy, following extensive customer research in the groundscare sector.

Safety, ease of use and operator comfort, has played a major part in the design of this tractor. The driving position has a sprung adjustable seat that positions an operator so they have all-round visibility and the semi platform provides plenty of leg room. All the controls are colour coded and within easy access. Another feature of this compact tractor is its versatility to take on a host of grounds maintenance tasks in confined areas.

The MFGC joins the already established 2200 series that offers three models from 55hp to 80hp. The emission compliant Perkins diesel engines used for these tractors, are said to provide 10% more power with 5% less fuel consumption.

There is a choice of transmissions and the Speedshift, which is an option, gives a 20% reduction in every gear.

For those looking for fingertip draft and positioning control, there is an optional electronic linkage system with rotary controls for the setting mounted on the console. There are special GE versions of this tractor for use on extreme hilly terrain. The tractor's height has been

reduced, so the centre of gravity is lowered and this is said to have the effect of improving the unit's stability under these conditions.

RANSOMES JACOBSEN

The new Iseki TXG23 tractor has a 23hp, clean burn 3-cylinder diesel engine with a displacement of 1123cc. Iseki say their diesel engine has been designed to provide high performance at low cost, and with a 21-litre fuel tank and 540kg lifting capacity, it is designed for heavy work over long hours.

Hydrostatic transmission gives variant speed selection in both forward and reverse. There are a number of features designed for operator comfort, including, a flat floor that allows easy access from both sides and the tractor's bonnet has been angled to provide a clear view out of the front of the machine.

Power steering is standard and all the controls and levers are within easy reach and there is easy access to the engine and other components and servicing has been kept to a minimum.

KUBOTA

The new ME Series is aimed specifically at professionals working within the amenity sports turf. Comprising three models rated at, 58hp, 85hp and 94hp respectively, the ME5700, (58hp) ME8200 (85hp) and ME9000 (94hp) tractors have been developed to deliver very high levels of comfort, performance and operating efficiency within a compact, lighter-treading frame. All are powered by the E-TVCS (three vortex combustion system) water-cooled diesel engine. These are said to produce high torque rise characteristics, reducing the need to change gear while giving smoother performance in all working conditions.

For driver comfort there are ergonomic control layout, illuminated instrument panel and deluxe suspension seat.

Transmission systems match each model's power output. The ME5700 has a fully synchronised 12/12 transmission with clutchless, on-the-move, hydraulic shifting from forward to reverse and vice-versa. The ME8200 and ME9000 have 18 forward and 18 reverse speeds, fully synchronised gearboxes, also with clutchless hydraulic shuttle shift for directional changes without having to stop the tractor.

All three tractors have an independent hydraulic rear PTO, which can be engaged and disengaged on-the-move.



Iseki TXG23 tractor



ANTONIO CARRARO

The TRX multi functional tractors have the provision to allow the attachments to be used either on the front or rear, in some case both. The drive direction is chosen through RSG, a reversible drive system. The tractors are said to have the capabilities of working in a wide range of environments and different terrains.

SAME DEUTZ

Their Deutz-Fahr Agrokid and Same Solaris have a number of commonalities and specifications.

All tractors in these ranges have three PTO points, a 540/1000 rpm rear a 1000/2000 rpm for front and mid mounted equipment. Position and draft controls are fitted as standard. There is 12/12 mechanical transmission, with the option of hydrostatic on the 25hp model. Features included are oil immersed disc brakes and electro hydraulically operated front differential lock, for added traction.

Solaris have four engine options in their range, three water-cooled plus an air-cooled version.

TRACTORS UK

For courses looking for a small compact there is the 3-cylinder, 18.5hp VST1880D which is said to have a host of features comparable with larger tractors. It is less than 1-metre wide so it can be used in areas where access is very limited.

The tractor is powered by a 3-cylinder Mitsubishi diesel engine and has a 6-speed gear box. The straightforward design is said to require minimal maintenance while retaining durability and make the VST 1880D competitively priced.

ΜΟΤΟΚΟΥ

The TYM range is made up of models from 31hp to 70hp, with the smaller fitted with Kubota engines and the larger 55hp and 70hp have John Deere power units. Synchro shuttle transmission is standard on most models and the creep speed is fitted on the bigger machines. Other features include selectable 4-wheel drive and the multi-plate hydraulic PTO package, which is operated by a hydroelectric control from the driving consul. All the TYM tractors have two years manufacturer's warranty.

KIOTI

The DK range includes 5 tractors from 35hp to 51hp. All have mechanical gearboxes with full synchronisation. The hydrostatic steering has its own hydraulic pump and there is the option on some models of a double speed turning system that is said to reduce the turning radius and avoid scuffing of the tyres. Kiota 'green' engines use indirect injection technology that meets emission regulations throughout the world. The hydraulics has its own high flow pump driven directly off the engine. Position and draft control, plus swinging towbar, are all fitted as standard. The tractors have two year unlimited hours, parts and labour warranty.

RENAULT

The specifications of the Dions and Fructus series include tractors from 52hp to 76hp, with either a field or creep version available. A main feature is the driving position, which has a plenty of leg room and colour coded controls for ease of operation red for transmission, green for – hydraulics and yellow for power.

There are now over 20 UK firms offering tractor ranges in what is a relatively static marketplace. It is worth checking out the specifications from as many suppliers as possible. The aim is to determine exactly what is included and what the optional extras are, then talk to other users before arranging a demonstration. There should be no problem in getting suppliers to demonstrate their latest models, it is more likely that you would not have all the time required to see them.

Competition for market share is fierce, so the financial package also needs to be taken into account.

A small amount of research could result in some considerable savings being made.

McCORMICK

Wetherby Golf Club in Yorkshire had a need for a mid sized tractor which would operate a 1.5metre punch-action tiner/corer, but be light enough not to damage the greens.

"The McCormick GX45 is part of a new range of groundcare tractors and seemed to embody the things we were looking for. It has been kept very busy over the past year and exceeded our expectations, in terms of the growing number of jobs we've found for the little tractor," says Head Greenkeeper David Hannam. He went on to say that they decided on a set of generous flotation tyres that allow the tractor to work on delicate grass areas, without leaving a mark yet have enough grip on their more challenging banks.

The GX45 is powered by a 44hp Yanmar diesel engine, has mechanical forward-reverse shuttle and 12-speed transmission plus creep facility. At Wetherby it handles the corer, three different cylinder and rotary gang mowers and a trailer for general transport work.

Eric Wallis, one of the tractor's regular drivers, added that the tractor runs very smoothly, is light to operate and very manoeuvrable.

"It is just what we needed for mowing and other work, and copes well with all the jobs we have given it."

A drop valve to regulate lift arm descent has been added to ensure the heavy corer can be lowered to the ground gently.

David Hannam concluded by saying that following crew training, calibration and familiarity trials, the GX45 recently came through a full 18 green run of hollow tining in eight hours with exemplary performance."



▲ McCormick GX45 tractor

An Outdoor Game

Tim Lodge, of the STRI, looks at the science and variables involved in playing the game of golf.

The more I learn about golf the more amazed I am at the enormous number of variables that golfers appear to consider when making even the most straightforward of shots. I think they must assess some of these variables in their subconscious and use an intuitive approach to their game. But there are measurable scientific principles behind almost every link in the chain of events that leads from the 1st tee to the pin at the 18th.

The science of golf is a massive subject area. Research workers in the field include physicists, material scientists, biomechanics specialists, physiologists, psychologists and more, not to mention turf scientists. Volumes have been written, particularly on the more lucrative aspects such as equipment design. Rather less work has been published on the ways in which the turf interacts with play. This is surprising given the controversy that circumstances can often create. In this article, from tee to green, I consider how some turf-related factors can affect the game.

TEE SHOTS

Though not usually a problem at major tournaments, replaced divots can create an unstable and unpredictable surface on which a following golfer's footing could be loosened at a critical point in the swing. It is now accepted that the replacement of divots should not be carried out on tees but that the scars should be immediately filled with a blend of fertile but free-draining soil and seed.

LIE OF THE BALL

When the ball lands short of the green its immediate surroundings determine what shot the golfer will then play. In order to understand the mechanisms involved we need to look closely at what happens at the moment of impact between the club face and the ball.

The club passes energy to the ball in two forms: linear (for distance) and rotational (for spin). There is only so much energy available, so the more that goes into rotation, the less there is for distance, and vice-versa.

The angled face of the club can generate spin of up to 8000 rpm. It does this by pressing against the ball slightly below its central point making it rotate backwards towards the club. For a tiny fraction of a second the ball actually climbs up the clubface. The extent to which it does this affects what proportion of the total energy is transferred as spin and what goes into distance. The process is governed by the amount of friction occurring between the two surfaces.

In wet conditions, friction is reduced so balls leave the clubface faster, but with less spin. Especially in the rough, grass leaves may come between the ball and the clubface. This also reduces spin, making such shots especially difficult and less predictable.

The grooves on the clubface help generate spin by increasing friction. Some players maintain that the more modern U-shaped grooves lessen the effects of wet grass on spin, but there has been some controversy over the move away from the more traditional V-shaped grooves. The R & A stipulates the permissible forms of grooves in the 'Rules of Golf' (Appendix II, 5, c (i)– 'Grooves').

The factors described also affect the amount of spin, if any, that is imparted as 'side'. This causes the ball to 'hook' or 'slice' if in error, or to 'fade' or 'draw' if the golfer has deliberately set out to curve the ball towards its destination. The mind that is able to compute these variables and fade an accurate shot out of a wet grassy rough is remarkable indeed.



THE GOLF BALL IN FLIGHT

After leaving the clubface, the spin, velocity and angle of the golf ball trajectory are the main controllable factors that affect the outcome of the shot. Other factors, such as the construction of the ball, the number of its dimples and the materials and design of the clubs, also affect the outcome but these will have been decided upon before the golfer sets out onto the course.

The table below shows the range of most typical angles (to the horizontal) at which the golf ball will leave the face of each club and also indicates the average distance subsequently travelled by the ball (on a still day). Clearly, distance is significantly compromised when golfers have to play out of a tall dense rough, or over obstacles in front of landing areas.

Typical angle of lift (degrees)		Average distance travelled (yards)	
WOODS		Men	Women
No 1	11	220-300	160-180
No 2	13	210-250	155-170
No 3	16	200-230	150-170
No 4	19	190-220	145-165
IRONS			
1	17	190-220	145-165
2	20	180-210	140-155
3	23	170-190	135-150
4	27	155-175	125-140
5	31	140-155	115-130
6	35	125-145	110-120
7	39	120-140	100-110
8	43	110-125	90-100
9	47	90-120	70-80
WEDGES			
Pitching	51-54	70-100	50-85
Sand	58		
Putter	0-4		-

LIFT ANGLE AND RANGE PER CLUB

(Reproduced by kind permission of John J. Monteleone)

Wind speed and direction cannot be controlled but they need to be taken into account when playing the shot. The same would apply to the intensity of any rain that might be falling.

Since the turf itself is not directly involved in the flight of the ball, we will not go into any of these aspects here. This is, however, a fascinating subject about which a great deal has been written.

SHOTS FROM THE ROUGH

For a golfer unfortunate enough to find him or herself there, the nature of the rough may affect club selection. A dense rough, perhaps containing a large proportion of coarser grass species, such as perennial ryegrass or Yorkshire fog, will be more likely to affect a ball passing through it than a rough containing more wispy species such as fescues. The height of the rough will affect the ball in a similar way and by emerging at a steeper angle the influence of the rough on the flight of the ball may be reduced.

IMPACTS ON THE GREEN

Spin, velocity and angle are also the main factors that govern the behaviour of the ball when it hits the green. Two phases can be identified. Typically, the ball bounces (usually twice or more) before entering a 'roll' phase. Different qualities of the green affect both these processes.

BOUNCE

Well-struck shots by the top professionals usually result in short bounces. This is because the ball tends to come down relatively steeply. Balls do not therefore bounce far even on very hard greens. Short bounces also follow when a golf ball 'plugs' into a soft green. This can occur even with shots coming in at shallower angles. Such shots are usually struck by less able golfers and this is unfortunate because they then acquire the impression that they are better at 'holding' the ball on the green than they actually are. Subsequently they demand soft greens all the time, which brings a range of problems for the greenkeeper and does nothing to improve the standard of golf of both low and high handicappers playing the course.

Attempts have been made to model the behaviour of greens during golf ball impacts. Models have employed the physics of springs and dampers (shock absorbers) to do this. At the highest levels of the game, however, these processes may be of less significance than the manner of golf ball flight mentioned above, and how the ball behaves on the surface of the green.

ROLL

After bouncing, the backspin retained at the roll phase reduces the forward motion of the ball. Friction between the ball and the green can slow a forward roll, check the roll entirely or cause the ball to 'screw back' from its position at the end of the bounce phase. Sometimes the ball will screw back beyond the point of initial impact. Watch out for this when the top golfers are playing with lofted irons or wedges from very close to the green.

The surface of the green affects the consequences of this spin retention. It does this by the nature of the 'grip' or friction that develops between the ball and the turf. In my own research, back in 1994, I found that a full and dense grass cover was able to grip the ball more effectively and allow the spin to pull the ball back on itself to a greater extent than a thinner, more open sward.

PUTTING

About 43 % of the shots played in The Open will be made with putters on the greens. It is in putting that the greatest interaction between the ball and the turf takes place.

On impact with the putter the ball first slides over the surface and then, as friction between the ball and the grass takes effect, the ball rolls towards the hole. Various turf-related factors affect the distance the ball travels over the surface, usually referred to as the green speed. Features of the green that affect speed include:

HEIGHT OF THE SWARD

A lower sward height will give a faster green speed. This can be achieved by cutting more closely but this puts the turf under a great deal of stress. An alternative approach would be to build up the ground level at the base of the grass, effectively reducing the sward height from the bottom up. This can be achieved by top dressing.



LEAF WIDTH AND GRASS TURGIDITY

The more contact that takes place between the ball and the turf the greater will be the resistance to the forward roll. Wide, stiff, upright leaves will touch more of the golf ball than narrow and flaccid leaves and a green made up of such coarser plants will therefore be slower.

Excessive use of fertiliser and water has long been known to reduce green speed. The resulting rapid growth will place more leaf in the path of the ball and slow down its forward motion. Where the grass is growing vigorously, as a result of excessively moist and fertile conditions, green speed tends to fall during the course of the day as the leaves extend.

Factors related to leaf width may also explain why greens get faster on hot, dry days. As dry conditions develop, the leaves of grasses, bents in particular, curl up to conserve moisture and effectively become narrower, presenting less resistance to the ball's roll.

DENSITY OF THE SWARD

Short turf with a very high shoot density can give a faster surface. This is because the size of the individual grass plants is necessarily smaller (so they all fit into the space available), resulting in less contact with the front face of the ball. Also, the ball will sink less into a dense sward which will therefore present less resistance to its forward roll.

A high shoot density can develop, in certain circumstances, if the grass is persistently mown very close. This occurs for example on some links greens. However, this carries a plethora of risks and implications for the welfare of the green.

Conversely, where shoot density is very low, faster surfaces can also result. This is because the ball is then rolling over a surface provided chiefly by bare ground (sand or top dressing) rather than grass.

It is probably by reducing the size of individual plants that procedures such as verti-cutting and grooming are able to increase green speed. The reduction in shoot density and/or plant size will lessen the general resistance to the roll of the ball. Vert-cutting also allows the integration of top dressing into the sward which can improve pace through its effect on the height of the sward as mentioned above.

SPECIES

It is widely acknowledged that different grass species produce different green speeds. Thus, for species normally found in the UK, fescues give faster surfaces than bents, which in turn give faster surfaces than annual meadow-grass (assuming all are at the same height). This corresponds, in most circumstances, with the leaf width and general size of the plants. For example, the needle-like leaves of fescue will support a golf ball but will not touch so much of its surface as will a lush, annual meadow-grass leaf.

GRAIN

This only tends to be an issue on creeping bent greens, most common in the northern United States and southern Europe. Speed is lower against the grain, into the tips of the leaves, than with it, along the lie of the leaves. Intensive verti-cutting is usually required to reduce the nap and create a more uniform, upright sward.

SURFACE MOISTURE

The presence of surface moisture usually increases the drag at the contact points between the ball and the turf. It is likely that these effects will be greater on lush greens where such contact points are already more abundant.

There are also those factors that affect the course taken by the ball on its journey. These include:

UNIFORMITY OF SURFACE

Bumpiness can result from the varying growth rates of different grass species. This often occurs where a mosaic of grasses in a green are all growing at different rates. The phenomenon is most common in early spring as the grasses respond differently to rising temperatures. Another source of unevenness may occur where aeration procedures have been carried out resulting in the stimulation of growth in one place, for example over a hollow core hole, but not to the same extent in the area immediately around this. The use of a top dressing with a grit content can also create a bumpy surface. The results are that putts follow an unpredictable, and hence unfair, path.

SLOPE AND BORROW

These are the elements of the green's topography that are fair and must be read by the golfer when visualising the course of his putt. Some work has been done on how a ball behaves going straight up and straight down a uniform slope, but I have been unable to find any research work on the rationale behind putting across varying slopes and the prediction of the route taken by a ball over an undulating surface. This is clearly an area where the intuition of the golfer takes over, but the subject seems to me to be ripe for a more objective study.



IN THE HOLE

Some good science has been done on the process of 'holing'. Though not really related to the qualities of the turf, this is interesting nonetheless. Some facts (from 'The Science of Sports' by Sharon L Blanding and John J Monteleone):

- If a ball is rolling without sliding it must be moving at 1.63 metres per second or less to be holed. Otherwise it has enough velocity to sustain the straight-line path across the top of the hole. A ball leaves the end of a Stimpmeter at 1.9 metres per second.
- Between 1.31 and 1.63 metres per second the ball will hit the opposite rim. What happens then is determined by how much the ball bounces against the walls of the cup and on how much friction is generated from the ball's rotation against the rim.
- If the ball is bouncing or skidding it can be holed at greater speeds. This is because such a ball has less angular momentum that can provide 'kick' to bounce the ball out of the hole.
- It has been found that it is easier to sink a wound ball than a two-piece ball.

CHAMPION!

I don't think that Ernie Els and Tiger Woods concern themselves too much with the biophysics of golf ball impacts on greens or the leaf extension rates of bents and annual meadow-grass. But it is surely the case that, by breaking down and focussing on these issues, the greenkeeper can empathise with the processes I have described and deliver even better playing surfaces.

Healthy Soil is the Future

Two months ago Bob Taylor of the STRI wrote an article based on limited trials data. This suggested that using bacterial and fungal additives as part of a maintenance programme, to re-establish natural growth processes on substantially sterile greens, would not work.

The trials and article were based upon a common misconception that a single microbial product can be a magic cure-all that will produce fantastic results, like a new improved fertiliser. This is wrong.

Given the different physical and chemical make up of greens and tees from club to club single site trials for a single product are very unreliable guides.

Adopting a biological approach means reintroducing, as far as possible, normal plant growth processes that have evolved over millions of years.

In this quick look at what goes on underground I will try and set out what happens in the soil and how natural processes can be used to produce better playing surfaces. My comments are based upon a large number of academic studies and our own research and observations at Symbio, gathered through collaborative research with local universities and practical experience of applying these techniques to hundreds of golf courses over the last eleven years.

Apart from commercially sensitive information concerning specific microbes nearly all the data is published on the internet.

Grasslands are part of a major food web, which stretches from man above ground to the smallest microbe in the soil below ground. There are probably thousands of mechanisms to ensure growth continues in times of stress to stop these chains breaking down to prevent mass starvation through the entire food web.

Since the 1920's when inorganic fertilisers were

introduced which override natural nutrient uptake sports turf soil has been prone to excessive fungal disease, dry patch, thatch build up and black layer.

Excessive fertilisers, fungicides, water and iron damage the soil food chains, blocking recycling, natural growth and disease suppression. More chemicals are introduced to treat more symptoms and the soil can become less and less fertile until it becomes too toxic to support healthy grass growth.

LET'S LOOK AT HOW TO SOLVE THE UNDERLYING PROBLEMS.

Plants photosynthesise taking energy from the sun, carbon from the air, and nutrients from the soil producing carbohydrates, proteins and fats. In grasses, about 50% of this energy goes into top growth, to feed the above ground food chain and 50% goes back into the soil via the roots and exudates to feed the underground, mostly invisible, food chain (Figure 2).

OUT OF SIGHT

Out of sight used to be out of mind, but by using molecular analysis and scanning electron microscopes that allow identification of individual bacteria, fungi and other organisms, we can now start to understand how natural processes work on a golf green and how to use them to our advantage.

THE SOIL FOOD WEB (Figure 1)

Food underground comes from exudates from plant roots, in the form of proteins and carbohydrates, which includes sugars and starches. Sugars are the main food for bacteria. (Figure 2).



When grass dies (i.e becomes thatch) it is full of cellulose and lignin. These are the tough structural materials that give grass the strength to resist bending and trampling. You only have to look at a dead tree to know this is the favourite food of fungi which convert dead grass, leaves and twigs to humus - the nutrient store and foundation for future plant growth.

Bacteria and fungi form the foundation of the whole food chain. The good (saprophytic) microbes only live on dead matter. There are about 20,000 enumerated soil bacteria and 15,000 fungi, of these, most greenkeepers know only the few disease - causing (pathogenic) fungi which live on live plants, by name.

Certain fungi known as Mycorrhizae form extremely close associations with the roots, actually growing inside them. The plant provides these fungi with carbohydrates (sugars) and in return the mycorrhizae use their hyphae to suck up phosphate, nitrate, trace elements and water and feed them to the plant, effectively giving the plant a vastly extended root system. This is a two way dependant partnership and both partners rely extensively on the other for survival.

It must be said that very little is known about how all these bacteria and fungi interact but we do know how they fit into the food chain.

In a gram of healthy soil you may find about a billion bacteria weighing about 100 μ g and a similar weight of fungal biomass, only half of each may be active but for fescue and bent grass growth it is important to have

Martin Ward, of Symbio, looks at some of the progress which has been made by the bio-tech industry in recent years.



approximately equal bacterial and fungal biomass.

A few bacteria fix nitrogen from the atmosphere; others take it from recycled nutrient in the soil. Locked up in a bacterial cell or fungal hyphae nitrogen is not available to the plant. To release nutrient the microbes have to die or be eaten by the next stage of the food chain comprising protozoa and nematodes. There may be 10,000 protozoa in a gram of soil but only a few hundred nematodes. Some nematodes can be seen with a magnifying glass.

Protozoa and nematodes eat the bacteria and fungi, they use the carbon to grow and excrete excess nitrogen as ammonium, which feeds the grass when converted to nitrate by nitrifying bacteria in the presence of oxygen

There are two other types of nematode, root - eating and predatory. Root - eating you know about but they are kept in check by the predatory nematodes which eat all nematodes, These in turn are eaten by small worms which create small spaces in the soil leaving little tunnels full of excrement (ammonium) for roots to grow into and feed on and so the chain expands up to moles and other burrowing animals. For golf course purposes we try to stop the food chain at non-casting worms but up to that point all aspects of the chain are necessary for natural healthy grass growth.

Working together all these microbes and organisms ensure a constant supply of nutrient for the plant, avoiding the boom and bust of the fertiliser cycle, they protect the grass from disease, because if the grass dies the whole food chain is compromised and they recycle dead grass back into usable nutrient.

WHY ARE GOLF GREENS STERILE?

Dumping a tonne or more of inorganic fertiliser (salts) per hectare per year means that the plant is swimming in a sea of food. The plant does not need its associations with microbes to live, which coupled with the fact that bacteria like sugars, not salts, the use of fungicides, excess water and compaction which deprives the microbes of oxygen, the removal of animals which replenish the microbes via excrement and near daily cutting mean that large parts of the food chain cannot survive.

We often find that golf greens have less than 1% of the microbial biomass of healthy soil and that the total fungal biomass is much less than that of the bacteria, though as we shall see fungi are extremely important to your greens management programme.

You can now see the reason for adding bacteria, fungi and selected food sources is to re-establish the primary links in the soil food chains.

HOW DOES THIS HELP THE GREENKEEPER?

DISEASE MANAGEMENT

There are of course specific remedies for each disease as they metabolise in different ways but in general, diseases occur on sports turf because fungal pathogens, which cull weak plants as part of natural selection, have a lot of weak grass to attack and very few of the natural defence mechanisms to stop them.

If all the grass dies we all starve, so nature has worked out some clever tricks to keep the plant and food chain alive. Figure 3 is a root covered in mycorrhizal and other fungi which shows blue in the picture, you can hardly see the root for fungi. It effectively forms a barrier against any disease-causing organism that wants to penetrate the root.

The good fungi and bacteria also get to any freely available nutrient first and out-compete the pathogens, this is called competitive exclusion. A third way that some soil microbes keep their host plant alive is to produce toxins active against disease causing organisms.- Finally in times of stress and food shortage some microbes will eat other microbes,

Strengthening the sward and replacing the defence mechanisms has to be an essential part of any IPM programme.

Healthy Soil is the Future



THATCH AND DRY PATCH MANAGEMENT

A hectare of greens with 4cm of thatch has about 400 m3 of dead organic matter that is full of excellent nutrients diluted with top dressing. Current wisdom is to hollow core or rip it out and replace it with – top dressing plus dead organic matter full of excellent nutrients. Weird or what?

The simple solution is to convert thatch into humus as it is formed, releasing the locked-up nutrient thus providing a building block for future plant growth that holds moisture and increases cation exchange capacity. To do this you need fungi that eat cellulose and lignin.

Other advantages of microbially activating and degrading thatch are that thatch is a great source of nutrient for fusarium, thatch fungus, basidiomycetes (The fungi that causes dry patch) and other nutrient loving fungal diseases. If the thatch is already full of beneficial fungi the pathogens cannot get a seat at the table so they cannot grow.

Percolation rates increase giving faster play after rain and as we shall see, thatch degradation helps reduce pH and promote the growth of bent and fescues.

Aeration is needed of course, as it would be for a 400 m3 compost heap, but generally once the process has started, weekly or fortnightly aeration with needle tines or a sarrel roller that does not upset the playing surface are all that is needed for thatch reduction. This is in addition to the aeration needed to address deeper compaction and drainage problems.

FINE GRASS PROMOTION

We do not exactly understand the mechanisms involved, and there is very little published research but we have seen the following reactions so often that it is worth mentioning here.

If you analyse soil supporting poa annua greens you find a bacterial biomass about 10 x greater that fungal biomass but soil that supports old established fescue and bent grasses has a nearly equal amount of fungal and bacterial biomass. Most greenkeepers report a sudden sustained increase in Agrostis tennuis grasses when they start to degrade thatch in situ, i.e. when the fungal population increases. Research has shown that Poa annua does not associate as well with mycorrhizae as perennial grasses which gives all fine grasses an advantage on mycorrhizal greens but additionally, the combination of increased thatch reduction and reduced fungicide application during the growing season combine to substantially increase the colonisation of bent and even fescues. The common theme is that fungal biomass has to increase and pH in the thatch layer reduce as humus and humic acids are formed by biological thatch degradation.

HOW DO I GET MY SOIL TO WORK?

Key parameters that will stop a healthy soil food chain forming are excessive chemical residues in the soil, and a greens committee that won't let you aerate.

If you do not suffer either of these impediments you should work with a company or agronomist that can advise how to build up each part of the food chain that is missing and supply the total package which will probably vary year to year as the soil quality improves.

You will join the fortunate band that already benefit from having their soil working 24 hours a day to produce an excellent playing surface and contribute to maintaining the natural features of our fantastic heathland, links and downland courses.

My thanks go to the professors and researchers at the universities of Oregon, Surrey and London for information contained and to Soilfoodweb Inc for the electron micrograph pictures, the technical team at Symbio and especially to the greenkeepers who have helped us with their time, feedback and advice in developing this technology.

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Ransomes Jacobsen Scholar Judith Colley outlines the work she has been able to carry out on the strength of receiving her scholarship.

Change of Career

In September 2002, I took the decision to change my career and embark on a three year Foundation Degree course in Turfgrass Science and Golf Course Management at Myerscough College. I had been employed within the pensions industry for over 14 years and was ready for a fresh challenge. Due to financial constraints, I opted for part-time study, while continuing to be employed in pensions, albeit on reduced working hours which I negotiated with my employer.



Although I have studied to degree level in the past, balancing the work-study commitments has not been easy. In addition, I had no previous turf or golf knowledge but now appreciate to some extent the complexities faced by those involved in the maintenance and development of a golf course. With the support of other students on the course and the enthusiasm of the teaching staff at Myerscough, I have successfully completed the first year of my studies and subsequently obtained casual, full-time employment on a golf course to obtain

greenkeeping experience and expand my knowledge in this area. I finally exchanging my stilettos for a pair of steel toecaps!

At the end of May 2003 it was a great relief to have completed the exams and I was looking forward to a relaxing, assignment-free break over the summer period. However, reflecting back on what I have learned over the first year of the course and the new contacts I have made within the turf industry, I am now keen to start the second year and develop my knowledge and experience of turf further.

WHAT HAVE I LEARNED SO FAR?

The Foundation Degree is made up of 12 modules, with four subjects being studied each year when following the part-time route:

YEAR 1:

Plant Biology (Grade Achieved: 77%) Soil Science and Land Management (Grade Achieved: 73%) Golf Course Presentation and Management (Grade Achieved: 82%) Turfgrass Establishment and Maintenance (Grade Achieved: 91%)

YEAR 2:

Cultivation Practices in Sportsturf Turfgrass Growth and Development Ecology, Conservation and Sportsturf Management Pests, Diseases and Weeds

YEAR 3:

Surveying, Planning and Design Sportsturf Machinery Management Irrigation Systems, Installation and Management Construction Systems

Attendance at lectures is required for only one day a week, although it is necessary to undertake additional reading and research. Myerscough College now offers the Foundation Degree as an on-line option for those not able to attend.

While the lectures were interesting, I found that undertaking the assignments was the most stimulating part of the first year. For Plant Biology, students were required to complete a laboratory workbook, which included plant morphology and anatomy drawings of the different parts of both monocots and dicots (stems, leaves, roots). We then had to answer questions relating to the duration of various plants (annual or perennial), their structure and physiology, with particular reference to their use and management in different sportsturf surfaces (fine turf, seedbeds, rough).

Soil Science also involved the submission of a practical portfolio: a soil sample was taken from a sportsturf area and analysed in the laboratory to identify the properties of the sample (texture, level of organic matter, NPK status, pH, particle size distribution and hydraulic conductivity). Once the analysis had been completed, we were required to comment on the suitability of the soil for the use to which it was put (eg as a golf green, football pitch) and, if necessary, recommend appropriate soil management operations to improve the soil's performance.

For me, the assignment briefs for Golf Course Presentation and Turfgrass Establishment were initially the most daunting, due to my lack of golf/turf knowledge, and required a lot of research so that I could familiarise myself with the basic greenkeeping terms. It was a steep learning curve. These assignments did, however, prove to be the most enjoyable and rewarding.

- Golf Course Presentation and Management consisted of two assignments:
 Practical Book and Record A diary of the various operations involved in the daily maintenance of a golf course over the period of one semester, giving a general overview of the selected course, a report of the duties undertaken (including any further recommendations for work to be carried out), and costings involved in the completion of the maintenance tasks. As I was not employed by a golf course at that time, my diary was based on the 9 hole golf course at Myerscough College and I would like to thank John Berry, the Head Groundsman, for his assistance in gathering the necessary information to complete this assignment.
- Investigation and Review of a Stated Topic This involved selecting a topic such as recent research, product information or a golf course concept, investigating and reviewing the literature available on this subject, and preparing a report to evaluate its application within the current golfing environment. We also had to make a presentation of the report to our lecturer and fellow students - thoroughly enjoyable once the first few minutes were over. I chose "Achieving Definition on the Golf Course" and spent many hours surfing the internet for photographs of bunkers, water hazards, mounds and various mowing patterns. Unfortunately friends now think I'm a bit mad when I get excited about bunkers or other wellpresented features on a golf course.

Again, Turfgrass Establishment required the completion of two assignments. Firstly, a practical logbook explaining the processes involved in the establishment of a suitable sward for a specific sportsturf use and the on-going



 Applying Rubber Crumb

maintenance schedule required. For this assignment I selected a tee that was in need of renovation. Initially, the problems of the teeing area had to be identified (ie whether it was smooth, level and firm, had any problems of weeds, pests or disease, and the type, density and coverage of grass species).

Visual assessments, quadrat sampling and subsurface assessments using a soil auger were used. Following on from this, a renovation programme was proposed, including costings.

The second assignment in this module was broken into two parts: another literature review of a particular product but also incorporating a research trial to assess the effectiveness of this product on turf. With the increasing number and range of products available for use within the sportsturf industry, it is important to be able to evaluate products to enable sound decisions to be taken. This will require judgements to be made with regard to the accuracy of sales claims and published information, and the ability to accurately test a product. The objectives of the assignment were threefold: firstly, to familiarise ourselves with major research establishments, governing bodies, relevant suppliers and publications; secondly, to develop skills of evaluation and analysis; and, thirdly, to present effectively the results of our investigations in a written, illustrated report.

As the use of rubber crumb in sportsturf is a relatively new development, I chose to review its use as both a topdressing material and a rootzone amendment, looking into the general reasons for using rubber crumb, its manufacture and the products available for turfgrass purposes. A lot of research in this area is currently on-going and most of the literature that is available is in the form of research papers and recent magazine articles.

For my own research into the product, I set up a trial to investigate the effect on seed germination in rootzone material amended with rubber crumb. I would like to thank Brian Tebbutt, of Tebbutt Associates, for supplying literature and the rubber crumb material to undertake the research, and also the laboratory staff at Myerscough College for their assistance in carrying out the trial. A brief outline of the trial and a summary of the results are shown in Figure 1.

PRACTICAL EXPERIENCE

Although I have completed the academic side of the course successfully (with final grades between 73% and 91%), I am very much aware that it is one thing to have the theoretical knowledge and another actually to put it into practice. If the Foundation Degree is followed on a full-time basis, there is a separate module in which the student is required to undertake a work placement for one year. There is a similar requirement for those wishing to follow the part-time route, although it is not a module subject to assessment. While I have had some experience during the summer of working on a golf course, I would find that a more structured practical training programme useful. My original reasons for undertaking the Foundation Degree were out of general interest in the subject, rather than to become a greenkeeper or groundsman. Since commencing the course I have recognised areas in which my previous employment experience could have a more supportive capacity within the sportsturf industry. What may be appropriate is a fast-track programme, similar to graduate training schemes adopted by large companies in other industries. Under such a programme I would gain hands-on experience of all aspects of greenkeeping (general maintenance operations and larger project work) over a relatively short period of time. Given the structure of the greenkeeping business and size of "companies" involved, I feel it would be more appropriate for such a programme to be devised and co-ordinated within the college environment, although the tasks would be undertaken at a golf club. This type of training may also be appropriate for others entering the sportsturf industry and wishing to transfer skills acquired in other business environments.

While I recognise that the student should take responsibility for their own development, such a training programme would need the support of the teaching staff at the college.

The colleges could negotiate with their local contacts to ensure that the student performs certain tasks at least once: possibly arranging with different clubs a series of week-long placements so that the student is involved in projects such as building a new green or attending a Greens Committee meeting as well as the routine general maintenance operations undertaken at various times of the year.

I appreciate that such a programme would require much co-ordination and commitment from students, teachers and golf clubs alike. However, given the changing nature of the sportsturf industry and career patterns in general, such training may be suitable in the future if the sector wishes to attract personnel from other sectors and tap into their skills.

People entering greenkeeping from a business-orientated environment may be comfortable undertaking the more office-based tasks associated with the increasing emphasis on administration, legislation and budgeting (which many Course Managers/Head Greenkeepers tend to shy away from). A fast-track training approach may offer an incentive to such professionals wishing to enter course management, where the traditional route has been to work up through the ranks, and give them a general overview of the practical tasks involved in the maintenance and development of golf courses, etc. In this way, they could support and assist the Course Manager/Head Groundsman in carrying out their duties, while recognising the knowledge required by greenkeeping staff that can only be acquired through several years of practical experience.

WHERE DO I GO FROM HERE?

As mentioned earlier, I am looking forward to resuming my studies and successfully completing the course in May 2005. In the meantime, I am investigating more fully how my administration, management, organisational and communication experience can be utilised within the greenkeeping profession. A job as full-time Personal Assistant to a Course Manager would be ideal but these jobs are few and far between. So currently I am considering a new business venture offering support to several Course Managers/Head Greenkeepers, particularly in areas such as budgeting or Health and Safety. In assessing the market for such services, I am beginning to recognise how differently each golf club functions in relation to the greenkeeping section and how it interacts with other areas of club management. Another learning experience!

In order to survive financially over the coming months, I will be resuming employment on a part-time basis back in the (dry, warm) office environment, although this will be outside the pensions industry. It is also a temporary measure until I manage to secure a suitable full-time, permanent position in the sportsturf industry.

I would like to thank Ransomes Jacobsen for providing sponsorship for my studies, thereby assisting in my transition into a more exciting and rewarding career.

Judith Colley, BSc, APMI

Figure 1: Seed Germination in Rootzone Material Amended with Rubber Crumb

Where rubber crumb is to be introduced as a rootzone amendment, the area will require either reseeding or returfing after the construction work has been completed. It is, therefore, important that the addition of rubber crumb has no negative effects on the germination of seeds. A laboratory trial was set up to study whether the incorporation of rubber crumb into rootzone material would affect the germination rate of perennial ryegrass seed.

Materials and Method

Several incorporation rates were tested (rootzone material :rubber crumb by volume: 100:0, 90:10, 80:20, 70:30, 60:40 and 50:50) using two different grades of rubber crumb (0.5mm - 2.0mm and 1.0mm - 3.0mm). The crumb was incorporated by hand into a sand-dominated rootzone material, which contained a small amount of organic matter, and put in seed trays with 30 perennial ryegrass seeds being scattered on top. The trays were placed in a growth cabinet and watered daily using distilled water. At periods of 7, 14 and 21 days after the initial sowing date the germinated seeds were removed and the number of seedlings in each tray was recorded. A duplicate study (Trial 2) was set up to check the accuracy of the results.

Findings

Analysis of the results indicates the following:

a) Total Number of Seeds Germinating

After 21 days the lowest rate of germination was found in the tray containing no rubber crumb with the total number of seeds being less than a quarter of those in the next lowest germinating tray. The higher levels of germination generally occurred in the trays containing the 1.0mm - 3.0 mm granule size. The incorporation rate does not appear to have a consistent effect on the total number of seeds germinating, although those incorporated at 50:50 had germination rates at the higher of the scale and those at 90:10 were found in the lower end of the scale (see Charts 1 and 2).





b) Rate of Germination

Seven days after the date of sowing the trays containing no rubber crumb had the lowest rate of germination. It also tended to be lower in trays with the 1.0mm - 3.0mm granule size. The number of seedlings appearing during this period was higher in the trays that were incorporated at the 50:50 rate for both granule sizes, although the remaining incorporation rates did not show consistent results across Trials 1 and 2.

Fourteen days after sowing, the trays with no rubber crumb incorporated into the rootzone were again showing a lower germination rate. Germination in this second week of the trial was lower in the 0.5mm - 2.0mm granule size, rather than the 1 .0mm to 3.0mm granules which had been experienced in week one. As indicated in the first seven days, the incorporation rates did not show any consistent trends between the two trials, although those incorporated at 50:50 once again appeared to be germinating at a faster rate while those at the 90:10 incorporation rate were slower at germinating.

The final week of the trial showed that the germination rate in the 0.5mm -2.0mm granule size was lower (as had been experienced in the second week of the trial) and that incorporation rates continued to be inconsistent between the two trials.

Conclusion

Results of the trial indicate that the addition of rubber crumb to rootzone material does not have a negative effect on the germination of perennial ryegrass seeds, in fact, the evidence suggests that the germination rate over a period of three weeks is enhanced by the addition of rubber crumb - the level of germination with a rubber crumb rootzone amendment being increased by more than four times. After the three week period, both the size and

incorporation rate of the rubber crumb granules appear to have an impact on the total germination rate. Seeds also germinated faster over the three week period where rubber crumb amendment was the greatest. Although the smaller granule size had higher rates of germination in the initial period, the comparative rates were lower after the first seven days.

More extensive research would be recommended to check the accuracy of these results. A larger number of seeds and a second duplicate trial would minimise further any effects of the seed purity and germination rates on the results. I would also suggest further studies to assess the impact of rubber crumb on germination over the longer term and on other turfgrass species.





Patent was granted in Europe April last year for the use of rubber crumb on grass.

Tebbutt Associates can be contacted Tel: 01253 342003.

EW RODUC'

SAFE POURING

Whether you manage a golf club, sports complex, football stadium, playing fields, private estate, market garden, orchard, horticultural facility or small arable farm the problems are going to be the same if you handle chemical concentrates in small packs.

You have to pour into a measuring jug before adding the concentrate into the sprayer. Then you have to triple rinse the jug to ensure it is clean. And worst of all you are required to do it with an impervious full length suit, gauntlets, boots, mask, helmet and face shield, even in hot weather! If you don't, you are taking a risk with your long term health and putting your employer at risk. Chemlok frees you.

You can discard your measuring jug - and the chemical suit too, because using Chemlok does not require protective clothing.

The flow controllable valve allows you to measure precisely in 25ml increments and a built in spirit level lets you know that the gauge is plumb.

Full transfers can be completed at the rate of half a litre in eight seconds The chemical is mixed into the filling stream.

The integral power rinse facility, using clean water from a tap or irrigation system, thoroughly cleans containers, removing more than 99.99% of the product, so that empty containers are safe for disposal and there is no wastage.

Chemlok will handle:

- · Any liquid formulation from any manufacturer in any container from 1 - 1000 litres.
- Containers of 1 10 litres are processed through the valve.
- For larger drums and IBCs, use the optional drum extraction.
- Standard thread size across the Northern Hemisphere is 63mm, but we also have 45mm and 60mm adaptors and can make other screw-in thread adaptors if required.



Chemlok is driven by clean water from any source. It is connected to an irrigation system by the side of a green, but can also be driven by a mains supply or from a non-pressurised source using the pump and sprayer controls.

But principally, because Chemlok is an engineering control within the meaning of the COSHH regulations, it does not require ppe to be worn, unlike an open induction hopper.

For further information Tel: Spraytech 01932 269495.

LIGHT ON YOUR FEET

Spring 2004 marks the launch of a revolutionary new footwear build concept from Hi-Tec. The new V-Lite system will guarantee Hi-Tec strides into the New Year delivering the most impressive collection of ultra-light golf footwear available.

The lightness achieved from the Hi-Tec V-Lite collection cannot be credited to one single technology or material but a breakthrough philosophy based on new and refreshing design insights with a creative and inventive combination of innovative materials and build construction. The result is exceptional - the most lightweight collection of footwear on the market, without any compromise on style, comfort or performance.

All shoes in the V-Lite new collection weigh in at less than 400g and include standard features such as:

- · Dual Density phylon V-Lite Sole providing an ultra lightweight unit that offers unbelievable levels of cushioning, support and traction with the added weight.
- Ultra Performance lasting board for maximum strength and flexibility without compromising lightweight and comfort.
- Technically advanced linings with comfort, breathabilty and moisture wicking properties. For further information Tel: 020 7940 1710.

NEW RANGE OF VACUUM SWEEPERS

Trilo has introduce the new SG800 into the range of quality vacuum sweepers. The SG800 has the ability to collect leaves and litter using the two metre suction hood and brushes or use the big cab controlled hose. Uniquely the hose can be used on either side of the machine, giving greater flexibility for the operator. The material passes through the armoured fan and housing into the seven cubic metre hopper, being chopped and mulched on the way through.

For further information Tel: 01638 720123.





GIVING A LIFT

Two purpose-made hydraulic loaders have been developed for key models in the McCormick tractor range used for grounds care, highways, forestry and construction plant hire operators, for routine materials handling tasks.

The McCormick LiftMaster loaders come with features such as joystick control, quick-attach mountings and fast-fit implement couplings to make them as convenient and easy to use as possible.

There are two models: the LiftMaster 1000 is designed for the three-model range of McCormick GX/GXH midi compact tractors, which have power outputs spanning 27-36kW / 37-49hp. The LiftMaster 2000 is designed for the McCormick CX and MC four-cylinder tractors of 54-75kW / 73-102hp.

Both loaders are operated through a four-way joystick control and have

A GREAT IDEA

A Wentworth member has developed a tool which repairs divots quickly and easily and the idea has been taken on by BMS.

Roy Harrison, a Wentworth member of 30 years standing, retired eight years ago and with spare time on his hands looked to see if he could invent something useful to the game of golf.

"At first I couldn't think of anything until one day I was playing golf and it came to me when I saw the terrible damage that golfers do to the teeing areas of par-3s. The divot holes are filled with a mixture of sand, soil and seed which is not very satisfactory and it takes a long time for the damage to repair, if at all," explained Roy.

"I had a chat with one of the greenkeepers and asked him if any company had come up with a tool that could repair the damage instantly and he said that there had been some devices which had come and gone as they hadn't achieved their aim.

"I then decided that I would see if I could design a tool that would do the job successfully."

Roy made a study of divots over the next few months on fairways and was surprised to note that hardly any of them regrew. They were either pulled out by birds or mowers or stamped on so hard that they died in their hole.

"I decided to use my lawn as a testing area for replacing divots and see what would make them grow successfully. I had the idea that it was the lack of aeration that was causing the hard tamped divots to die so I stamped a divot into my lawn and punched holes all over the whole area and sure enough the divot grew really well.

"I knew then what was needed - a tool that would stamp in the divot and at the same time aerate it."

After a few prototypes Roy came up with a tool which solved the problems he'd encountered.

"The tool is made up of 45 steel pins ground to sharp points set into a steel box five inches by three inches with a steel handle. A steel plate with 45 holes drilled into it with springs on each corner allows the divot to be stamped in and at the same time to be aerated with the 45 pins.

"I have tested this device over a long period of time and found it useful for other jobs such as preparing bare ground for seeding, aerating areas which have been well compacted and tamping in new turf without compressing the roots."

Roy contacted BIGGA to ask for advice in manufacturing and developing the tool and then contacted James Buckholt, of BMS, Luton. Who after seeing the tool in action, agreed to produce and promote it.

For further information from BMS. Tel: 01582 758444.

mechanical parallel linkage to automatically keep the bucket level and prevent spillage of loose loads such as earth, sand and wood chips.

Quick couplings make it easy put the loaders on when they are needed and to take them off again to release the tractor for other work.

Similarly, implements from pallet forks and manure grabs to large volume grain and feed buckets can be put on and taken off quickly and easily. Generous articulation means implements can be rolled back sufficiently to fill to capacity and dumped to a steep angle to empty cleanly.

LIFTMASTER 1000

The McCormick LiftMaster 1000 hydraulic loader is designed for the 27kW, 44kW and 36kW / 37hp, 44hp and 49hp McCormick GX/GXH midi compact tractors. These are available with either a 16 x 16 speed creep gearbox or hydrostatic drive, both of which make them ideal tractors for light grounds care duties such as mowing and aeration, for operating power tillers and stone buriers in locations with limited access.

The loader has a lift capacity of 985kg at ground level (630kg to full height) and a maximum lift height of 2.7m enabling it to easily clear gates, fences and the sides of a small truck or trailer.

LIFTMASTER 2000

The McCormick LiftMaster 2000 hydraulic loader is mounted using a full-length subframe for added strength and upright bars at the front protect the nose of the CX and MC tractors for which it is designed.

It lifts 2142kg from the ground and takes a 2422kg load to the maximum lift height of 3.88m. This gives it the capacity to load skips and dump trailers with loose materials or to use pallet forks to offload deliveries of building materials, fixtures and fittings, turf, fertilisers and other soil management materials.

A third hydraulic service is available for operating grabs on manure forks and silage cutters. Adding the Euro Hitch option ensures that users can operate existing implements from certain other loader manufacturers.

Further options include a suspension system using gas accumulators to absorb shock loads during work and travel, and a single coupling for all hydraulic lines for quick, easy and accurate connection.

For further information Tel: 01302 733393.



Greenkeeper International 51

Around ^{the}Green

SCOTTISH REGION

Central

A very successful AGM was held on October 30 at Gleneagles Hotel when Golf Course and Estates Manager Jimmy Kidd gave an excellent presentation on Gleneagles bid for the Ryder Cup, we are indebted to Gleneagles for extending us the courtesy of their facilities and to Jimmy for giving us an insight into a very complex and expensive document which his staff had to prepare and present in their bid to bring the tournament to Scotland. Well done to everyone at Gleneagles!

Twenty-five members were in attendance at the AGM and it was heartening to see a few new faces present, a number of fresh ideas were put forward for the committee to consider for the coming months. So watch this space!

Your committee for the coming year is Stuart Cruickshank, Chairman; Derek Scott, Vice Chairman; Andy O'Hara, Past Chairman, J. Crawford, Secretary/Treasurer; with A. Dunn and I. MacMillan, Patrons' representative, K. Brunton, Trade representatives P. Langdon and J. Finlayson. Following the meeting everyone made their way to Auchterarder Golf Club where we enjoyed a superb buffet lunch provided by Jim Finlayson, to whom we extend a big thank you.

Before I forget, very belated congratulations go to Ally Philp from everyone in the Section on being elected to the office of Captain at Comrie Golf Club in Perthshire, where he is also Head Greenkeeper. It must make it easier when the Captain is on the greenkeeper's side! I hope that is right as Ally's wife is a lawyer and the last time I made a mistake in some information about him he threatened me with a lawyer's letter.

We haven't had any new membership applications for a while but we are making up for that this month with 10, yes 10! We extend a very warm welcome to the Section to Kris Bilby, from Kingsbarns Golf Links; Michael Robertson, Barry Ross, Neil Smith, Glenn Cameron, Gary Douglas, Fraser Cochrane, David Goldie, John Mitchell and Colin Haldane, all from St Andrews Bay. Hope to meet you in the not too distant future at some of our events.

The Section nominees for this year's Patrons' Awards are Robbie Breingan, from Muckhart GC, and Donald Gardner, from Scoonie GC. Congratulations to them both and I hope they enjoy the Harrogate Experience.

Remember time is running out for you to buy/sell your allocation of Club 2000 tickets before I give you a very public reminder. It now costs £60 in postage for one mail shot to Section members so it is much cheaper to give you a gentle reminder via this column!

John Crawford

East

Welcome to this month's column. A few things to get through this month as there was nothing of interest for the column last month. Well here we are just a few days away from Christmas and New Year so where has the year gone? The next thing we know it will be time for Harrogate and 2004. Well down to section news, the Autumn outing was held at the new course at the MacDonald Cardrona Hotel Golf & Country Club with 30+ members playing and the majority of people said they had a great day with nice meals, the course in excellent condition and also good weather. A big thanks to the management of the Cardrona Hotel for courtesy of the course. Course Manager, Robert Hogarth, and his team for the condition of the course and the hotel staff for the welcome received and the way they looked after us also thanks to everyone who ran the tournament in myself and Steve's absence. Here is the results of the day:- Best Scratch (Stuarts Quaich) Danny Murray 77, 1st class (Watermation Cup) 1. S. Cunningham 79-3-76; 2. T. Murray 83-5-78; 3. C Noble 85-6-79. 2nd Class. (SGM Cup) 1. R. Prowse, 83-11-72; 2. A. Russell, 86-11-75; 3. A. Campbell, 87-11-76; 3rd Class (STS/Rigby Taylor Cup) 1. R. Bullouch, 92-14-78; 2. Robert Hogarth, 101-19-82; 3. J. Dalrymple, 122-21-101. Best Nett (Russell's Quaich) R. Prowse 72 Nett, Veteran Prize (Eddie Holt Trophy) J. Nielson 113-21-92. Trade Prize (Autumn Trade Cup) Ian Henderson 93-9-84. New Members' Prize. M. Littlejohn 90-8-82. Guest Prize. Peter Boyd 79-3-76. Aggregate Trophy Spring & Autumn - (Bill Beverage Trophy) Alan Campbell.

By the time you read this the AGM and Annual Dinner Dance will have

Peter Boyd SCOTLAND

SCOTLAND & NORTHERN IRELAND Tel/Fax: 0141 616 3440

passed us once again and I hope all in attendance at the dance will have yet again had a great weekend so all information from the dance and the AGM will be in next year's magazine, (think about it). If you are going to BTME 2004 I hope you have got your place on the BIGGA trip booked or your B&B booked as I've heard that the rooms are becoming hard to find so I hope you are lucky in your search for accommodation and I look forward to seeing you there.

Well done to Ian Watson, Gullane, and Colin Noble, Cardrona, as they are the winners of the Patrons' Award for the East Section this year, and I hope you both enjoy your trip to BTME 2004. I hope both of you can write a small article for the forthcoming edition of 'Greenkeeper International'. Well that's it all for this month and this year, before I go I would like to thank my committee for all their hard work over the past year, patrons for all their help (ie. raffle prizes, Help etc. etc.) so a big thanks to all of you for the past year.

So myself and the committee would like to wish you and your families a Merry Christmas and a Happy New Year. I look forward to seeing you in the new year if you have any news for the column let's hear from you so we can get it into print as soon as possible. All the best.

Chris Yeaman

Ayrshire

Hello, hope you are all well and ready for the Festive Season. The Section AGM was held at Irvine Bogside Golf Club on Thursday October 30 where it was unanimously agreed that Derek Wilson should carry on as Secretary, Chairman and Vice Chairman stay unchanged as Martin Lothian and Marshall Sloss enter the final year of their respective positions. Stephen Higgins, from Ardeer Golf Club, joins the committee.

The Patrons' Award winners are John Mair, Beith Golf Club, and Michael Wilson, Moffat Golf Club. Congratulations to you both and I am sure you will enjoy yourselves at Harrogate.

The spring outing will be held at Prestwick St. Nicholas on Thursday April 29 with tee times from 12.30.

A good day was had by those of us who ventured to Scotsturf last month. There was plenty of machinery on view and it is always nice to bump into friends and colleagues from times past and present.

That is it for now except to say "Seasons Greetings to you all" and feel free to give me a call on 01292 478606

Dennis Tweedle

North

No new members to report this month, but overall we have done alright in members this year, so hopefully that trend will continue

The section AGM took place at Peterhead GC on October 16. There were one or two changes in the committee in that John Geddes, of Ellon GC is now the Chairman of our Section and Steve Sullivan is now the Vice-chairman. Dale Robertson of Newmachar GC is the new Secretary taking over from Dougal Duguid, of Westhill GC. Dougal has put many years of service into the running of the North Section and is going to remain on the North committee for another year to help out. I would like to thank Dougal on behalf of the members of our Section, for all his efforts over the years and wish him all the best when he begins his new role as the Scottish Vice Chairman.

Donald Patience, of Tarbet GC, has joined the committee and is a welcome new face. Donald and Hugh Mclatchie are this year's patron winners and will attend a luncheon in Stirling and also Harrogate in the spring. Their support to the Section is much appreciated.

There were 34 at Peterhead and they all had a good days golf and were well fed. Our thanks go to Hugh Mclatchie and his staff for the condition of the course and for the hospitality of the club for the day. The day took the form of an outing and this produced more people turning up for the AGM than in previous years. A first for Peterhead is the installation of electricity to their worksheds. This came as a major shock to Hughie and his staff.

Scotsturf is again coming around this month and it does not seem any time since last year. Hopefully there will be a good turnout for the show as usual from the north as it is an important part of the greenkeeping calendar.

I would like to thank Campmuir for their open day at Nairn GC. The day was very well attended and we were all well fed and watered, very important for the under nourished of our profession. It gives the greenkeepers a chance to catch up on what's new in the product range, plus it gives a great opportunity



Peter Larter NORTHERN & MIDLAND Tel: 01476 550115

to speak to other greenkeepers about the trade in general.

On behalf of Dale Robertson of Newmachar GC, I would like to thank Alpha plus who invited Dale on a trip to the states with their company. An enjoyable time was had by all.

lain Gunn

NORTHERN REGION

North Wales

Christmas has come early for our Match Secretary, Jeremy Hughes and his wife, Jane, on the birth of their first baby girl, Mille Tayler. Jez will have to hang up the golf clubs now for a while he is up all night with feeds and pushing the pram around Llangollen on the weekends. Well done, Jez & Jane, the fun starts here!

Mollington Grange's Course Manager, Alwyn, has attained his 'black belt' in karate and has agreed to come up to Harrogate to keep the peace in all the camps. He is also hiring a special 'Hong Kong Fuey' guise for the event.

BTME now just less than seven weeks away so have you booked your accommodation yet? The place is full to bursting already so if you leave it any longer you might be staying as far out as Leeds and having to bus it in.

Don't forget these dates 20, 21, 22 Jan, all the latest in technology and products plus all your educational programmes and seminars you cannot stop learning and cannot miss this event.

Toro once again took clients on a trip to Spain last month and Darren Anderson was invited over to test all the latest machinery on offer.

I got an e-mail from Alec Davies last week who emigrated with his family to New Zealand just over 12 months ago and has got a job working at Russley GC in the south island living in Christchurch. He was telling me of building a new green from hollow cores – the surrounds were turfed as normal and the sub soils and root zones placed and contoured he then took the core collections from approx 14 - 15 of the other greens and then spread them evenly out over the prepared surface to achieve a thin but complete consistent coverage. Keeping a small pile to one side for any later abnormalities he applied fertiliser and a foliar feed and again after 10 - 14 days rolled and applied more feed within the month a fully rooted surface just needs sand dressing (twice a week) regular water, dependant upon weather conditions and mowing 14 - 16 days. The full 14-stage programme is on a word doc, should anyone require it give me a call.

This just leaves me to wish you all the very best for Christmas and a prosperous 2004.

Home: 01925 263394 Mobile: 07778 162162

e-mail: acorngolf@supanet.com

Mesen Cymru, Andrew Acorn

Northern

I must start this month with an apology, as you will all have noticed the lack of notes in last month's magazine. This was due to me being on holiday at the time of the submission date, sorry for that. If you are interested I had a fabulous time on the West Coast of America.

Anyway, down to Section News. September saw our Invitation day take place at Wetherby Golf Club on a warm and sunny day. David Hannam and his team had the course in great condition for members and their guests. The winners on the day came from the host club with Dave Hannam and B. Jowitt (45pts) pipping Alan Baxter and A. Taylor on a count back. In third place came Phil Roebottom and B. Wragg (44pts) followed by Chris Hill and R. Smith (43pts). Nearest the pin prizes went to B. Wragg and Frank Stewart. Big thanks must go to the host club for their hospitality and courtesy of the course. Rigby Taylor who sponsored the event again put on a splendid prize table.

October saw our autumn tournament (sponsored by Bob Wild Grass Machinery) and AGM take place at West Bowling Golf Club. The weather again was another warm affair with no rain. Benny Hill and his staff had done a sterling job on the course, which everyone who played appreciated. The catering staff also took good care of us, and again thanks to all at West Bowling and our sponsors at Bob Wilds.



Derek Farrington SOUTH EAST, SOUTH WEST & SOUTH WALES Tel: 01903 260956

At the AGM we had a disappointing 33 members present and with two apologies for absence where were the other 270 of you? A lot of debate about the lack of interest at non-golfing events was discussed and it was decided not to run any more social functions for the time being. The committee is the same as last year with the exception of Andy Slingsby who was voted on to the committee. It was also good to have Peter Larter, our Regional Administrator, present at the meeting.

Late October we had our Dog Race night with only six greenkeepers out of 20 on the coach. A great night was had by all with no doubt a few sore heads and empty wallets felt the next morning.

Our next event is our nine-hole Christmas Competition that is at Elland Golf club on December 10. £16 per person a week before the event with limited places available. Tee off is at 1pm (Shotgun Start) so can everyone be at the venue no later than 12noon. Dress code for the event is smart casual (no Jeans, trainers or collar-less shirts please).

I hope you have all made arrangements by now to either visit the BTME exhibition and/or some of the educational workshops in Harrogate next year, as time is fast running out as we race towards that time of year again.

That about wraps up another year for me. May I just finish by wishing you and your families a very Happy Christmas and a prosperous New Year.

To contact me: 16 Westwood Ave, Eccleshill, Bradford, West Yorks, BD2 2NJ. Tel: 01274 640739 Mobile: 07976876264 E mail: Dthackray@aol.com Dave Thackray

North East

Retired Alnmouth Village and Warkworth greenkeeper and local celebrity, Willie Holden, hasn't been too well recently. He suffered a heart attack and a stroke last November and was in a coma for two weeks but after some time in hospital he made some progress and got back home, even though he was wheelchair bound. Speech also proved difficult for Willie at this time and for anyone who knows him, this was very frustating.

Unfortunately, in August this year, Willie suffered another heart attack which meant another month in hospital. He's back home in Lesbury now but he is currently paralysed from the waist down. However the good news is that Willie's speech is back to normal so his wife Brenda is now suffering from the old witty comments that he is renowned for.

All members of the greenkeeping fraternity wish Willie continued progress along the road to better health.

Jimmy Richardson

North West

Hello again. It is November 3 as I write these notes, and I was just reading about the annual threats of the postal workers, airport staff, fire fighters and rail workers going on strike again, as is usual in the build up to Christmas. If they do go on strike I suppose the buckets will be getting shaken again to support them. It's a good job greenkeepers don't go on strike otherwise the strikers would have nowhere to spend their spare time.

Little or no news has reached me from section members so the report will be quite short. Daniel Chamberlain, from Manchester Golf Club, was appointed Head Greenkeeper at Whitefield Golf Club and I feel sure he will be the right man for the job. The National Tournament at Coxmore and Hollinwell Golf Clubs was well supported with 90 players, but only five from the North West. Perhaps we will have better support next year as the tournament will be in the Leeds area.

That's it for now other than to wish you all a very Merry Christmas and a prosperous New Year. Hope to see you all at Harrogate.

Bert Cross

Cleveland

By this time members read this the festive season will be fast approaching. So may I wish all BIGGA members a very Merry Christmas and a Happy New Year.

As soon as we are back to work after the holiday break thoughts will turn to the BTME show at Harrogate. I am sure that the turf management industry now believes that it is the major show of its kind. Our Section always gives the show excellent support and I'm sure that 2004 will be no exception. Our highly respected Chairman, Tony Smith, of Teesside Golf Club, is giving a talk on GET FIRED UP with the speed, simplicity and accuracy of EXPRESS DUAL

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SHARPER SOLUTIONS with BERNHARD

'Stress in the Workplace'. Get along and heckle him! Tony has also become a Deputy National Board Member – Well done Smiffy.

Some news from the Richmond boys. Congratulations go to Anthony 'Titch' McGeough has recently passed his NVQ 3 – Greenkeeping. He has since chosen to progress onto an HNC course at Askham Bryan. We wish him continued success! I'm told the top man at Richmond, Tony "The Fringe" Burge, hasn't been too well recently. However my spy informs me that he still pops in most days to make sure that the lads are keeping "his" place right. Hope your recovery continues Tony.

The final piece of news from North Yorkshire is that Richmond Golf Club staff are constructing a new green 'in house' to an amended USGA spec. We hope the weather holds until the job's done, boys.

I recently popped into Headlam Hall Hotel and Golf Club, near Piercebridge, and what a lovely little spot it is. Chris Fiddel, formerly of Billingham Golf Club, has helped with the construction of a smashing little 9-hole course. One particular par-3 has the green built out into a lake. What a little tester that will be when the course opens next June. All of the greens have a pop-up irrigation system and a new fairway mower has just been ordered. Some local golfers have already joined and Chris and the management have made plans to get the balance right between use by hotels guests and members. Good luck to Chris and his staff.

Don't forget lads, any news to TC on 07831 214879 All the best, Terry "El Prez" Charlton

MIDLAND REGION

Midland

Welcome to the "Christmas Special" edition of "Around The Green". To begin with, something I forgot to mention last month. Rigby Taylor held their annual "Stableford Doubles Tournament" at Gay Hill Golf Club on 24 September. The course was in excellent condition as produced by Mr P. Woodham and his excellent team. You all should be very proud of your track gentlemen. Our thanks to Gay Hill GC for making us so welcome, and of course thank you to Tony Cheese for organising such and to Rigby Taylor for it's kind sponsorship. The winners on the day being N. Bird and R. Carter. I'm sure next year's event shall be as successful.

For the last 19 years our Section has annually played a 36-hole competition, consisting of morning greensomes followed by afternoon singles, against the East Midland Section. The match was held at Edgbaston Golf Club, and as always, the course was immaculate. A fine tribute to the skills of Mike Hughes and his superb team. Mike how on earth were you able to organise the fly-by of Concorde? The match's score finished at 11.5 to 3.5 in the East Midlands favour. Well done to the East Midlands, your company was a pleasure as always gentlemen. Our greatest thanks to Edgbaston GC for affording us their kind hospitality, and yet again thanks to Rigby Taylor and Tony Cheese for organising and sponsoring the event. The overall score to date is 15-4, to us.

I have the lovely pleasure of welcoming Mr A. D. Throssell, of Gaudet Luce Golf Club, to our Section. We all look forward to seeing you at our many differing events Adam.

Don't forget the Section's AGM is to be held at Enville Golf Club at 4.30pm on 9 December. Please attend. Your views, opinions and council are of huge importance.

For the last 12 months you have been subjected to my reporting of the Section's news, events and general goings on. I have endeavoured to report such within our humble notes with a degree of joviality, sincerity and humility. I hope you have enjoyed such, and a huge thank you to all that have provided me with the bones for our notes. Indeed ladies and gentlemen, without your support these notes would not be possible. Anything to report? Then please call the Schwillbilly hot line on: 07816 410552.

On behalf of the committee, I would like to wish you all a very merry Christmas. "Now, where's that Mead?" Sean McDade



BB&O

Has it rained yet? I keep asking this because it is quite incredulous that the answer could still quite possibly be an emphatic NO! It is even possible the greatest rainmaker known to mankind, bonfire night has not stirred the soul of Aquarius. I guess we have much overseeding ahead of us next spring but there is plenty of time left to contemplate the actions required. Our AGM went off without any problems at the Springs Golf Club. At least 50 people attended; so many in fact that I lost count. We now have our new Secretary, John Scoones, Course Manager at Caversham Heath GC, and Treasurer, Mitch Stewart, Deputy Course Manager at Henley GC. Mark Day, of Tacit, will be representing the trade and producing the editorial for the Around the Green news. If you wish to contact Mark with any news you can always ring him on: 07887 723377. We would ideally like to see someone take up the position of chairperson. If anyone would like to come onto the committee in this, or any other capacity we would welcome the support.

May I post a very special thanks to two committee members who have finally decided to rest from such activities, Lindsay Anderson, Course Manager at Badgemore Park GC and Adrian Cooper, Managing Director at the Springs GC. These two characters have been committed to moving the BB&O Section forward for over ten years so much respect is due their way. Also thanks Adrian for the organising the chips and sandwiches for the lads. You keep a smooth pint of Boddingtons on tap! Next years fixtures have been finalised and are as follows: The spring tournament at Badgemore Park GC on April 22; the summer tournament at Calcot Park GC on June 24; the autumn invitational tournament at Caversham Heath GC on August 11 and the Winter Turkey Trot at Parasampia GC on November 4. You will be receiving a fixture card, similar to last year but a new improved version with more detail on the events being held. Thanks go to Mr Alan Wright for organising the print of these cards and TH White for sponsoring the cards.

I was sorry to hear that Ray Clarke has left as Course Manager at Harleyford GC. He has gone into his own business and we wish him great success with his new venture. I am pleased to report that my Deputy at Maidenhead GC, Christopher Mitchell, will be taking over from me as Course Manager in December with Barry Gardner stepping up as Deputy Course Manager. I wish them the very best with their endeavours at the club. I know the members think highly of them, which, in this day and age, is gratifying indeed. It just leaves me to thank all those members who attended the Section dates this year and I wish all our members, your families and loved ones, the very best for Christmas and the New Year ahead.

David Haskell-Craig

Mid Anglia

The Section's third competition of the year was held at Berkhamsted Golf Club at which we had 33 players attending. Our thanks must go to Gerald Bruce and his team for the superb condition of the course, knowing how difficult it has been this year with the severe lack of rain, well done to all involved. Also thanks to the Berkhamsted Golf Club for their hospitality on the day.

The results of the day were as follows: 1. Geoff James 36pts, John O'Gaunt; 2. Gerald Bruce, 35pts, Berkhamsted; 3. John Smith, 33pts, South Beds. Alan Grew, Berkhamsted, won the Longest Drive, and Mark Day, Tacit, won Nearest the Pin. Thanks to Driving Force Leisure for sponsoring the day and to our other reps for their donations to the prize table.

With our Spring, Summer and Autumn competitions we use a scoring system to find out who the most consistant player is, so the more you play the more points you could gain and like Gerald Bruce become Player of the Year. Gerald will receive a Trophy and a £250 voucher which will go towards a weekend break that has been kindly sponsored by Turner Groundcare. Kevin Armstrong, John O'Gaunt, was runner up and Nigel Phelan, St Johns Hospital, was third.

The Autumn competition also means the AGM and thanks to all those who attended. Officers elected to stand for committee were - Chairman; Steve Mason; Vice Chairman, Frank Scullion; Secretary and Treasurer, Gerald Bruce; Match Secretary Richard Saunders and other members John Wells, Colin Robinson, Mark Ellis and Bob Butfoy.

May I now take this opportunity to wish you all a Merry Christmas and a prosperous New Year and let's hope we have a bit more of the wet stuff next year.

East of England

The annual match between the EOE Section and the Secretaries' Association went down to the smallest of margins before the result was decided. After eight matches the result was 4-4. So the rules stated we got a result on holes won and the outcome was nine holes up to eight with the Secretaries winning by one hole.

Thanks to Jim Birkett and his staff at Holme Hall for producing an excellent course enjoyed by all.

Nearest the Pin went to G. Macdonald, Longest Drive went to R. Welford. Thanks must go to Tim Cannon and David Hornsey, of Cannons Turf, for sponsoring the day. New sponsors for 2003 and we hope for many years to come.

The last golf day of the year was played at Carholme GC where new Head Greenkeeper, Stuart, and his staff produced a good testing course thoroughly enjoyed by all. Hope you settle into your new position Stuart. Lawn Mower Services were the sponsors for this competition and we thank Chris Overton and Dave Hampshire for all the wonderful prizes.

The winners on the day with a net score of 60 were J. Hewson, G. Cooper and G. Macdonald. Second with 60.5 was I. Batty, P. Fell and I. Roberts.

Longest Drive went also to I. Batty and Nearest the Pin went to R Welford. The AGM followed the meal and after some lengthy discussions the new committee was elected.

Stuart Clayton was nominated on as a committee member and Les Howkins was elected as Secretary. Graeme Macdonald will stay on as Deputy Regional Board Member after 10/11 years as Secretary.

The Order of Merit Blazer was won by Graeme Macdonald, of Newark Golf Club. The blazer will be kindly sponsored once again by Nigel Lovatt, of Lely Toro.

New positions to greenkeepers in the area are R. Welford taking the post of Head Greenkeeper at Immingham; Stoke Rochford has a new Head man, Retford has a new Head man and Seacroft has a Head Greenkeeper and as mentioned Stuart, at Carholme.

Congratulations to local greenkeepers Russ Moody and Tim Jones for winning the Stirrup Open in October.

Thanks to all, Graeme Macdonald

East Midlands

This year's Rigby Taylor golf match against the Midland Section was held on October 20 at Edgbaston GC. The day started badly for our side with the late withdrawal of our lowest handicapper Ian Marshall, meaning we would be one short. However Tony Cheese, of Rigby Taylor, stepped in as a late replacement to save the day. The weather was set nice and sunny with a good forecast, helping everybody to look forward to the day. After our morning Greensomes we took a very healthy 4 points to 1 lead, with Gavin Robson & Stephen Mackie winning by 4 & 2; Jeff Dickinson & Russell Allen, Steve Goode & Greg Skinner, Antony Bindley & Adie Porter all winning their games by the narrowest of margins 1 up. The only defeat came in the first game of Tony Cheese and Chris Brown.

After lunchtime refreshments of soup and sandwiches it was time for the Afternoon Singles. The Section previously have never faired too well in this format and had only won the trophy three times in 18 years. However each and every player put in a determined effort, enabling us to win 6 games, halve 3 and lose only the 1. Stephen Mackie enjoyed the biggest winning margin 8 & 7. The other winning players were Russell Allen, Adi Porter, Antony Bindley, Gavin Robson, & Greg Skinner. The most amazing fightback was from Chris Brown who came from 4 down to halve his game. Steve Goode & Jeff Dickinson also fought hard for their half.

The eventual result was a winning score of 11 1/2 points - 3 1/2 points. Our thanks should go to Geoff Little & Tony Cheese, of Rigby Taylor, who organised the day. Mike Hughes and his staff for setting up such a excellent golf course, the Steward & Stewardess for a great meal, and Edgbaston GC for allowing us courtesy of their fine course.

Finally a special thank you should be extended to Rigby Taylor for sponsoring the day, and to all those members from both sides for participating in a great event.

Jamie Bedford would like to thank all those Greenkeepers who attended the Seacroft weekend, which included Steve Goode, Gavin Robson, Adi Porter,

Dave Leatherland, Greg Skinner, Kevin Kinzer & David James. The winners over the two days were Dave Leatherland & Steve Goode. I would also like to take this opportunity to thank Seacroft GC for courtesy of their fine course. Antony Bindley

SOUTH EAST

Around

Essex

On behalf of the committee and myself I would like to wish all of you a Happy New Year and let's hope the weather in 2004 will be a lot kinder than this year. I would also like to thank the trade for their generosity for either sponsoring a golf event or donating prizes for the raffle. Without their support the days would not be as successful.

With no golf days to write about although Dave Beale has virtually organised the 2004 Golf Events, your personal fixture list will be with you earlier than last year.

Here is a review of 2003's Education Events. The Spring saw a full house and successful manual handling and fire training courses held at the Burstead. Our first two day tractor driving training has had some excellent feedback and with the next one to be held in February, which is already full, I have already started to compile a list of names for the Autumn and Winter 2004 courses. Anyone wishing to add their names to the list or would like to attend the professional image/communication 1-day course (already have 7, we need at least 12) at the Burstead, costs £30. Please contact me on 07984 867939 in the daytime or on 01245 603131 in the evening.

Finally here is my recent moan from a golfer at the Essex.

He complained to one of my lads that the fairways were too hard and this was due to the lack of slitting carried out this year. What weather has he been enduring over the last 12 months? It makes you wonder what planet these people come from.

Martin Forrester

Kent

Not much news to report this month, please don't forget about the Winter golf day which is being held on December 10 at Birchwood Park Golf Club, if you want to participate but haven't received a form, give me a call and I will have one sent to you.

Congratulations to Steve Suttle, Course Manager at Northforeland Golf Club for completing the London to Brighton road race.

All that it leaves me to say is I hope that you all have an enjoyable Christmas and good New Year.

Phil Belton

SOUTH WEST & SOUTH WALES

South Coast

The end of another year and it has certainly tested all our skills as greenkeepers. The Section has been quiet over the last month so it leaves me time to thank our sponsors for all their support over the year. Without valued sponsorship we could not provide such good Seminars and golf days so a huge vote of thanks to all our sponsors who have given both their time and money to the section. We look forward to working closely with you again next year. A couple of reminders next. You have all received details of the Amenity Technology sponsored coach trip to BTME by now and I can honestly say the event is one every greenkeeper should attend at some point. It really is a highly rewarding week and the sponsored coach allows you to attend at a very reasonable price, so let's see some more faces from the section there! The final touches are being made to our Section seminar which will be held at Canford

Magna Golf Club on February 26 so put the date in your diary. This just leaves me to wish you all a Merry Christmas and a Happy New Year on behalf of your committee and when you are making those new year resolutions give some thought about supporting your Section more next year.

Until next month., Alex McCombie

South West

A great day was had at Marlborough Golf Course, despite the continuing drought the course was in great shape, the walk around was well attended and was superbly conducted by Marcus and as usual raised some interesting topics for discussion.

Team results:- First place went to Mark Prentice, Mike Sage and Martin Samuels, Second place Roger Neil, Chris Sealey and Derek Farrington. Nearest the pin par 3 Pete Seviour, nearest the pin in 2 Pete Habbard.

The AGM went smoothly as I am reliably informed, no change in your leaders unlike the Conservative Party, I wonder which one of us has "a bit of the night about him" I've got my money on Nobby! Only joking another well organised day we are all very grateful.

There doesn't seem a month goes by when I'm not congratulating Robin Grieves on another new job. Anyway congratulations on your appointment with Countrywide.

Congratulations to everyone at Minchinhampton GC upon winning the best newcomer category in the BIGGA Environmental Competition, a superb effort. From my own experience I know how tough the judging is and the work involved to get to the stage of being judged. £500, that should buy a few pints of organic beer.

Don't forget your training requirements. The management and computer training days I have organised with BIGGA were filled within days, so the need must be there, but yet again I can only run these courses when the demand is there so contact me. The next event is at Landsown Golf Club on Tuesday, December 9. No course walk. I find it hard to believe that when you are reading this it will almost be Christmas, so may Santa bring you all your desires and festive cheer.

Guy Woods

Devon and Cornwall

Our first Autumn Meeting was held at Truro Golf Club on Wednesday, October 22. The day started with 26 members competing for the D.O. Hunt Trophy, a Stableford format which produced some fine scores. The winner was Jacko "The Bandit", from Tehidy Park, with 38 points. Runner up was Gordon "The Yips" Tamblyn, from Mullion GC, also with 38 points and third place went to Craig Martin from Falmouth G.C. with 37 points. Head Greenkeeper, Jim Sheehan, and his staff presented the golf course in superb condition and thanks to Jim's deputy Steve Tiddy for escorting members on the customary course walk. A few more thanks, firstly to Truro Golf Club for allowing us the use of their excellent facilities, the caterers for putting on a splendid lunch, to the bar staff for keeping the lads well watered and last but not least, to our sponsors for the day, Don Hunt, of Roffeys. Don has been an ardent supporter of our section since its inception in the 1970s and I would like to thank him for his support.

The final of the Vitax Matchplay, a knock-out competition, which runs through the Summer months, was also played at Truro Golf Club with the Home Club's Head Greenkeeper, Jim Sheehan, beating Peter Rendell from West Cornwall on the 21st hole. Jim was presented with £100 of Marks and Spencers vouchers by Joe Crawly, South West Area Manager of Vitax and runner up Peter Rendell received £40 of Marks and Spencer vouchers. The section would like to thank Vitax for their continued sponsorship. The day concluded with a raffle with prizes kindly donated by the trade. We have also introduced this year a prize draw for members attending the course walk. A signed copy of Jim Arthur's book "Practical Greenkeeping" was won by Bill Mitchell, of Perranporth.

Dates for your diary:- Wednesday, November 19, Section AGM. at Bigbury GC; Wednesday 19/20 November, Regional Seminar at Cannington.

If you have any news or views for this column, please do not hesitate to contact me on 01822 617671.

Steve Evans



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This state-of-the-art Sony Walkman, Atrac3plus, portable CD Player has a CD reader and rewritable function. It comes complete with Sony, SonicStage 'SIMPLE BURNER' software so you can create your own CD compilations - up to 30 albums on one disc. The Player has a jog proof protection function and is supplied with headphones and an AC adaptor. To win, all you have to do is enter this month's Buyers' Guide competition sponsored by Greenlink International.



Entry could not be simpler! Listed below are a series of clues relating to ONE company featured in the ever popular Buyers' Guide. Take care to look through all the products and services shown and write down the name of the company which you think the following clues refer to:

WHO ARE WE?

- 1. We are based in Salisbury.
- 2. We are a Limited company.
- 3. Our telephone number ends in 361.

Write down your name, address and answer on a postcard and send your entries to:

Turftime Teaser, Greenkeeper International BIGGA HOUSE, Aldwark, Alne, York YO61 1UF. Entries to arrive no later than 15th December. So hurry, because that doesn't leave you much time! The first correct entry drawn will receive a fantastic Sony CD Walkman.

This competition is not open to BIGGA Staff or non-members. The solution to the November Turftime Teaser was 'Bywater Services'. That was a tricky one, so well done to all of you who got it right. The lucky winner of the portable colour television is Malcolm Jervis from helmsford Golf Club - WELL DONE!

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TENDERS



37 year old seeks position abroad. 10 years experience. Certificate in Turfgrass Management. Certificate in Sports Turf Management. Pest Control Operators Course. Over the past 6 years, have looked after a golf course with bentgrasses in a very hot climate. Looking to continue career abroad.

District Council

JS/147/03

New for BTME & ClubHouse 2004 is the introduction of The 18 Hole Competition.

Every visitor to the show will receive a score card in the carrier bag given out at all the main entrances. The challenge is to complete the score card by visiting the participating stands and have the card stamped. Having finished the score card, a visit to the BIGGA stand in Hall Q to post the entry will ensure a place in the draw for a luxury holiday.

See page 30 for details of how to enter this FREE competition.



EXPRESSIONS OF INTEREST FOR THE SUPPLY AND INSTALLATION OF A NEW IRRIGATION SYSTEM AT FARNHAM PARK GOLF COURSE

Farnham Park Golf Course is owned and successfully operated by South Bucks District Council.

Built in 1977 and set in 130 acres of mature wooded parkland, the golf course is described in The Times Golf Course Guide as an admirable and handsome facility. Indeed it is considered by many as one of the finest 18-hole municipal golf courses in the South East of England.

The Council wishes to maintain the present high standard and seeks expressions of interest from suitably gualified and experienced irrigation contractors to supply and install a new irrigation system at the golf course in Spring 2004. STRI Irrigation Services are currently working on behalf of the Council in preparing a design/specification. The new system shall meet modern environmental requirements and recommendations.

Organisations wishing to express an interest should contact Keith Simkin - Leisure Officer as detailed below. Companies expressing an interest will be required to complete a pre-tender questionnaire and also submit a copy of their previous year annual certified accounts to the Council by Monday 5th January 2004 in order to be considered.

Keith Simkin - Leisure Officer, South Bucks District Council, Leisure & Environment Section, Council Offices, Windsor Road, Slough SL1 2HN Tel: 01753 748306 Fax: 01753 676214 Email: keith.simkin@southbucks.gov.uk

Recruitment



HEAD GREENKEEPER

Bradfield College's golf course was built in 1996 and lies within the beautiful grounds of Bradfield College, an Independent Boarding School, four miles to the west of Reading and close to junction 12 of the M4 motorway

We are looking to recruit a Head Greenkeeper from February 2004 with responsibility for maintaining the 9 hole course, which is used by pupils, staff and a small private members' club, to a very high standard.

Reporting to the Bursar, and to the various Club Committees you will also be responsible for managing a small team, preparing the golf course's budget, maintaining golf course vehicles and equipment to the highest standards and ensuring full compliance with Health & Safety legislation. Applicants should possess appropriate qualifications, including spraying and be able to demonstrate at least three years' relevant experience.

> Salary is negotiable depending on experience. Assistance with accommodation may be available.

Please apply in writing or e-mail, together with current CV, to:

The Bursar, Bradfield College, Reading, Berks, RG7 6AU or e-mail: bursar@bradfieldcollege.org.uk Further information on the College can be found on www.bradfieldcollege.org.uk



invites applicants for the position of

MECHANIC / IRRIGATION TECHNICIAN

Hauger Golfklubb recently voted Norways No.1 course is an 18 hole championship standard golf course, along with driving range and 6 hole short course, located 15 mins from Oslo city.

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The candidate must also have a background knowledge of the Rainbird Master 3 system in order to carry out any necessary repair work. A good greenkeeping knowledge is also required.

> Suitable qualified and experienced applicants should apply in writing with full C.V. to:

Mr. Eoin Moroney, Head Greenkeeper, Hauger Golfklubb, Ramstadveien 180, 1480 Slattum, Norway. Tel 0047 48 22 64 72. Surrey Downs Golf Club

Invites applications for the position of

Mechanic

Are you flexible, forward looking and adaptable? Do you relish a challenge and working as part of a small team? Would you like to create your own workshop?

We are a relatively new privately owned club set on Surrey Downland outside the village of Kingswood in Surrey. The course opened in 2001 and you will be expected to maintain a fleet of Toro and Jacobsen equipment of varying ages.

You will be well organised and used to keeping timely and accurate records.

3 to 5 years experience in turf machinery maintenance and servicing

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To apply, send your CV to, or contact, Surrey Downs Golf Club, Outwood Lane, Kingswood, Surrey, KT20 6JS. Tel: 01737 839090

The Northwood Golf Club Ltd

Applications are requested for the position of

COURSE MANAGER

Established in 1891 Northwood Golf Club is an 18 Hole 6535 yard course situated in the northwest corner of Middlesex. The course has undergone a programme of major improvements in the past

5 years and plans to reconstruct all its greens to a USGA specification during the Autumn 2004.

The successful applicant must be hard working, self motivated with excellent supervisory skills to lead the current team of five greenstaff.

In addition this individual must have:

- NVQ 3/4 qualifications or equivalent.
- Experience in the maintenance of USGA greens.
- Minimum of 7 Years experience with at least 2 years as a Head Greenkeeper/Course Manager.
- A proven Ability to prepare and monitor annual course budgets.

An excellent remuneration package with an option of accommodation is on offer.

Please apply in writing no later than 23rd December 2003, including a full CV with salary expectations to:

The General Manager, Northwood Golf Club, Rickmansworth Road, Northwood, Middlesex HA6 2QW





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Recruitment

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Require a

HEAD GREENKEEPER

To lead a team dedicated to the pursuit of excellence in the upkeep and development of this fine Parkland Course on the Cornwall Devon Borders.

Position for those with:

- A minimum of 10 years experience in Greenkeeping
- · Show knowledge of Machinery/Irrigation Maintenance
- Be enthusiastic, highly motivated and committed
- · Show Man Management skills
- Salary negotiable.

Closing date for applications: 20 December 2003.

Apply in writing with CV to:

The Secretary, Launceston Golf Club, St. Stephens, Launceston PL15 8HF

WALTON HEATH GOLF CLUB

Require an

ASSISTANT GREENKEEPER

We are looking for an enthusiastic, conscientious Greenkeeper to join our existing team on the two Championship Courses.

Accommodation available.

Please apply in writing with full C.V. to:

Clive Osgood, Course Manager, Walton Heath Golf Club, Deans Lane, Tadworth, Surrey, KT20 7TP



OLD FOLD MANOR GOLF CLUB

GREENKEEPER

An opportunity exists for an experienced greenkeeper, qualified to NVQ Level 2, to join our team responsible for developing and maintaining one of the finest golf courses in Hertfordshire.

Closing date for all applications is 6th January 2004.

Applications in writing with full CV to:

Brian Cullen, Manager, Old Fold Manor Golf Club, Old Fold Lane, Barnet, Herts, EN5 4QN E-mail: manager@oldfoldmanor.co.uk

Head Greenkeeper

Schmallenberg Golf Club (Germany)

Are you an experienced Greenkeeper with a proven track record in golf course management and looking for an exciting challenge? We are offering a unique opportunity to recruit a Head Greenkeeper for an initial contract of two years (subject to extension).

Schmallenberg Golf Club has a membership of 650, and an 18-hole golf course, lying in the picturesque rural heartland of Sauerland – "the land of a thousand hills". Situated between Cologne and Kassel, in the Lenne valley, the area has a thriving tourist industry with the club attracting a high number of visitors each year. We are seeking a Head Greenkeeper who would relish the opportunity to support an ambitious Management Committee, ensuring that Schmallenberg Golf Club achieves the highest reputation for golf course excellence.

You will have proven experience of maintaining golf courses and greens in peak condition, possess the necessary technical qualifications and have the ability to manage and train a team of greenkeeping staff.

We will offer an attractive salary (negotiable) and assistance with accommodation will be available.

To express an interest, please submit a letter or E-mail detailing your experience and references to:

Golfclub Schmallenberg e.V.

Winkhausen 75 D 57392 Schmallenberg Homepage: www.golfclub-schmallenberg.de Email: golfclub-schmallenberg@t-online.de

THE DUKE'S COURSE, ST. ANDREWS

Require a

1st ASSISTANT GREENKEEPER

The Duke's Course opened in 1995, was designed by 5 time Open Champion, Peter Thomson and is owned and managed by the Old Course Hotel, Golf Resort & Spa.

A U.K. top 100 course and host to the 2003 Scottish Amateur Championship, the Duke's received the Environmental Excellence Award in 2002.

Reporting to Head Greenkeeper, the applicant must have minimum 5 years experience in all aspects of golf course maintenance with sound knowledge of irrigation systems.

Qualification to minimum N.V.Q./S.V.Q. Level 2 or equivalent plus PA1, PA2 and PA6 certificates. Experience of U.S.G.A. specification greens an advantage, but not essential.

Applications including a full curriculum vitae and references with an accompanying letter should be sent to:

Human Resources Manager, The Old Course Hotel, Golf Resort & Spa, St. Andrews, Fife, Scotland, KY16 9SP

LEAMINGTON & COUNTY GOLF CLUB

Founded 1908

Require a qualified



enthusiastic and committed person required to join our energetic and professional team.

Qualified to NVQ Level 3 - PA1, PA2 and PA6 would be an advantage. Salary is negotiable dependent on qualifications and experience.

Applications in writing with CV to:-

Mr Jason Cooper, Leamington & County Golf Club, Golf Lane, Whitwash, Leamington Spa CV31 2QA

Recruitment



Ernest Doe, the largest Ransomes Jacobsen dealer in the UK, has a vacancy for a Parts Manager at its Esher depot.

The branch specialises in ground care equipment, therefore a knowledge of this industry and related goods and hardware will be an advantage. This challenging position will suit someone who is keen to develop the sales and after sales service of this department.

If you are self motivated, have good leadership and communication skills and are looking for a challenging and rewarding career, please apply in writing with full CV to:

Mr Phil Bush, Branch Manager, Ernest Doe & Sons Ltd, Portsmouth Road, Esher, Surrey, KT10 9AD

KNOLE PARK GOLF CLUB

A vacancy has arisen for a

QUALIFIED ASSISTANT GREENKEEPER

at this prestigious Kent golf club.

The successful applicant will be part of a team of 5. Qualified to or working towards achieving NVQ Level 2. Further training will be provided. Minimum of 2 years greenkeeping experience. Candidates should have sound knowledge of modern machinery. Salary negotiable.

Apply in writing with C.V. to:

Head Greenkeeper, Knole Park Golf Club, Seal Hollow Road, Sevenoaks, Kent, TN15 0HJ



Have your Job Vacancies shown FREE to all who visit the BTME & ClubHouse Exhibition when you place it in the January issue of Greenkeeper International

Call Cheryl Broomhead or Katie Davies on: 01347 833800 or email: sales@bigga.co.uk

EDENBRIDGE GOLF & COUNTRY CLUB

A mature 18 hole woodland and parkland course, measuring 6700 yards, set within a 500 acre site that also contains a 9 hole Par 3 course, as well as a further 18 hole course requiring re-development.

> Hard working, ambitious and dedicated greenkeepers required for the following positions:

First Assistant - NVQ Level 2, and 3 years experience Assistant - Minimum 2 years experience

Please send full CV and references to:

Rob Purll, Course Manager, Edenbridge Golf Club, Crouch House Road, Edenbridge, Kent, TN8 5LQ Contact Tel: 07748 353935

HAZLEMERE GOLF CLUB

Require a

1st ASSISTANT GREENKEEPER

A vacancy has arisen for candidates with 3-5 years experience. Should be qualified to NVQ Level 2, hold PA1, PA2 and PA6 spraying certificates, be able to deputise for Head Greenkeeper in his absence. Have knowledge in machinery and irrigation maintenance. Be able to motivate and organise staff for general daily duties.

Salary in accordance with the CGS 2004 Salary Recommendations.

Please apply in writing enclosing a full CV to:

The Manager/Secretary, Hazlemere Golf Club, Penn Road, Hazlemere, Bucks, HP15 7LR

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FOR MORE INFORMATION CONTACT: Mike O'Keeffe / John Beardmore The Ohio Program, Suite 360, 700 Ackerman Road, Columbus, Ohio, 43202, USA Telephone: 001-614-292-7720 Fax: 001-614-688-8611 E-mail: okeeffe.1@osu.edu



See us on the GCSAA stand at BTME 2004

Feature listing from December 2001

December 2001; Toro Award Winners; Southern Gailes GC; BTME preview; Specialty equipment; Thatch removal

January 2002; Walton Heath profile; Greenkeeping in Denmark; Moving materials; A first for Andy Campbell; New products

February 2002; Harrogate 2002 Review; Drainage; Castlerock GC; Trees; Recycling; TurfTrax profile; Barn Owl special report

March 2002; Donnington Valley profile; Utility vehicles; Essay competition winner; Irrigation; Seeds; Sandy McDivot

April 2002; Heyrose GC profile; Bernhard's Scholarship; De-stress your greens; COSHH assessments; Rootzones and topdressing; Maintenance facilities; Essay competition

May 2002; BIGGA Report; Nematodes; Caldy GC profile; Multi-tasking machinery; Bunker Sand; Essay competition; Fijian GC profile; BIGGA Minimum qualification

June 2002; Finding Fungi; Greetham Valley GC profile; Tyres; Calabria GC profile; Lakes and Ponds; Poa Annua - Jim Arthur

July 2002; Open preview; Turf; Steve Isaccs; Emissions; Grinding; Rotary Mowers; BTME preview; Sandy McDivot

August 2002; BIGGA Golf Day; Open review; Talking Heads - Education & training; Trees; Dr Kate Entwistle; Pwllheli GC; Weather; Compact Tractors; Saltex preview

September 2002; National Championship Preview; Irrigation; Non Grass Cutters; Hawkstone Park; Careers in Greenkeeping

October 2002; Saltex Review; Golden and Silver Key Supporters; Environment Awards; Health & Safety; Sustainable Use of Pesticides

November 2002; Toro Student of the Year; National Championship; Drainage; St Andrew's Bay; Autumn Problems

December 2002; BTME & ClubHouse Preview; R&A Golf Course committee; Dr Kate Entwistle; Pennard GC

January 2003; Beedles Lake Profile; Talking Heads - Chemical Application; Rebuilding Golf Greens; Constructive Advice

February 2003; BTME/ClubHouse Review; Royal Liverpool Profile; Irrigation; Nematodes

March 2003; The Berkshire Profile; Meloidogyne; Overseeding Golf Greens; Talking Heads - Health & Safety

April 2003; Oakmere Park GC; Spraying; Golf Course Security; Bernhards Delegation; Ransomes Jacobsen Profile

May 2003; Cardrona Golf & Counrty Club; Poa Annua; Rough Mowers; Mole Control; Rootzone; Green Construction

June 2003; Irrigation; Ransomes Jacobsen Scholarships; Fertiliser; Fairway Mowers

July 2003; Irrigation Water; Greens Mowers; Bent Grasses; Course Management; Rakes

August 2003; Aeration; Open Review; Saltex Preview; Waste Water; Toro Student of the Year

September 2003; Hanbury Manor; Irrigation; Disease; Integrated Pest Management; Communication

October 2003; Construction Machinery; Pay Recommendations; Saltex Review; Pesticide Legislation; Finance

November 2003; Temple GC; Trees; Environment Competition Results; Sandy McDivot; Drainage



Burning the Candle!

I managed a two-day visit to Saltex, the show was bathed in sunshine and to me it seemed most successful with good attendances. It was difficult not to enjoy as the surroundings, atmosphere and weather was most pleasant.

Once again it was a good chance to meet up and chew the grass with so many long standing members and acquaintances and also a good opportunity to meet new ones. Our BIGGA staff from HQ had a busy time and I understand they dealt with many membership enquiries and applications.

On a personal note (probably my age) I cannot believe the speed and change regarding the manufacture and variety of equipment that is on the market today. It was not many years ago there were only a handful of companies supplying their machinery to the turf industry, today there are literally hundreds to choose from, and that makes it a really tough and competitive market. It is little wonder that some of the long-standing and well-known companies are now changing their marketing strategies.

You may think I am old fashioned but I still tend to buy from the reputable companies that we have been dealing with for years, and with personnel that we have known and come to trust. Having said that there are many new and different types of machinery on the market today and one must never put blinkers on but always strive to purchase the best machine for the job, at the right price, bearing in mind that the back-up service is most important.

This past month has still been very busy at Turnberry and inundated with golfers, with the addition of some of my friends and several overseas colleagues that have been itching to visit and play our course. Playing golf and socialising with these guys is OK but they are young, have healthy livers and are on holiday... Unlike myself!

I had the opportunity of playing the recently opened Dundonald Golf Course (just up the road) that is now under the ownership of Loch Lomond. I must admit it was most challenging and enjoyable, another success for the course architect, Kyle Phillips. Although they are still doing some earth moving and minor alterations throughout the winter it will be without doubt a valuable asset to the Loch Lomond membership and I am sure will be home to many future tournaments.

Recently I attended the Ayrshire AGM that was held at the Irvine Bogside Golf Club and once again the attendance was most disappointing. Nevertheless we thank Derek Wilson and the Club for their hospitality. Then it was another visit to Scotsturf, where it was nice to see friends and colleagues. Unfortunately this attendance was also disappointing, as I thought the numbers were down and the show seemed very quiet and lacking its normal atmosphere.

My next trip will be to Arizona to join the John Deere World Championship being played in the Scottsdale area. I have been fortunate to have visited this area before and for those lucky qualifiers who have not played the Desert Courses before they will be in for a real treat, as they will be playing golf in shirt sleeves and sunshine on firm fairways and fast greens (unlike our normal December playing conditions). I will give a further report upon my return.

Upon my arrival back at Heathrow I will then need to make my way to Cannington College where the South West and South Wales are holding their two-day Regional Seminar. Then back to Turnberry for one day to say hello to my wife before flying out again to visit one of our properties abroad. Somehow I think I have lost the plot because I was under the impression that one is supposed to slow down in their twilight years and not burn the candle at both ends!

I have been invited to attend the Scottish Patrons Lunch in Stirling. Their support is much appreciated by the Association in Scotland and it is with their assistance we are able to run various Golf outings and other important functions such as seminars and of course the March Conference.

It has been a funny old year and it is a funny old world. During the winter we seem to pray for the summer and sunshine, yet when it is here it seems to fly by so quickly, and here we are once again facing winter once more and already in the middle of our winter work programmes.

My last official duty for this year will be the December Board meeting at HQ and then following that it will be Christmas and I would like to take this opportunity at this time of wishing you all compliments of the Season.

George Brown Chairman



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