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The causes and problems of thatch



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June 2004

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> > BIGGA National Chairman, Andy Campbell hosts some visitors to Carden Park and congratulates the people making full use of the BIGGA Website Forums.

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The Root to Victory on the Golf Course Tim Fell, of Tillers Turf, explains the ins and outs, the whys and whens, of using rootzone turf on the green.

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Cover photograph courtesy of Toro



Welcome

START OF A CAMPAIGN

I know most of us like to believe that we don't really care what other people think of us. Why should we? We are paid to do a job as well as we can and invariably have more knowledge of what we are doing than the people who are doing the criticising. Best to ignore such comments - water of a ducks back and all that.

However, if we are completely honest, none of us like criticism, particularly the uninformed variety.

So what should you do when the criticism becomes deafening? Bend to public opinion in the hope of a quieter life? Amending your ways in response to the opinions of a few, never mind an entire membership, is a sure fire way tie yourself in knots.

Tackling it head on is perhaps the best way. If you can't justify your actions you probably are in trouble. Having said that, admitting an honest mistake can also win friends and often respect. The perfect person hasn't yet been created and every one of us makes mistakes once in a while.

To make it work critics have got to be prepared to listen but, in many cases, they were at the front of the queue when mouths were being dished out but nowhere to be seen when ears were being allocated.

In the absence of all else a thick skin is definitely a help.

At the same time, it is useful to know how you are perceived by others.

Next month the magazine will feature an article by Colin Callander, a former Editor of Golf Monthly magazine, under the heading "See Yourselves as Others See You" which is aimed at giving you an idea as to how someone in the golf business sees you, the greenkeeper. Colin is a former Greens Convenor at a club in Scotland so has seen your role from "inside the ropes", as it were, and he does have some interesting things to say about the greenkeeping profession.

I'd be delighted if you could contribute to the feature. Write to me at BIGGA HOUSE or email me at scott@bigga.co.uk giving some examples of how you have been treated by golfers or club members - anonymity will be preserved if requested! That way I can paint a picture of what life is like for the nation's greenkeepers.

Without anticipating what will be said I know that the cloth cap and wellies image of greenkeepers is as hackneyed and out of date as the image of professional footballers wearing clumpy boots, baggy shorts and kicking heavy laced up leather footballs.

I'm also hoping to speak with a few other people from different elements of the golf industry to see what they think of greenkeepers.

I see it as as starting point of a campaign to educate the golfer into what you, the greenkeeper, actually does with the aim that in time you will be treated by golfers as the professionals you undoubtedly are.

It will be a difficult task but any signs of improvement will more than justify the effort.

Scott MacCallum, Editor

A WIN FOR BIGGA

The annual fixture between the Secretaries Association and BIGGA Scottish Region took place over the West Links, North Berwick Golf Club, on April 14.

This year was the turn of BIGGA to host this match and we are grateful to the Captain and committee of North Berwick for granting us courtesy for the day.

We have been successful in winning this match for the last few years and no doubt the Secretaries' Association were out for revenge and hoping to regain the trophy.

With the course in superb condition and with very favourable weather conditions everyone was looking forward to the match.

Our number one pairing of lain Barr, our Chairman from Largs GC, and Stewart Greenwood, Course Manager, North Berwick GC faced Allan Osborne, Captain of the Secretaries' Association, and Norman Wilson, Secretary, North Berwick. Unfortunately our top pair failed to lead the way and lost by 5&4 but this was our only defeat, as we either halved or won the remaining matches, eventually winning by seven and a half to two and a half.

Wins for C. Yeaman and A. Holmes, G. Thompson and P. Boyd, J. Manual and G. Jarvis, A. O'Hara and D. Scott, D. Tweedle and B. Aitken and finally B. Bolland and E. McGhee, with halved matches for A. Dunn and D. Wilson, S. Sullivan and A. Williamson and S. Cruickshank and J. Mair. Congratulations to everyone on a splendid result.

The scenic views from North Berwick are truly outstanding with the East Lothian coastline and the Bass Rock providing a truly splendid backdrop and the Kingdom of Fife in the distance made for a superb day.

Our grateful thanks to the Captain and club for allowing us the facilities of the club and course for the day. Congratulations to Stewart Greenwood and his staff for the excellent condition of the course.

Our thanks also to Alex Beveridge, Secretary of the Secretaries' Association, for his assistance and help in organising the match. We are all looking forward to renewing our friendship in 2005.

Peter J. Boyd Regional Administrator

DESIGN WITH WATER IN MIND

Independent irrigation engineer Giles Wardle of IrriPlan has called on golf course architects to make efficient water use a key design feature at the European Institute of Golf Course Architect's AGM in Italy.

Speaking at the invitation of Ken Moodie, the Institute's Vice President at the historic Castello Di Carimate, he told members that the uniform application of water is often overlooked as an objective in the design of irrigation systems.

"Maximising the efficiency of an irrigation system through good design has aesthetic, agronomic and golfing implications for the course.

"In the quest to save water, appropriate design is arguably more influential than merely adopting technologies such as valve-in-head sprinklers, computer controls and weather stations," stressed Giles.

While the appearance of wet and dry patches on a golf course can be caused by wind or variations in root-zone, drainage or topography, it's often poorly uniform irrigation application that's at fault, he said.

"Having emphasised that, achieving a uniform application of water from an irrigation system is a far more complex issue than just specifying a head-to-head sprinkler spacing." Giles went on to explain the scientific principles of uniformity and the approaches available to the irrigation designer to optimise it.

Using densograms generated by SPACE (Sprinkler Performance And Coverage Evaluation) software, he illustrated the dramatic effect that seemingly unimportant design options can have on the efficiency and uniformity of an irrigation system.

"The EIGCA arrange Continuing Professional Development seminars on a regular basis to keep our members up-to-date with advances in technology. We were very pleased that Giles agreed to speak and he delivered an excellent talk. With growing environmental awareness, the need to conserve water and apply it efficiently has never been more important," said Ken Moodie, who's also Chair of the Institute's Professional Development Committee.



News

TOP DEMONSTRATION SHOW

Organisers of the Reaseheath Sports Turf Machinery Show are predicting that it will become the best demonstrative event in the turf professionals' calendar.

With demand from exhibitors exceeding expectations and several national manufacturers planning to launch new machinery, the show, in Nantwich, Cheshire, on Wednesday, July 7, is set to be twice as successful as the 2003 inaugural event.

Last year the event attracted over £6 million-worth of cutting edge equipment, including the latest ride-on, trailed and pedestrian mowers, aerators, scarifiers, top dressers and line markers. All were demonstrated in a working environment on Reaseheath College's varied sports turf facilities. Potential buyers were attracted from across the north-west and the midlands.

"This is the only show of its kind in the country and we are intending it should become known as a 'show not to be missed," said Phil Sharples.

"We are excited about the positive co-operation and support we have received from the industry. We will continue to develop the show to give maximum benefit to exhibitors and visitors. We have acted on feedback from those who attended last year and are confident this year's event offers even greater value."

Entry is free to visitors.



HE WHO DAIRS...



BIGGA member, James Dair, an Assistant at Oundle Golf Club has set off on a professional career which could see him teeing it up with Europe's finest.

James was successful in the Euro Pro Tour

Qualifying School, the third tier Tour after the main European Tour and the Challenge Tour and will be competing in events throughout the summer.

If he does well and finishes in the top five in the final Order of Merit next season he will compete on the Challenge Tour where success could lead to a place on the main Tour.

But one step at a time and James, who is a member of Toft Golf Club, is delighted to have the chance to play in events which offer a top prize of £10,000.

"To qualify I had to pre-qualify at Forest Pines initially before playing three rounds at Bedford Golf Club where, out of a field of 240, I finished in a tie for 30th," said James, 31, who had a handicap of scratch when he turned professional.

He is delighted that Oundle Golf Club have kept his job open to him so he can return to greenkeeping between tournaments, but in the meantime he can look forward to events in Spain and Portugal as well as playing some of the finest courses in the UK.

Royal Inverdivot GC... Strip Cartoonist of the Year www.tonyhusband.co.uk There's a rep He's in the car Where Is he? here selling Bermuda park.. he's the grass GREEN one wearing Bermuda shorts

WELL QUALIFIED

Since January a further 12 technicians have qualified successfully as Briggs & Stratton Master Service Technicians. This brings the total in the UK to over 200 and 3,000 worldwide.

This internationally recognised qualification is only given to those who can attain the highest levels of excellence when it comes to servicing and repairing small engines.

Each year entrants undergo an intensive course in theory and practical engineering practices, at the end of which they set a series of rigorous examinations.

The MST course is held annually and is open to workshop personnel of garden machinery specialists, hire outlets, golf courses, contractors and local authorities that wish to increase their skills and gain more recognition for the important work they carry out.

Anyone interested in attending the 2005 course, should contact Briggs & Stratton's Service Department on 01708 335616.

RECOGNITION **FOR STRI LAB**

STRI has been awarded accredited laboratory status for the testing of rootzone materials specified by the USGA in the construction of putting greens.

The American Association for Laboratory Accreditation (A2LA) certified STRI's soil laboratory at the end of April. It is the first laboratory in England and only the second in Europe to gain accreditation and a place on the USGA's approved list of physical soil testing laboratories, which recommends laboratories carrying out testing under the high levels of quality control required by A2LA.

STRI has been involved in research and the testing of rootzones and construction materials for golf courses since 1929. In 2001 BRTMA (the British Rootzone and Top Dressing Manufacturers Association) appointed STRI as their official Testing House to improve standards within the industry.

STRI's association with the USGA also has a long history. The work of the USGA Green Section, formed in 1920, was influential on the early turfgrass research programmes carried out at STRI in the 1930's.

Dr Stephen Baker who is Head of Soils and Sports Surface Science at STRI was a member of the USGA advisory committee that drew up the current Recommendations for a Method of Putting Green Construction.

These recommendations have been recently revised and details of the changes, which are all intended to help make the construction of USGA greens less expensive and less complicated, can be found on the USGA website; use the links page at www.stri.co.uk

'FREE ENTRY' TO GLENEAGLES

The Diageo Championship at Gleneagles will be held over the PGA Centenary Course, The Gleneagles Hotel from June 10 to June 13.

The Gleneagles Hotel have kindly offered free admission over the four days of the tournament to full BIGGA members on production of their current BIGGA membership card.

The event is being played over the Jack Nicklaus designed course, part of the 'The Gleneagles Hotel, which includes the King's and Queen's courses. The venue is situated in rural Perthshire with stunning views over the hills and glens that surround the magnificent location.

The Association are extremely grateful to the Gleneagles Hotel and Scott Fenwick Course Manager at Gleneagles Hotel for this generous offer and encourage members to make the journey to Gleneagles and see the best of Europe's golfers taking part in this tournament over a challenging and superb golf course.

RAISING STANDARDS

"We've got there," said Duncan Russell, Manager of the National Sprayer Testing Scheme, reporting that at the end of the first target period over 5,000 sprayers were tested by the Scheme.

Farmers and contractors across the UK met their target established under the Voluntary Initiative. The VI is a joint initiative with the supply industry aimed at reducing the impact of agrochemicals on the environment.

NSTS has raised the standard of application machinery by introducing a simple test to make sure the sprayer is functioning properly. A network of over 500 test centres with approved testers have been established around the country since the launch at Smithfield in 2002.

Testing shows that leaks and drips, worn nozzles, faulty pressure gauges and poor hose condition are the main reasons for sprayers needing repair or rectification to bring them up to the standard required.

"Operators are crucial to the condition of sprayers," said Duncan.

"If they have a regular checking and maintenance regime in place then the faults we find are significantly less. Machine purchasers should always ensure that new and second-hand sprayers they buy are certificated by NSTS."

"Having achieved the first target the next is a big one. 10,000 sprayers tested by March next year is going to be a real hurdle, but I am confident that with the support from all sides of the industry we can get there. We have a good coverage of testers across the UK and, with more coming on stream, we can manage 10,000 sprayers," explained Duncan.

A STAGGERING RATE OF PROGRESS

When Mo Bah arrived in the UK from Gambia in 1998 he knew nothing about the game of golf. Now, six years, on he is an assistant greenkeeper at Coombe Hill Golf Club with an NVQ Level 2 from Merrist Wood College under his belt and plays the game to a handicap of 5, although by the time you read this he may have dropped to 4.

"I was a bicycle mechanic after I arrived in Britain but I was living just opposite Coombe Hill Golf Club and liked what I saw when I walked around the course," explained Mo, 27.

Through friends, he first swung a club and was immediately hooked. It wasn't too long before he approached Murray Long, Course Manager at Coombe Hill, to extend his love of the game to working on golf courses as well.

"I absolutely love my job and the game and I hope to go as far as I can in both. I play three times a week and practice every lunch time," said Mo, who has aspirations to reach scratch, take the PGA exams and become a teaching professional.

"I really do appreciate the chance that Murray has given me and we have a great team here at Coombe Hill," said Mo, whose very appreciative of the fact that his BIGGA card has allowed him to play some of the finest courses in his area.

Virtually the same age to the day as a certain American, Mr Woods, Tiger is very much Mo's hero and those who saw Mo at last year's National Championship, when he was playing off 10



incidentally, could not have mistaken the similarities between the two, down to the Nike gear both wear.

At his current rate of progress, in another six year's time, Mo might be the first man to prepare an Open venue and play in the Championship as well!

OK FOR ETL FROM USGA



European Turfgrass Laboratories Ltd (ETL) has been reaccredited by the American Association for Laboratory Accreditation (A2LA). ETL is still the only laboratory outside of the USA to be accredited by the A2LA, the USGA approved accreditation body. The laboratory is now in its seventh year of accreditation.

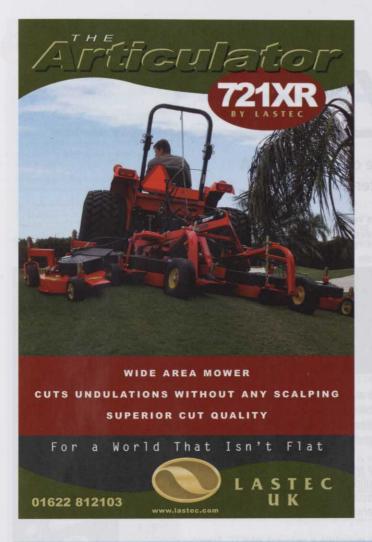
"Accreditation for us is just part of the day to day process of Quality Management within the laboratory," said Anne Murray, the Lab Director.

SWANS IN RESIDENCE!

Golfers at Longhirst Hall, near Morpeth, are having to cope with much more than a case of the duck hooks at the moment. Several swans have taken up residence and can often be found sitting right in the middle of fairways, slightly off putting for anyone faced with a tough 3-iron into a cross wind or a delicate sandwedge over a lake.

Course Manager, Graham Chambers, got close enough to one of them to supply us with this picture.









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It is with great pleasure that the GTC accepted the offer from BIGGA to contribute a regular column in Greenkeeper International.

For many of the more mature readers of GI the history of the two bodies working together will need no explanation however in this first article I think it is important that the GTC's Aims and Objectives are shown and also the structure of the GTC.

The GTC Board has representatives from the following organisations.

- · The Royal & Ancient Golf Club of St.Andrews
- The British & International Golf Greenkeepers Association
- · The Golf Course Superintendents Association of Ireland
- . The English Golf Union
- . The Golfing Union of Ireland
- · The Scottish Golf Union
- · The Welsh Golfing Union

The GTC also has a Technical Committee to support the Education Director and advise the Board on all greenkeeper education and training matters.

Chairman: Dr Mike Canaway, Former STRI Chief Executive

Committee members:

Gordon McKillop STRI Chief Executive

Tony Mears Paddy Holohan

Ken Richardson BIGGA Education & Training Manager Course Manager & GTC Liaison Officer Course Manager & GCSAI Representative

Course Manager & BIGGA Representative

David Leach MG John Davis

Independent Education & Health & Safety Advisor

In attendance:

Gordon Huddy David Golding

GTC Board Chairman GTC Education Director

In a brief summary for this first article the GTC represents both golf club employers and greenkeepers. Its main aim is to ensure that the sector has a range of relevant qualifications, which have national recognition by Government and are both vocational and academic.

The GTC has a network of Approved Training Providers who offer courses related to the qualifications and range from day/block release, work-based or on-line.

Finally, if the content of any turf-related qualifications is proved to require amending the GTC can ensure this can be actioned by the appropriate body.

Aims



- To work with Government bodies to ensure the Golf Greenkeeping sector has qualifications relevant to meet employers and employees needs.
- To work with the Awarding Bodies i.e. City & Guilds, Edexcel, SQA, NCVA to ensure Quality Assurance is being maintained throughout
- To maintain a network of GTC Approved Training Providers throughout the United Kingdom & Ireland.
- To assist the Training Providers with the delivery of Vocational Qualifications by maintaining a structure of workbased trainers and assessors.
- To maintain a consultation network to review qualifications and training courses relating to Greenkeeping and Golf Course Management.
- To communicate with Golf Club employers on the benefits and opportunities for the training of Greenkeepers and to offer an independent advisory service on all matters relating to Greenkeeper training.
- To co-operate with Greenkeeping Associations in the furtherance of education and training for their members.



Greenkeepers Training Committee Aldwark Manor Aldwark Alne York YO61 1UF

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For details, please contact Ken Richardson on 01347 833800 or via ken@bigga.co.uk

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Education Update

Ken Richardson sees the year quickly vanishing and updates you on Harrogate 2005 and the new Annual Conference in March, 2005.

As I write this article, I am looking forward to a welcome holiday. By the time you read it, I will be back at my desk wondering where the year has gone with BTME & ClubHouse only seven months away and the new Education Conference only nine months away.

Continue to Learn at Harrogate 2005

Our plans for Harrogate are coming to fruition and we shall be able to produce a draft programme by the end of this month. Please remember that there will be an increased number of workshops held on Sunday 16th January and Monday 17th January, followed by an extensive seminar programme on Tuesday 18th, Wednesday 19th and Thursday 20th January. Add on a series of ClubHouse seminars and a Master Greenkeeper Workshop and there is something for everyone at next January's Continue to Learn at Harrogate. Watch out for more details appearing next month.



The 21st Century Manager

As announced last month, the BIGGA Annual Conference will move from Harrogate to a new location in 2005. The British and International Turf Managers' Conference, will be held at Staverton Park Conference Centre on Saturday 19th and Sunday 20th March. This, high level conference will be titled 'the 21st Century Manager' and will feature speakers from around the World. The Conference will include research papers presented by a range of academics from both sides of the Atlantic and by greenkeeper graduates plus papers on various aspects of management. Full details will be published later in the year but watch out for further monthly updates in this column.

TORO Student of the Year Competition



The deadline for the TORO Student of the Year Competition has now passed and we have received more than 36 entries so far. Regional interviews will be held around the country in early July with the National Final taking place at BIGGA House on 26th and 2th September.



Regional Training Courses Autumn 2004

Final preparations are being made for a wide range of regional/section training courses which will take place in October/November/December 2004. Full details will be sent out during July.

Remember to book early as places are limited on these high-quality, low cost training courses.



Health and Safety - Keep it Simple and PLAN AHEAD

Tutorial One

Much discussion is held by golf clubs in trying to understand their real and serious obligations under UK and Eu Law for Health and Safety. Proprietors, Owners, Committees, Golf Club Managers, Secretaries, Course managers etc need to ensure that they really do understand the basics.

Haztek International® has over 25 years experience in health and safety, not all for golf clubs but in recent years has specialised to assist golf clubs and invested in understanding golf clubs needs.

They have visited and surveyed over 400 clubs in the UK and Europe and have below attempted to feed back some of the most common shortcomings to assist greenstaff in understanding the present areas to concentrate. Further tutorials (highlighted in caps) will help resolve some of these issues.

- 1. Golf clubs generally fail to have a clear LONG TERM PLAN for managing health and safety. The committees and owners tend to rely on the day-today operations to meet the legislation.
- 2. Secretaries and Club Managers often are not fully aligned with other departments especially the "course activities". Often RISK ASSESSMENTS are only completed for some operations and not all.
- 3. Health and Safety documentation is often piecemeal and has no manageable structure. Few clubs have invested in any form of MANAGEMENT SYSTEM that allows updates and control of daily, weekly, monthly and annual checks. The greenstaff need to be continually consulted and involved.

- 4. Few clubs have appointed a responsible person on the board to address Health and Safety and even less have appointed a COMPETENT PERSON.
- 5. Most clubs have in place an up to date HEALTH AND SAFETY POLICY but only around 40% have successfully completed the risk assessments to the required standard, very few have assessed risks on the course.
- 6. Few clubs have a TRAINING PLAN, which is essential to good health and safety. Many do, however, give adequate training especially in First-Aid, Manual Handling and Fire Fighting.
- 7. Many clubs have not completed checks for employing the DISABLED and this becomes a legal requirement from October 2005.

Haztek International® has put together a very simple free pack and CD to help the golf industry understand its basic obligations and includes information on, The Policy, Risk Assessments, COSHH, Fire Risk Assessment's, Emergency procedures and Safe Working Practices.

An additional set of cards will also be available on Disability Discrimination Regulations, working with Under 18s and Manual Handling Risk Assessments.

Modern Golf Club Management requires full compliance with UK and EU Health and Safety. Haztek International® are one of the only companies specialising in supporting golf clubs and have over 25 years experience working for over 300 UK clubs.

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Rachael and Gemma from Membership Services would like to welcome 76 new members to the Association and talk about fraudulent use of BIGGA cards.

Membership Update

Be Vigilant!

As reported in the news last month it has come to our attention that fake BIGGA cards are being used to gain courtesy golf. At first we thought the problem was confined to the North Yorkshire and Manchester areas, however we have since had a call from Cornwall, indicating the use of fraudulent cards is more widespread.



We are asking all members to show the Pro and the Club Secretary their cards so they are aware of what a valid membership card should look like.

If your club is presented with a fake card please ask for additional ID and if you can record the name and address of the user. If it is possible please confiscate the card. If you are at all unsure about a particular card please give the membership department a call and we will be happy to confirm the owner's membership.

Please inform us if any of these cards are presented at your club so we can build up a better picture.

The courtesy golf scheme relies on the goodwill of golf clubs and if the system is abused then you are at risk of losing it.

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National Championship 2004

The National Championships will this year be held at Alwoodley Golf Club, Leeds, on the October 4 and 5.

The Championship will produce the BIGGA National Champion over 36 holes of play, based on the lowest handicap score. This year the entry form for the championships appeared on page 10 of the May edition of Greenkeeper International. If you can't locate your May magazine then contact Sarah Norris for further details and an application form on 01347 833800 or see the website: www.bigga.org.uk and click on the 'events page'.

BIGGA welcomes...

SCOTTISH REGION

Steven Arnott, North Andrew Baillie, East Graeme Black, East Christopher Bruce, North Robert Bryant, East John Douglas, East Stephen Grant, North Mark Healey, West David Leys, North Ian McIntyre, Central Jon Metheven, Central Craig Reynolds, Central

NORTHERN REGION

Michael Anderton, Northern Nick Armstrong, North East David Bateman, Northern Stewart Brown, North west Joe Buckley, Northern Michael Douglas, North East Benjamin Greaves, Northern Richard Hetherington, North East Mark Hirst, Northern Gavin Pickard, Northern Chris Stephens, Northern Gordon Street, Northern

MIDLAND REGION

Paul Barnes, BB&O Gareth Dennett, Midland Glenn Gibbons, BB&O Lucy Giles-Townsend, Midland Rodney Ludgate, BB&O Kenneth Mackie, Midland John Munro, BB&O Alexander Piziura, Midland Edward Short, BB&O Paul Tustain, Mid Anglia Andrew Westley, East Midland

SOUTH EAST REGION

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GOLDEN KEY MEMBERS

Tom Barnes, B8&O T Dunlop, Ayrshire S Gooch, North West C Hennah, South West David Roberts, B8&O S Thompson, N Ireland S Yamada, B8&O Tim Yates, B8&O

JUNE'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 an 0.5 litre isolating flask suitable for hot and cold drinks and soups.

Our congratulations go to Jeffrey Mills from Taunton and Pickeridge Golf Club.



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 June's winner, Jason Bradbury from Royal Automobile Club whose message was posted on 30th April 2004 under the 'Talking Shop' section.



Course Feature



▲ Phil Chiverton

A Masterpiece

Scott MacCallum visits The Grove and meets the man charged with looking after a masterpiece.

At a time when a Picasso painting has sold for over \$100 million it is perhaps fitting to recognise an artist in another field, sharing a talent to take a blank canvas and create something unique. Renowned golf course architect, Kyle Phillips, is one such person and his latest British masterpiece, The Grove, confirms his status as one of the best around.

The man who designed Kingsbarns, near St Andrews, and Dundonald, the course recently purchased by Loch Lomond Golf Club on the west of Scotland, is justifiably proud of what he has created on the edge of

Watford just inside the M25 loop, and he has received outstanding reviews since it opened late last year.

The responsibility for ensuring that the quality of the layout is matched by the course conditioning falls to Course Manager, Phil Chiverton, who joined The Grove in 2001 during the construction phase.

"I would say that it is an inland links," said Phil, when asked to describe The Grove, and you can readily see what he

Transport yourself away from Watford and you can easily see some of The Grove holes being included in the Kingsbarns or Dundonald layouts and vice versa.

The bunkers are small and deep and the greens have swailes and fall away to devilish hollows like so many fine links courses. With a putter in your hand the greens leave little doubt as to which way the ball will break but plenty of doubt when it comes to determining speed and line.

Indeed it is around the green where Kyle's talent can be seen and those who play any Phillips' course know that they need their short game to be at its best if birdie, or indeed par, is to be threatened.

However, Kyle has not ignored influences which are more familiar to the south of England.

He wanted to go back to the roots of traditional parkland courses which featured some of the classic characteristics synonymous with the great designers such as Harry Colt and J H Taylor. To this end he spent many months with his shaper, Jason Dott, visiting some of the finest courses in the south of England including Sunningdale, Swinley Forest and Walton Heath before he even contemplated putting pen to paper.

The Grove, a top-of-the-range pay and play course, is privately owned and the search for a suitable site began back in the mid 90s with the

proviso that ease of access was all important. It took some time to identify the farmland site, purchase it and begin the arduous task of seeking planning approval.



▲ The Grove Hotel and 1st green

Once achieved MJ Abbott began the construction work and, as with Kyle's other courses which look so natural once completed, it masks the mammoth effort that went into reaching that stage.

In all 300,000 cubic metres of earth were moved during the construction phase and at one time more than 60 people were working on the project under the guidance of Abbott's.

Some fascinating discoveries were uncovered during this period including the outline of two old lakes which were subsequently dug out and re-lined with a pvc liner. A series of pumping chambers were then installed so that water taken from the discharge of the land drainage system could be pumped away if the level of the lakes becomes too critical. The end result is two distinctive water features situated on the front nine which look as though they have been there for many years.

Much of the work was carried out during one of the wettest winters we've experienced in recent years. The Law of Sod then kicked in and last year's cold drought slowed the establishment of the grasses just months before the official opening and during the important preview time.



▲ The 18th

However every cloud has a silver lining and the weather which caused the problems also created opportunities for Phil and his team.

"The wet time allowed me to identify potential problem areas on the course and bring in additional drainage and on the flip side the drought meant we could really test the Rainbird irrigation system in extreme conditions," said Phil.

"It is a high maintenance course and the level to which we maintain it is labour intensive with 20 greenkeepers and five gardeners working round the clock on the course, hotel and spa surrounds as well as the walled garden, which is the second biggest in England," he explained.

"All the greens are hand mown and many of Kyle's design features including the little swailes in bunker surrounds and steep banks around the greens look dramatic but take time to maintain." The Grove also benefits from the input of Troon Golf the world's leader in golf resort and club management. With more than 140 clients worldwide in 11 different countries Troon Golf provides a comprehensive service which not only involves using the latest agronomic methods and expertise on the course but also maximises the wider aspects of developing and marketing the facility.

The annual maintenance programme has to be signed off by Troon Golf each year and Chief Agronomist Jeff Spangler visits The Grove three times a year to ensure everything is on track.

It is testament to the quality of Phil's team, that The Grove has been ranked third for course maintenance and fifth for the overall golf experience throughout the 140 resorts at Troon's Annual Meeting of Club Managers in Arizona recently.

"Prior to Troon Golf being appointed as our management consultants, I would like to personally thank Steve Jones, from Golf Course Solutions, and Mark Hunt, from Headland Amenity who have both made a huge contribution helping us



▲ The 17th



▲ The 8th

with our agronomic plan and management of our facility,"

"Steve's experience with the maintenance of the A4 grass on the greens and Marks help with our fertiliser programs, both working alongside ourselves and Jeff Spangler, from Troon Golf, have made a huge team effort in making the course a success and setting standards in the industry for others to hopefully follow.

Initially play will be limited to 20,000 rounds per annum and will gradually increase as the course develops. The Grove is certainly more than capable of staging a big tournament in the future and as Phil has supervised preparations for more than six tournaments at The Buckinghamshire, from where he moved to The Grove, and Wentworth he is well equipped to take the course to the next level.

What Kyle Phillips can be sure is that his English masterpiece will be looked after as well as Picasso's \$100 million painting.



Silver Jubilee for a Golden Key Supporter

Scott MacCallum visits Kubota UK Ltd, a big company who have recently rejoined the Golden Key scheme.

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The beauty of the fine turf industry is that it caters for the huge multinational conglomerate right down to the single businessman working out of the back of the garage. Everyone is welcome and everyone has a contribution to make in this most diverse of industries.

One company which very much comes out of the multinational bracket is The Kubota corporation of Japan, who turnover several billion pounds annually, and BIGGA is delighted to welcome Kubota (UK) Ltd back into the fold as a Golden Key supporter.

"I've always considered BIGGA to be a very important part of our business," explained David Roberts, Sales Manager for the Tractor & Groundcare Division.

"We need to press the buttons of all the right people in the golf club but, most importantly, we need to get to the Course Manager as he is the key person in the club for us.

"What you can't replace in the golf course sector is credibility and BIGGA has a huge amount of credibility. It is the major organisation for the golf greenkeeping fraternity and we see many positives in being involved and Kubota's name being linked with BIGGA," said David, as we sat in the Board room the Kubota (UK)'s Thame headquarters.

"I think we owe it to the greenkeeping industry to put something back in," he added.

The more you examine Kubota as a company the more you are amazed at its sheer size and ability to pioneer the sort of equipment greenkeepers have become so familiar with over the last 25 years.

Indeed, 2004 represents Kubota UK's silver anniversary and a special silver edition tractor was unveiled at Harrogate this year to commemorate the occasion.

"The first compact tractors, brought into the UK in the early 1970s were from Kubota. In 1982 the first mini excavators in the UK were by Kubota and in 1984 the first diesel ride-on rotary mowers were by Kubota," said David, who added that particularly through the hire market their mini excavators were finding their way on to golf courses.

"The theme running through it all is that we were the first, true pioneers," he added.

Indeed Kubota were one of the first companies to introduce a reversible tractor and a zero turn mower but admits they were possibly a little too far ahead of their time when they did it. Indeed, a zero turn mower has recently

been re-introduced by the company

Add to that the fact that Kubota are the market leader in the golf market for compact tractors and that many of the major manufacturers use Kubota diesel engines to propel their own machines and you have a pioneering company with the scale to make a real impression on any market.

Kubota was founded in 1890 by Mr Kubota who started off with an engineering forge in Osaka, Japan, where he began producing engines from the early 1920's, one of the first Japanese to do so.

From those beginnings the company has grown into a massive corporation with 17 manufacturing plants in Japan alone and other major manufacturing bases in, among others, America and Germany.

"We manufacture all over the world but also have distribution companies in most developed countries in the world. We're big," said David, who added that the Thame-base covers the UK and Ireland as well as Iceland.

Although a Japanese company, Kubota is keen to ensure that the national companies are run by the people who know the local market best.

"We have a Managing Director here as well as the Financial Director, a Technical Liaison Manager and a Product Specialist who are all Japanese but the company understands that no-one understands the UK market better than UK people. They don't come here and insist that we should do things the way they are done at home in Japan," said Dave, who also dispelled the stereotypical cliché that they all do Tai Chi every morning.

"What they are doing is bringing in the best of Japanese product and allowing us to sell it our way."

The other benefit from being a multi-national is that the UK and Ireland is the first stop when the Japanese company is looking to develop new grass cutting machinery.

"No-one grows grass like we do here so if you are going to develop a new grass cutting machine you test it in the hardest conditions and with our climate we are pretty demanding in terms of grass cutting machinery."

The first compact tractors were produced around the late '50s and early '60s as fundamentally a paddy field tractor and it was these that British entrepreneur, John Croft, saw in the early '70s and realised the potential for



▲ The first compact tractors in the UK were Kubota



▲ The special edition silver tractor to commemorate the Silver Anniversary



commercial greenhouse owners in the UK for use in poly tunnels.

"That market, based on two models of Kubota compact tractor, ballooned as users in other markets saw the potential and in 1979 Kubota (UK) Ltd was set up to take advantage of it.

"We capitalised on having the market to ourselves. It was very embryonic but we had 100% of it. Obviously over the years other people have come in including some strong competitive names and our number one position has been attacked, but our heritage and legacy, is that history is very strong with Kubota.

"People don't forget that they first bought a Kubota tractor in the '70s, it served them well, had a good second half value and that the next one they bought was also very good," said David.

The number of compact tractors in the Kubota range rose along with their popularity and new markets were identified, including chicken and pig farmers, horticulturists, estate managers and, of course, golf.

In percentage terms of the overall Kubota business golf does not represent an enormous element but David is of the opinion that in real terms golf has a significant strategic role for the company.

"With so many golf courses in UK and Ireland and so many people playing the game, golf is a superb shop window for our products. More than that it fills a huge chunk of the 30-60 horsepower market and if we didn't have golf we wouldn't have such strong sales in that sector."

He also sees the role of the tractor, which was under some threat a few years ago, growing. Eight years ago people were probably sounding the death knell for the tractor with self propelled fairway mowers and utility vehicles, but you need a tractor with creep speed and a good lifting capacity to carry heavy deep aeration equipment and we can offer that.

"The compact tractor is still the ultimate versatile tool. ATVs and utility vehicles are great at getting you from A-B but as a workhorse you can't beat a tractor.

"The role of the tractor has changed for us and there will always be a place for the tractor on the golf course."

Indeed, David feels that with the American influence, where larger, heavier implements are being introduced, you need larger, but lightweight, 80+ horsepower tractors with turf tyres and these are now being seen on UK courses.

"A Course Manager may need a larger but lightweight tractor on turf tyres but now farmers are asking for these tractors and we can add weight to them and put on agricultural tyres," said David, who added that Kubota were now exploiting the higher horsepower markets in general.

He is also keen to take increasing advantage of the fact that there are some sophisticated budgets operated at golf clubs and the fact the Kubotas

hold their value and that maintenance costs are low makes long term budgeting much easier.

"You can only set five year budgets if you know how much things are going to cost in the first place, how much they are going to cost to run over the period of the budget and, most importantly, how much they are going to be worth at the end of that period. Then you can fix your costs.

"Kubota have one of the best residual values in the business - second hand Kubotas are like hens' teeth at the moment, you just can't get them - so it makes them extremely attractive propositions."

The Thame headquarters of Kubota UK Ltd has a full time staff of 72 and the dealer network numbers 47 with many of them being multi branch operations.

"I place a great deal of emphasis on our relationship with dealers and know full well that while they can't do without us, we certainly can't do without them.

"Our job is to service the end user and we can't do that without a dealer so we are intrinsically linked. I certainly don't tell them that I want 50 more units a year out of them or which demonstrator they must carry. That's down to them. If they are successful we're successful and vice versa."

Thame is split into three stand-alone divisions, Tractor & Groundcare products, an Engine division and the Construction Machinery Division.

Kubota supply diesel engines to Ransomes Jacobsen, Hayter and Toro among others and that particular division is enjoying a boom time at the moment.

"Kubota engines have very low emissions and with regulations becoming more and more stringent this is a very strong element in our favour.

"In the early '90s we were the first diesel manufacturer to meet and surpass the California Air Resources Board Emissions Test and now in Europe the Tier 1, Tier 2 and soon to be Tier 3 and 4 of regulations are raising the bar every time.

"We've got great confidence in knowing that in Japan there is a massive amount of engine development going on, because, as we are the largest manufacturer, we can afford to invest a lot of money into research and development," said David, who added that as well as low emissions, lower noise levels are also a great plus for the Kubota engine.

Kubota sees joining BIGGA's Golden Key programme as putting something back into the industry and an opportunity to get out and meet more greenkeepers.

"We'll be wearing our Golden Key ties with pride at BIGGA functions," said David.

I'm sure everyone at BIGGA will be delighted to see Kubota representatives at National, Regional and Section events.

Biological Solutions from novozymes

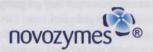
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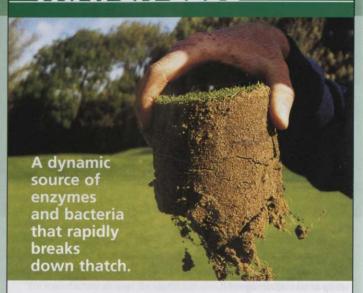
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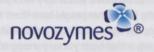


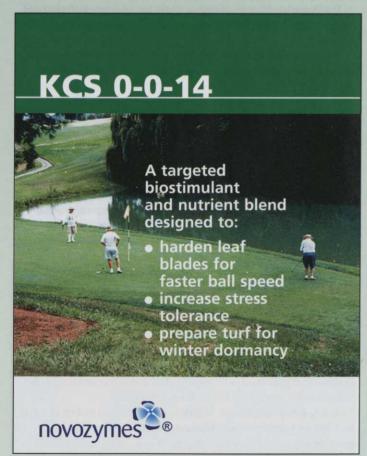
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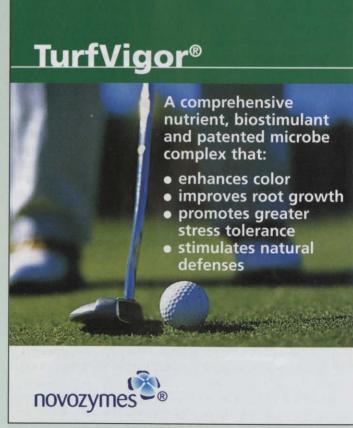


THATCH-LESS™









Exploring the hidden mysteries beneath our feet — Thatch



Martyn Jones explores the nature of thatch, its causes, and considers its management in various situations

Course Managers and greenkeepers are well aware of the deleterious aspects of excess thatch: Increased disease and insect problems, localised dry spots, chlorosis of the turf, proneness to scalping, foot printing, decreased heat, cold and drought hardiness, restricted rooting, nitrogen immobilization, reduced effectiveness of pesticides, a soft, spongy surface in wet weather, and the potential for black layer formation.

They are also conscious of the benefits of a limited depth (approximately 6mm) of thatch: Insulation of the soil surface, protection of the crowns of plants, buffer against surface soil compaction and smearing, recycling of nutrients, provision of a resilient surface, and absorption of chemical residues.



Literature on turfgrass management prior to 1950 rarely, if ever, makes reference to the term 'thatch'. Allied terms such as 'matted turf', 'fibre', and 'litter' were sometimes fleetingly used when discussing other topics such as 'droughty turf' or 'neglected turf'.

A number of American authors between 1953 and 1973 proposed definitions of thatch. Beard (1973) produced one that became universally accepted: "A tightly intermingled layer of dead and living stems and roots that develops between the zone of green vegetation and the soil surface". He also defined 'mat' as "an organic layer buried and/or intermixed with soil from topdressings. It is partially decayed thatch that has become part of the soil profile". However, Shildrick (1985) in a comprehensive review of thatch expressed the view that 'mat' is a misleading term and should be avoided. He also distinguished two subdivisions of thatch:

"Fibrous thatch usually overlies dry soil, the turf becoming very dry indeed and difficult to re-wet under drought conditions. It is most commonly found in acidic conditions where the sward consists of Agrostis and Festuca spp."

"Spongy thatch is waterlogged throughout most of the year and is likely to smell strongly of decay and stagnation. It is yellow-brown in colour with black streaks showing the activity of anaerobic bacteria. The underlying soil is often wet and compacted, and usually of clay with restricted drainage." Further comments on spongy thatch suggest, "Poa annua usually predominates in the sward with perhaps some surviving Agrostis."

While these subdivisions are useful, they are more descriptive of differing environmental influences on accumulation, as opposed to the actual constituents of thatch.

WHAT ARE THE CONSTITUENTS OF THATCH?

Thatch is composed primarily of a mixture of partially decomposed stems, roots, stolons and rhizomes, each of which varies in its resistance to decay. Leaves are the least resistant to decay and, contrary to popular belief, do not appreciably add to thatch accumulation.

Resistance to decomposition increases in order through sclerified vascular strands of stems and leaf sheaths, stolons and rhizomes, roots, and nodes of stems and crown tissues, these being most resistant.

Chemical analyses of thatch show an abundance of lignin, this being the most resistant to decomposition.

Fungi in the order Basidiomycete, the group of fungi that contain the familiar 'fairy ring fungi' and 'mushroom or toadstool fungi' are the primary decomposers of lignin. Cellulolytic fungi and bacteria, and many species of Ascomycetes and Fungi imperfecti decompose cellulose and hemicelluloses that are intermediate in decay rate. Rapidly decomposed organic compounds such as sugar and starch that are present in large quantities in leaf tissue are quickly decomposed by numerous species of bacteria, sugar fungi and shadow yeasts, as well as by a range of soil macrofauna.



▲ Core cultivation is an effective means of physically removing thatch and, when accompanied by a sound topdressing programme, creates a favourable environment for decomposition

WHAT ARE THE CAUSES OF THATCH?

A thatch layer develops in any situation where the accumulation rate of dead organic matter from the growing turf exceeds the rate at which it decomposes. Consequently, any cultural or environmental factor that promotes excessive shoot growth or impairs decomposition will encourage thatch accumulation.



▲ Sensitive use of a well-designed irrigation system is vital to successful thatch management

It has been estimated that about 8000 kg ha-1 of dry organic residues are returned to turfgrass soils each year. This comprises of approximately 3500 kg of roots, 2000 kg of clippings, and 2500 kg of other vegetative parts (Riem Vis 1981). Consequently, when clippings are removed, as in a golf green maintenance programme, the annual returns of organic residues will amount to around 6000 kg ha-1. These quantities vary to some degree depending on the turfgrass species studied but, surprisingly, the quantity of nitrogen fertiliser applied has little effect on the final figure as the nitrogen is utilized in the most part in leaf growth that is removed by mowing.

Certain turfgrass species and varieties with increased vigour and density such as Poa annua, Agrostis stolonifera, and, in a favourable environment, some cultivars of Poa pratensis are notorious for thatch production.

Species such as fine-leaved fescues that have high lignin contents are more resistant to decomposition and in these cases it is the slow rate of decomposition of the organic residues that contribute to thatch accumulation, rather than the turfgrass growth rate. Low growing, prostrate species such as creeping bentgrass tend to form more thatch than upright species. For this reason, although the upright-growing Lolium perenne is a vigorous species, it is not a major thatch producer.

Strongly acidic conditions will inhibit micro-organism activity and, consequently, decrease the decomposition rate. The majority of organic matter consumers and decomposers prefer neutral to alkaline soil conditions. Bacteria and actinomycetes are more abundant in such soils. Although many fungi are tolerant of pH's as low as 4.0, they are more numerous in soils with a pH range of 5.0 to 6.5. Optimum activity of species capable of decomposing cellulose and lignin occurs at pH 6.5 to 7.5. Many studies have shown that continuous and excessive use of acidifying fertilisers such as ammonium sulphate will favour the development of thatch (Edmund and Coles 1958, Smith 1979, and Potter et al. 1985).

A lack of earthworms will impair decomposition. They are major consumers of soil organic matter and their activities in soil mixing play a major part in increasing microorganism populations and enhancing organic matter decomposition. Their digestive tract contains large numbers of bacteria and these are deposited into the soil in their casts to continue the decomposition process. Decimation of an earthworm population will invariably result in an increase in thatch accumulation; hence its association with intensively managed golf turf where earthworm activity is unacceptable.

Poor soil aeration resulting from fine-textured rootzones, compaction, excessive wetness, be it due to poor drainage, an inclement climate or excessive irrigation, will decrease the decomposition rate of organic residues. The majority of beneficial microbes are strongly aerobic and restricted soil aeration will impair their activity. Many species of fungi are able to tolerate relatively low soil oxygen concentrations but the majority are unable to function in anaerobic conditions.

Excessive nitrogen nutrition stimulates rapid shoot growth and shallow rooting and, therefore, encourages thatch accumulation. An excess of nitrogen will also create an unfavourable carbon/nitrogen ratio for decomposition of the organic residues. The optimum C/N ratio range for bacterial decomposition is 25:1 to 30:1 and ratios greater or lesser than this range will slow down the decomposition processes. Heavy applications of nitrogen, even if applied infrequently, can impair rooting and create a temporary upset in the carbon/nitrogen ratio. Surface applications of phosphorus can stimulate rooting within the thatch layer, thereby further aggravating the thatch accumulation rate.

Irrigation practices that stimulate rapid shoot growth will increase the thatch accumulation rate and excessive irrigation that maintains high moisture contents to the detriment of oxygen availability within the thatch layer will decrease the decomposition rates.



Extremely dry conditions, in stark contrast, can be equally detrimental. Although most bacteria and fungi are able to survive drought conditions, they require water to be active decomposers and extremely dry conditions in the thatch will reduce the decomposition rates. Additionally, lack of water can result in turfgrass drought stress, greater pest and disease damage, and an increase in thatch accumulation.

The use of pesticides has often been reported as a contributing factor in thatch accumulation by adversely affecting decomposition rates. Whilst there may well be some merit in this argument when considering highly toxic chemicals that were quite widely used in the past, evidence that the modern range of pesticides directly affect microbe activity is highly debatable. Smiley et al (1985) and Smiley and Fowler (1986) concluded that increases in thatch accumulation where fungicides had been applied could be attributed to a greater rate of tissue production, rather than due to a reduction in the decomposition rate.

Topdressing materials high in organic matter will add to the accumulation of thatch, particularly if the organic source is high in compounds such as lignin that resist decomposition. Topdressings should be aimed at diluting the organic content in the surface horizon to produce a rootzone mixture with a maximum of four per cent by weight organic matter.

Fine-textured soils present a physical barrier to rooting, in addition to their inherent problems of impeded drainage and restricted aeration porosity. Consequently, there is an increase in the accumulation of organic matter near the surface. The anaerobic conditions that readily occur in such soils also accelerate root death whilst depleting microbe activity. The moisture retentive nature of such soils also makes them slow to warm up in spring and the low temperatures inhibit the activities of soil microorganisms. The net result is an increase in thatch accumulation and decrease in decomposition rates.

Low temperatures reduce the metabolic rate of micro-organisms and thatch decomposition is greatly retarded during extended periods of cold weather. This is particularly relevant in northern Europe where temperatures remain below 10 degrees C for a large part of the year and, consequently, where fungal and bacterial activity is extremely restricted.

During the 1960s, thatch was a common problem on golf greens. This coincided with the wider introduction and misuse of automatic irrigation systems, excessive use of compound fertilisers, chlordane as a wormkiller, mercury-based fungicides, sterilised organic-rich topdressings and agricultural soils management policies. Little wonder that thatch developed so significantly. Those were the glory years for thatch but the Dark Ages for turf management.

MANAGEMENT OF THATCH

Management of thatch falls into two categories, curative or preventative, depending on the degree of thatch present. The former consists of a series of renovation procedures while the latter is a maintenance programme. Similar techniques are adopted for both categories but there are generally significant differences in intensity and frequency of operations. For example, scarification into a thatch layer would be considered a renovation or curative technique whereas Verticutting and grooming are maintenance or preventative operations. There are similarities in the actions of equipment but major differences in the severity of the treatment.

Scarification or hollow-tine cultivation will physically remove existing thatch. Coring may not remove as much material in a single operation but it has an advantage, in conjunction with a sound topdressing programme, of establishing capillary continuity with the underlying rootzone material, an important element in improving drainage and modifying the thatch environment for enhanced decomposition.

Topdressing is an essential part of both curative and preventative thatch management but incorporation into an existing thatch problem can pose difficulties. Creating layers of thatch/topdressing must be avoided by thorough and frequent cultivation. This is best achieved by coring but other cultivation techniques such as spiking and slitting can also be beneficial.

Course managers and greenkeepers with greens constructed to USGA recommendations must preserve the integrity of the construction by timely topdressings with compatible sand. A USGA rootzone recommendation suggests a maximum of three per cent by weight organic matter content in its construction; it follows then that a topdressing schedule should aim at maintaining this percentage by diluting any thatch accumulation to similar proportions (Carrow 2004). In most instances, this would necessitate annual topdressings of sand at 4.00 to 5.00 kg m-2, preferably divided into a number of small increments throughout the year.

Proper management practices will minimise thatch accumulation. Fertilisers should only be applied at rates that meet, but not exceed, the nutritional requirements of the turf. Similarly, irrigation must not be excessive and should not be applied before the desired turfgrasses shows signs of moderate moisture stress. Surface cultivation techniques to preserve drainage and adequate soil aeration should be appropriate to the site and soil type, and to the time of year.

All factors that contribute to thatch accumulation must be considered and management should be focused on enhancing decomposition rather than accumulation. Although the thatch may be beneath our feet and out of sight, it should never be out of mind.

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Martyn Jones is an internationally recognised educator and speaker. In addition to his teaching roles, he is a Founder Trustee of the National Turfgrass Foundation and Secretary of the British Turf and Landscape Irrigation Association.



BIGGA National Championship sponsored by Ransomes Jacobsen

BIGGA is delighted that the 2004 National Championship will be sponsored by a company which has already done a huge amount for BIGGA and greenkeeping.



Ransomes Jacobsen will sponsor the event, to be held at the wonderful Alwoodley Golf Club, in Leeds, on October 4 & 5, thus ensuring that it will continue to be an event not to be missed for BIGGA's top golfing greenkeepers. As always the field with comprise those who have entered and others who have been lucky enough to win a place in the field via a Section or Region event.

"Ransomes Jacobsen are delighted to be a part of the BIGGA National Championship and are proud to be sponsoring the event. It gives us a great opportunity to meet many of BIGGA's golfing members at Alwoodley and enjoy a social occasion together," said David Withers, Sales and Marketing Director for Ransomes Jacobsen.

"Events such as these allow for greenkeepers and manufacturers to grow closer and forge stronger relationships which will help improve our industry and drive it forward, which can only be a good thing!' he added.

The news that Ransomes Jacobsen were to extend their existing sponsorship programmes with BIGGA to include the National Championship was met with pleasure by BIGGA Chief Executive, John Pemberton.

"BIGGA enjoys a superb relationship with Ransomes Jacobsen and their agreement to sponsor our flagship golf event is just another example of that relationship in action," said John.

The 36 hole event, for the BIGGA Challenge Trophy, was won last year by Chris Lomas, Course Manager at The Berkshire, at Coxmoor and Hollinwell Golf Clubs, with a two round nett total of 144. It will take golf of a similar standard to lift the Trophy this year.

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The Root to Victory on the Golf Course

Tim Fell of Tillers Turf, explains the ins and outs, the whys and whens of using rootzone turf on the green



There are two scenarios where turfing a green might be necessary: the renovated green, and the new green.

Renovation is required when the old green fails to support both the quality and quantity of play demanded by the golfers. The main season for renovation is September to March, when the old green is taken out of play. The members play on temporary greens until the renovated green comes back into the system in the spring.

So, there is an obvious need for speed, and no time to be wasted. Thus, turfing is the only option. If you seed, the green won't be back in play the following spring.

Where new holes are concerned there is a bit more flexibility. New holes will be part of a new 18-hole/9-hole development. They are sometimes seeded, sometimes turfed, depending partly on budget and partly on opening date. For cost comparisons, seeding works out at roughly 50p per square metre, while turf is about £7 per square metre. Clearly, there is a substantial difference, although that difference is much smaller when growing-in costs after seeding are taken into account.

But the case can be made for turf if the conditions are right. It means the course can open 6 months earlier, which in turn means earlier revenue in membership fees and green fees. Indeed, in the United States, sometimes entire courses are turfed, all 50 ha, so they can open soon afterwards.

THE OPTIONS AVAILABLE

Topsoil turf

This is turf which is grown on indigenous topsoil. It has been the main commercial source of turf for the golf industry, and the landscape industry, for the past 30 years.

However, now that most greens are constructed using high-quality imported rootzones, the use of topsoil turf has fallen dramatically. Waterlogging is a major problem on some greens, and is often caused as a result of incompatibility between topsoil turf and

imported rootzones.

Incompatibility arises from the fact that there is a wide difference in particle size distribution between the two. In particular, the percentage of clay, silt, and very fine sand in most topsoil is too high, resulting in poor drainage of rain and irrigation water through the green profile. A distinct topsoil layer can often be seen in sections of a green where this type of turf has been used, and it is here that water is retained.

The general advice on overcoming problems associated with topsoil turf has been to hollow-core regularly and then to top-dress, to try to effect soil exchange.

This is labour intensive, expensive, slow and disruptive to the playing surface. The results are often far from satisfactory.

Sea-washed turf

This is turf which grows naturally on the edge of river estuaries, and was popular for golf and bowling greens up until the 1980s because of its very pure and fine mix of grasses.

It is not used now, due to the fact that the soil it grows on is silt, and contains an even higher percentage of fine particles than many topsoils. Accordingly, waterlogging would be an inevitable consequence of laying sea-washed turf onto a quality imported rootzone.

Re-using old turf

Obviously this does not apply to a new build, but existing turf can be stripped off and used on a renovated green.

There are two arguments for re-using - the first is cost. It is seen to be cheaper than buying in new turf. However, the costs are often underestimated - the old turf must be lifted, laid out on plastic sheets, kept alive and re-laid.

The second argument is that by using the turf again, the new green has the same playing characteristics as other greens on the course that haven't been renovated.

This argument loses its validity when you consider that the objective of a renovation is to improve the playing surface. It could be said that a better approach would be to accept a difference in the short term, with the aim of bringing all the greens up to the same high standard as the new ones.



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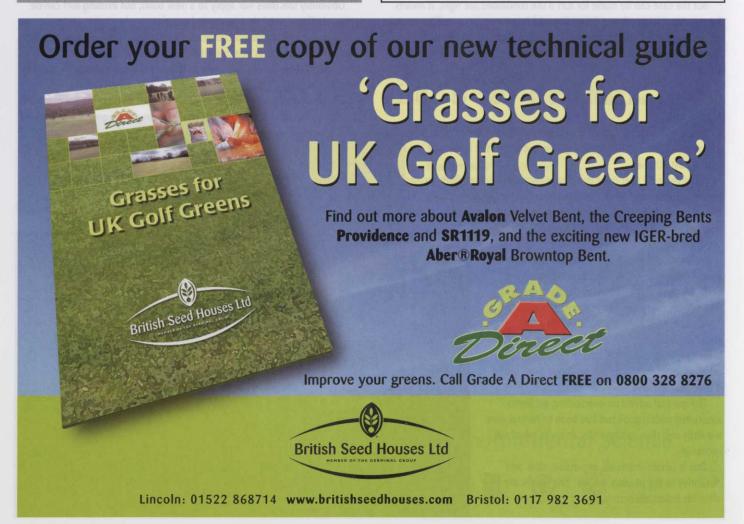
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The main argument against re-use is that it can bring problems associated with thatch (a major issue on greens), including increased disease potential.

Re-use is not always an option, particularly if the new green is larger than the old.

Washed turf

This was developed ten years ago to answer criticism associated with turf grown on topsoil, where problems arise from the material the grass is grown on. So, by washing away the topsoil, the problem of incompatibility can be eliminated.

The theory behind it is sound. The problem is that it is a product which needs careful handling and aftercare. The degree of skill, and the amount of aftercare, needed by the greenkeeper is much higher than with other sorts of turf.

This is because in the early stages after lifting, it is very fragile. It can dry out easily, and it's prone to disease because it doesn't have any of the benefits of buffering from the soil it's grown in.

There is a need for copious top-dressing and brushing to get rootzone back into the turf mat. Additionally, washed turf remains soft for at least a year after it has been laid. Some say the washing process damages the roots. It is also very susceptible to overheating in transport. The cost of washed turf lies somewhere between topsoil turf and rootzone turf.

Rootzone turf

Rootzone Turf is turf that has been grown on imported rootzone. Some believe it presents the best way of overcoming problems of incompatibility of soil types. The main objective is to match the underlying materials of the construction. By growing it on the same material the turf is to be laid on, the problem of waterlogging due to layering is overcome.

When building a green, laying anything other than rootzone turf could lead to a reduction in performance, or even failure, of the whole green at a later stage.

When you consider that a new green can cost £20-30,000 it pays to get it right first time.

In simple terms, the benefits from rootzone turf are clear. Firstly, it is very easy to use with no particular complications. Second, the green will be free-draining and firm. After all, the biggest problem on a green is waterlogging, which is normally associated with poor rootzone profiles.

HOW ROOTZONE TURF IS GROWN

Prior to establishing a crop on our nurseries, we, at Tillers, treat the soil to ensure any weed seeds in the top four inches are killed. This gives us an

exceptionally high degree of purity. Following that, the seedbeds are levelled to a billiard-table standard. A layer of rootzone is applied, using a drop spreader. Then we sow a mix of fescue and browntop bent, and irrigate immediately afterwards to give a quick, even emergence.

In terms of a 50/50 mix, this gives a much higher proportion of the smaller bent seeds than fescue seeds, because the proportion refers to distribution by weight. So the crop is predominantly bent as it matures, which is what the majority of inland golf courses are looking for.

Then we start mowing the sward, over a period of months bringing the height down gradually to 7-8ml. Once it is at 7-8ml, we will topdress it regularly. Top-dressing is brushed in after it has been applied.

The benefits of topdressing are to give a really dense, firm sward, and to reduce the build-up of thatch.

We mow, sometimes every day during the height of the growing season, with a Toro triple mower 5200, which gives us a very fine quality cut. We give it a programme of fungicides to ensure we protect the crop against take-all and other diseases. We verticut regularly too, to cut out lateral growth and stimulate dense growth.

The whole process is similar to growing-in greens on a new course, and in fact we employ an experienced Greenkeeper to manage it.



AFTERCARE

The establishment of a rootzone turf after it has been laid is like any normal turf, and considerably more straightforward than washed turf. Because it has been mown at 7-8mm, and regularly top-dressed, it can very quickly be brought into play.



BUGS AND ALL THAT - Do they work or don't they?

Stella Rixon follows up her questionaire of last month with an examination of how biologicals can be utilised.

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This is my second article following the introduction of the STRI's national survey on use of 'biologicals' (see last month). A questionnaire has been sent to many Clubs around the UK with the aim of studying the exposure of bio-products, how, why and where they are used, what percentage of users have had positive results and where they have failed.

I will discuss the findings in future articles and the results will be made publicly available. In the meantime I'd like to examine how, when and where they might be successfully employed.

Firstly, we should address the use of the word 'they'. There are a number of 'bio' products on the market, referred to in all manner of ways such as biostimulants, microbial inoculants, organic products, bacterial liquids, bio-solubles, microbial composts, etc.

Each formula contains different ingredients, some may contain fertiliser components such as nitrogen and/or organic material, they may have one type of bacteria or a whole host of microbes (bacteria and fungi) and others may not contain any microbes at all.

Therefore, it is very difficult to discuss all these products under the single heading of 'biologicals'. The first step to understanding their possible use is to know WHAT you are using and WHY. For this we need some definitions:-

MICROBIAL INOCULANT vs. BIOSTIMULANT

Microbial Inoculant - contains living microbes (bacteria or fungi), specifically chosen for their beneficial properties, cultured up and put into the product in a stable form (i.e. inactive).

There are a range of formulations on the market but it would be fair to say that most manufactured microbial products contain bacteria as they are generally easier to culture and some species can remain dormant for several years, thereby giving the product a reasonable shelf-life.

Bacillus and Pseudomonas are the most common groups used, chosen for their plant growth promoting activities and as competitors to fungal plant diseases.

A few inoculants contain fungi eg mycorrhiza fungi (discussed later). Another beneficial fungal species - Trichoderma spp. are used quite extensively in horticulture - in both lab, glasshouse and field as they can repel diseases by producing anti fungal agents (no known Trichodermaspecific commercial products available in this industry as yet).

Products may contain a single species of bacteria or fungi or several species. Remember that many subspecies or isolates also exist so one product containing Bacillus subtilis may be different from another containing Bacillus subtilis in the same way as there are several varieties of browntop bent grass, they are all Agrostis capillaris but we have Lance, Heriot, Sefton, etc all with slightly different characteristics.

Attempting to manipulate an existing microbial community in an established soil by introducing new microbes is difficult. Studies using DNA tracers on introduced bacteria have shown that the indigenous population will quite quickly out-compete the newcomers. Nevertheless, in the short-term, \sim 2-4 weeks on average, it is possible to boost numbers of the desired inoculated microbe(s).

Biostimulant – this could describe anything that boosts bacterial numbers or activity – aeration is a very effective biostimulant!

In terms of products, biostimulant usually refers to those containing organic components such as seaweed, amino acids, composts, yeast extracts, molasses and even simple sugar which are all food for microbes and can increase their numbers.

If this organic material has not been sterilised, eg chicken manure, then it will still contain naturally occurring saprophytic microbes (those that degrade dead organic matter) and therefore actively inoculates the soil too.

If you add a biostimulant to soil, you generally see an increase in microbial numbers, e.g. via a bacteria count, in response to the increase in food supply, but as this extra food is used up, the numbers will drop again unless more is added.

However, remember that a simple increase in microbial numbers may not necessarily be a good thing - a biostimulant can be utilised by many types of microbes - some beneficial, some neutral and some detrimental to plant health.

Many formulations contain both an inoculant and biostimulant eg granular microbial products with an organic base such as seaweed. Some liquid formulations will be sold as two bottles — one containing the microbes and the other a biostimulant such as liquid seaweed/molasses, etc which are designed to be tank-mixed to get rapid reproduction before application.

AND ENZYMES...

I should also mention that a few products also use enzymes. Enzymes are not actually living entities — they are protein molecules which are naturally produced by living organisms such as plants, bacteria, human digestive system, etc to catalyse chemical reactions such as breakdown of food.

In the turf industry, enzymes have a potential role in organic matter degradation/composting and thatch breakdown. Although they are non-living they are affected by some of the same factors as microbes such as temperature and pH.

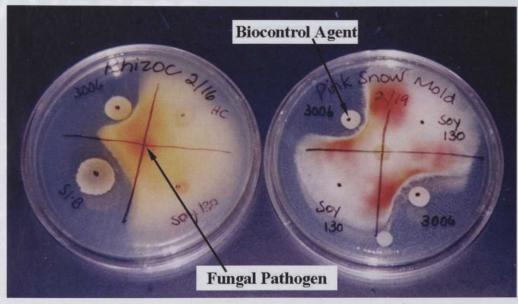
Remember they are protein molecules.... think of them like an egg; just like an egg, if you heat an enzyme its consistency changes and for an enzyme this will mean it is no longer effective — it has to keep a particular shape to be active.

Note your biological washing powder at home will have a recommended maximum temperature! I won't discuss enzymes any further as they are only found in one or two products but keep in mind that if you do come across an enzyme product to trial ask questions such as what pH will it be effective in.



Biocontrol in labatory

Picture kindly supplied by Novozymes



WHAT USE DO 'BIOLOGICALS' HAVE?

The important question is what problems are you trying to solve? You have to be clear on your objective before you can see if and how biological products may fit into that.

Sadly, there is no one 'super-bug' which can resolve all turf problems and it may be that biological products will have no benefit for your particular problems eg poor drainage. Their possible uses can broadly be separated into general turf health and biocontrol as discussed below:-

A.) GENERAL TURF HEALTH

New rootzones

New rootzones are relatively sterile; ie: little microbial content or biological activity, but they are not totally sterile unless they have recently been fumigated with a sterilant such as methyl bromide. Without good microbial activity, these rootzones are prone to three main problems:-

- 1. Leaching of nutrients –remember the grass plant takes in nitrogen predominantly in the form of nitrates and ammonia. If nitrogen is supplied in a complex form such as long-chain, slow-release molecules then in most instances the plant will not be able to access the potential nutrient available without microbial activity to convert it into a form which the plant can take up.
- 2. Thatch build-up despite the turf managers best efforts, thatch and organic matter can quickly accumulate when there is little microbial activity in the soil to break it down.
- 3. Diseases —such as Take-All Patch (Gauemannomyces graminis) which is an opportunistic fungal pathogen, quick to colonise new, sterile ground but a poor competitor against other microbes. Therefore, this disease tends to decline over time as the microbial community develops, a phenomenon known as Take-All Patch Decline, however it may revive if environmental conditions favor its growth eg a rise in pH.

Therefore, it is the aim of the turf manager to stabilise and mature the rootzone as quickly as possible to avoid the above problems. Over time the rootzone will slowly establish its own microbial community but 'biologicals' can be added to speed up this process.

In this instance, the objective is to cultivate a whole community of beneficial micro-organisms rather than just one or two types and therefore if considering an inoculant - a cocktail of microbes would be more appropriate.

It will also be as important to add some biostimulants i.e. organic material to the rootzone, as a new sand environment is pretty low in microbial food sources in the first few months, until the grass plants start producing organic matter and thatch.

There are two important points to note here:-

Firstly, take care not to overload the system with organic material as the microbes will not be able to degrade it quickly enough and a build-up will occur, resulting in problems such as reduced drainage rates and anaerobic, black-layer soil conditions.

Secondly, when combating Take All Patch it is important not to increase the pH of the rootzone which would actually encourage the disease - some biological/organic products have an alkaline pH.

It is also worth mentioning mycorrhiza fungi again here as they have been found to improve grass establishment on new rootzones - most research concentrates on bent and rye grasses.

Mycorrhizal fungi are slightly different in that they actually attach to plant roots and form a close relationship with almost all plants including ~84% of all grasses. In most cases the relationship is a symbiotic one - that is both parties benefit - the fungal hyphae (fungi equivalent to roots) extend through the soil like a web and channel nutrients and water back to the fungi and into the plant. In return the fungi get sugars from the plant - a vital source of carbon.

There are 1000s of different species of mycorrhiza but those classified as endo-mycorrhiza are the only type to associate with grasses—there would be no benefit at all to putting ectomycorrhiza on turf as they only associate with certain tree species!

MATURE SOIL ROOTZONES

Although this type of rootzone is by far the most important in terms of sports turf area, it is also the field where research has been limited and results have been the most unreliable due to the large variability in soil environments.

Can 'biologicals' benefit an old soil rootzone such as clay-based, pushup golf greens or council football pitches? If the turf suffers from very few problems and has a rootzone with good oxygen levels, a low sand content, some organic matter and a thriving population of native microbes then the answer is probably very little! "If it ain't broke, don't fix it!"

However, it may be that, although the rootzone is mature, it has become unbalanced eg through over-use of pesticides, over-use of organic matter/fertiliser or through repeated sandy top-dressings the surface has become more akin to a new sand rootzone where microbial activity is lower and hence problems such as thatch build-up occur.

In these instances, there may be some benefit to using a 'biological' as part of an integrated programme, but remember - none will resolve a problem with underlying drainage or a poor aeration programme.

The most common problem is build-up of thatch - when the rate at which the grass produces organic matter exceeds the rate at which the microbes can degrade it (or the turf manager can remove it!).



◀ Fusarium close-up

In this instance, adding an organic biostimulant may be useless and could actually worsen the situation as the existing microbes are already over-loaded with organic material/thatch which they require oxygen to degrade.

If oxygen is the limiting factor, then adding more organic material is likely to create anaerobic soil conditions. The best solution for this problem does not lie in a packet but rather in your aeration machinery!

Inoculating the thatch with additional saprophytic microbes can increase the rate at which it is degraded, provided oxygen is not limited and obviously only if the introduced microbes survive and are active for a sufficient period.

If the environment into which you are adding them is not suitable e.g. too acidic (pH of < 5), too cold (<100C) or anaerobic then results will be poor. It should also be noted that some turf managers have experienced worse Fusarium (Microdochium nivale) disease following a late application of saprophytic microbes as the flush of growth resulting from the thatch degradation has promoted soft, lush grass growth which is then more prone to disease-attack.

B.) BIOCONTROL

Biocontrol is basically about using one living organism to control another and in the turf industry the aim is to identify antagonistic microbes which can prevent the growth of disease-causing fungi and then apply that specific microbe, as you would a fungicide, to actively control the spread of a disease. This is quite easy in a laboratory situation as the control agent and fungal pathogen are in ideal conditions for their growth and in close proximity to each other in a Petri dish!

However, in the real world the soil environment varies considerably - it may be unsuitable for the growth of the control agent or simply that conditions are particularly suited to the growth of the disease-causing organism, meaning that disease pressure is high.

Under these circumstances it is difficult to get sufficient numbers of the control agent to blanket cover the soil in order to stop the growth of the disease throughout.

However, for low to medium disease-pressure, biocontrol agents can be very effective, provided they are applied very regularly (every one-two weeks) through the disease period.

They can also be used in rotation with standard chemical fungicides to ensure complete control of the disease thereby avoiding the build up of tolerances within the disease population to a single product.

One such bacterial inoculant has been registered as a pesticide against Dollar Spot in the States and to gain registration the company must have proved its efficacy and safety for use in the environment. Trials are underway in the UK to gain sufficient data to register similar 'biofungicides' but as yet none have been released.

THE ROUTE TO SUCCESS!

As you may have gathered by now, dealing with living organisms is not an exact science and there is still much we have to learn about the world of soil. As research continues, we will understand more about this complex environment and how better to manipulate it to our advantage.

However, in the meantime if you are considering trying a 'biological', first ask yourself the following questions:-

- Q. What do you want to achieve by using such a product? Can you do a trial to actually assess the results with and without?
- Q. What's in your chosen product does it actually address the problems you have? Check it cannot actually make them worse!
- Q. Is your soil environment suitable for microbes? Overly acid pH (<5) or anaerobic soil conditions are not suitable and require other cultural methods to resolve.</p>
- Q. Are there underlying problems which need addressing first e.g. drainage, improved aeration programme? Remember the majority of microbes beneficial to plant health are aerobic, that is they require oxygen.
- Q. Consider the timing of the application the soil needs to be warm for microbial activity (>50C).

Don't forget to fill out the questionaire which appeared in the May magazine and return it to Stella; whether you are a user of biological products or not.

Amenity Update

Giving Mother Nature a Helping Hand

When water ecology is healthy, we can expect to see naturally beautiful, crystal clear water, but a healthy aquatic environment is often created with just a little help. In many cases, poor pond and lake water quality is a result of an overload of organic matter, including excess nitrogen and phosphorous. This build-up serves as a food supply for algae, anaerobic bacteria, and even certain weeds. You may not only see algae bloom and scummy conditions, but you can often smell the results of poor water quality. Today, these unpleasant and unsightly conditions are easily remedied with Aquatic Management Products from Amenity Technology. Designed to combat the problem of organic matter in the water column, Amenity has developed its range of microbial pond clarifiers known as Crystal Clear. Crystal Clear is an all-natural, microbial-based product range designed for maintaining better pond and lake water quality. Designed to protect the environment, Crystal Clear products contain absolutely no synthetic chemical ingredients, but rather, it is a concentration of proprietary, naturally occurring microbes, which act to bring pond water back into ecological equilibrium. The result is reduced organic sediment and particulate in ponds reduced sludge, enhanced conditions for aquatic life, and clearer, cleaner water.

How does Crystal Clear Work?

Crystal Clear creates clean pond and lake water through biological processes. It introduces beneficial microbes, which consume the food source supporting algae and anaerobic bacteria growth. Without the food source, the unsightly and often unhealthy conditions cease to exist, and as a result, water quality improves often within two weeks of treatment. In addition to its microbial pond clarifiers, Amenity also markets a range of Super Strength Aquatic Colorants including WSB and Lake Colorant Super Strength. Both of these products are produced from the most concentrated liquid organic colorants available today. One litre of Lake Colorant Super Strength is often as concentrated as 4 litres of other brands of colorants. The Lake Colorant Super Strength is designed to impart a lustrous blue colour to lakes and



ponds. Aesthetically pleasing, the blue colorant adds a rich, tropical look to treated waters, giving them the appearance of being deep, dark and inviting bodies of water. Both products work wonderfully well in concert with the Crystal Clear range of Pond Clarifiers. Crystal Clear is available in granular form as well as easy to apply, pre-measured 'pucks'. WSB and Lake Colorant Super Strength are available in easy application bags and one litre bottles respectively. A secondary and previously unimagined use of the lake colorant products has been devised in the USA where fishery owners are using the product to deter herons, cormorants, eagles and other predatory birds from eating their valuable stocks. The birds simply cannot see the fish clearly enough to dive in and eat them! While this might not be desired in ornamental pools it is certainly an option during breeding season when the fish become vulnerable in the shallower spawning areas.



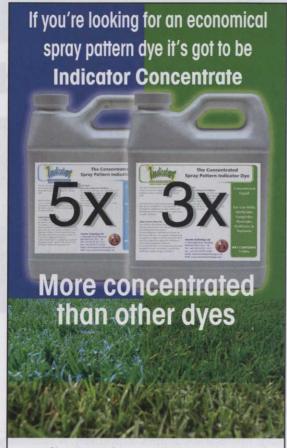


Crystal Clear Puck (tablet) is high in concentrations of bacteria and rapidly disperses once applied. Initially an application of one puck per 75m³ of water is recommended once the water temperature has reached 10°C. Application should be repeated at a rate of one puck per 375m³ every two - four weeks.



Crystal Clear is available in no-mess Water Soluble Bags (WSBs) 12 bags per tub. Application of I WSB per 125m³ of water when the water temperatures reach 10°C. Repeat application I WSB per 500m³ every two-four weeks whilst water temperatures remain consistently above 10°C.

Lake colourant is a concentrated, easy to use aquatic colourant that rapidly disperses the attractive blue colour from the surface down to give a natural looking blue in a matter of minutes. The product is totally safe environmentally and offers the added advantage of cutting the levels of photostnthesis - thus reducing the build up of submerged aquatic weeds. Lake colourant is available in water soluble bags (WSB) and the ever popular Super Strength Concentrate. The intensely concentrated solution is exceptionally economical with 100ml being the rate required for a massive 500m³ of water to be treated.



Indicator Blue and Green spray pattern dye liquid in a new concentrated formulation gives excellent coverage at an economical price of £32.50 for 1 litre bottle.

Indicator is also available in 10 litre non-concentrate formultion in Blue and Green £157.75 each, or easy to apply pre-measured Water Soluble Bags (WSBs) available in Blue only, supplied in tubs of 40 WSBs £325.00.







STOP PRES

Amenity Technology are running a special promotion on the INDICATOR Spray Pattern Dyes until June 30th. Contact your local distributor for full details.

Poor spraying could make you dye

GORDON HOLMS, Thepowerof2, talks about the use of spray pattern dyes.

Has this ever happened to you?

You spray a selective herbicide to control weeds on a turf area then continue to see them growing a few days afterward?

How about seeing streaks of dark-green and light-green grass after a liquid-fertiliser application? Mixing errors or product selection could be the cause-but sometimes the problem is not what you spray but how you spray it. Thorough, uniform coverage is essential to the success of any pesticide, fertiliser or wetting agent application. Obviously, you want to avoid situations like these as uneven turf appearance causes customers to devalue your services. Luckily, you can prevent many of these unwanted results by using a spray-pattern indicator.

In general, you add spray-pattern indicators to the spray tank in relation to the volume of water that the product label specifies. The indicator product changes the colour of the contents of the spray tank, usually to a dark blue or green. After application, this colour change is temporary, usually effective for several hours. However, some products may last up to 3-4 days or longer after application. There are also training advantages with spray-pattern indicators. They can be helpful in training new employees to use spray equipment. Simply add the colourant to a tankful of water and let the untested employee test-spray some turf areas. During this time, you can observe the effect that boom/nozzle height; ground speed and tank pressure have on output. If you don't do so, you can end up with an untrained person who basically will be "experimenting" on the job, which is potentially damaging to both the environment, and your reputation. An employee who knows how to use the equipment is a valuable asset.

A spray-pattern indicator is useful in other situations as well, such as on unfamiliar sites where the potential for spray drift is unpredictable. You typically can't determine wind patterns around trees until you've had several years of experience. Using a spray-pattern indicator can help you identify which areas are subject to influence by wind effects. While no manufacturers claim it as a direct pest-control benefit, the use of colourants when applying pesticides in areas with pest damage can cosmetically mask the damage. In these situations, you may want to consider the use of longer-residual colourants. However, as with any product you apply, the possibility of undesirable results exists. With cheaper colourants, you occasionally hear reports of undesirable staining. For example, protective clothing, irrigation heads, paths, tree trunks, and posts are all possible non-target items that cheap colourants could adversely affect. As a precaution, always use quality brand indicators that are manufactured from quality materials. All in all, spray-pattern indicators can be quite useful.

Indicators can help to improve product effectiveness, indicate potential for pesticide drift and save time and money.



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Neutralize Liquid tank cleaner is non toxic and extremely easy to use. When applied after each application it will remove pesticide, herbicide and other chemical residue. Available in 5lts £42.95



Manniplex - the nutrient superhighway

Intake is not a micronutrient. Intake is not a standard complex. Intake is not even a chelate. Intake uses Manniplex technology - a delivery system designed to deliver micronutrients to the part of the plant where growth is formed - nothing new in that? No, but unlike other, more conventional micronutrient products, Intake is produced from a unique sugar/alcohol blend that provides four significant advantages:

- · Spreading and adhesion agents for enhanced foliar contact.
- Intake has the smallest molecular size of any micronutrient carrier ensuring more initial uptake.
- Once taken into the plant, Intake is the only delivery system that directly feeds nutrients to the phloem and xylem.
- · Intake is great for use with post-applied herbicides.

With conventional micronutrient products simply spraying them onto a plant is no guarantee of the nutrients being absorbed through the foliar feeding action of the plant. The system employed in the Intake range is different - it works. Because it is smaller in its molecular structure than all other micronutrient products, Intake is able to enter the plant via the stomatal openings and transcuticular pores.

Put simply - Intake can get into a plant easier and more efficiently than any other foliar feed, it really is that simple. And yet, there is more. Once the nutrients are in the plant they have their main task to complete - the transfer into the growth forming regions; to do this the nutrients are mostly conducted through the xylem and phloem. The plant does not readily allow this to happen - these 'transport arteries' have to expend energy and time breaking down nutrients in order to let them pass into the system. This is NOT the case with Intake - the unique sugar/ alcohol employed by the Manniplex technology is seen as a native ingredient and the plant lets it straight into the phloem. Thus a 'Passport' to growth is the best way to view Intake. This passport is the single most important element of Intake - for the nutrients to do any good they have to be able to get into the plant - intake does that, few others come even close because they do not have the benefit of Manniplex technology. The Intake range comes in various formulations giving different nutrient delivery with varying levels of: calcium, nitrogen, potassium, iron, manganese, magnesium, boron, copper and zinc - all of these in differing combinations and quantities.







Foliar feeding, the next generation utilising Manniplex technology

0000



Intake Ca

Rapidly corrects Calcium deficiencies in plants, and will provide readily available Calcium with virtually no leeching.



Intake Fe

A unique chelated Iron foliar feed, designed to rapidly correct Iron deficiencies within plants.



Intake Mg

A chelated Magnesium foliar feed, designed to rapidly correct Magnesium deficiencies.



Intake Micro

Micro is unique and it provides Iron, Manganese, Magnesium and Zinc more effectively than any other micronutrient product available.



Intake Macro

Macro is a unique supplement that provides calcium and magnesium more efficiently than any other product thanks to Manniplex technology.

More in Fore



Green-Saver has developed the first ball-mark-repair tool that actually incorporates the PGA recommended repair procedures. Unlike other ball mark repair tools, this patented motion prevents tearing of the root system, which causes even more damage or scarring of the greens. There are a total of eight prongs, four that close the hole and four that lift and flatten the hole. The prongs enter the soil, flatten the ball mark and retract out of the same holes as they travel in an arc like motion. In addition, when you tap the putting surface, four prongs protrude straight out and aerate the ball mark, enabling additional air and moisture to the area, which accelerates the healing process. This unique patented tool provides the very best repairs possible for the professional maintenance staff, mowers, course marshals and even the players. Many private courses are plaing a Green-Saver on each of the par threes for the players to use during the day to help prevent scarring. "A ball mark that is not repaired properly in the first three to four hours, take three to four weeks to heal." The Green-Saver is designed to work in all types of soil environments, from the very wet and soft European turf to the dry and hard surfaces of sandy Desert turf.

What is the Green-Saver?

The Green-Saver is a revolutionary ball mark repair tool that was developed by scientists working on the NASA Space Shuttle program - science, materials and technology from the most advanced space program on earth is available for your golf course!

How is it used?

Simply place the Green-Saver over the ball mark and press the handle down. The eight prongs enter the ground around the ball mark; lifting and compressing the indentation back to a smooth and beautiful putting surface. It is impossible to do it wrong. You can fix 10 ball marks in about 30 to 40 seconds.









to repair a ball mark with a hand tool, which tears root system. Many players even turn the ball marks inside out by using too much force. For many people, it is difficult to bend over or crouch long enough to repair a ball mark properly. As a result, many don't bother or worse, they cause more damage by trying.

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Sand and Dressing

Roland Taylor sets about investigating the requirements for bunker sand and top dressing and comes up with some interesting results

BUNKER SAND

The modern greenkeeper has to thank, barren windswept terrain and animals for the development of the bunker. In the dim distant past the first courses were links courses, ones which were often situated in fairly hostile locations.

Sheep, cattle and rabbits devoured the grass cover leaving tracts of exposed sand and then through erosion, pits were formed that became traps for the wayward shot.

This added interest to the game and lead to bunkers being introduced as part of inland courses. One factor at the time, which could well have not been taken into account, was the sand that went into these bunkers - sand will not do.

The grain size defines sand and there are various theories and figures of between 0,2mm and 1.6mm are suggested. It can be composed of various

minerals but quartz makes up most of the world's sand. It is evolved by the action of water and ice on rock and is resistant to being broken down by mechanical and chemical means.

As far as bunkers are concerned there are a number of factors that make high quality sand.

These include:

- Particle size and shape
- Free draining ability
- · Standard of playing surface (Penterometre)
- · Low lime content
- Colour

Out of these, 'the standard of the playing surface' is the most important. If a ball lands on it how far does it sink into the surface (fried egg test)? The shape of the particles plays a major part in this aspect. Angular shaped particles compact close together so are more resistant to a ball penetrating them.

However, a playing surface must not be so hard that the ball bounces off it. Rounded sand is softer and a ball is likely to be buried in it. These types of particles tend to move more freely, so the playing surface and bunker face can become unstable.

Good drainage is also important. Soaking wet sand is going to cause all kinds of problems. Likewise, if it becomes contaminated with a run-off of soil after an exceptionally heavy down pour. In both instances the playability will be affected.

In the case of the soil contamination, replacement is the only answer, but this is unlikely to be practical, so it is then a case of leaving it until an appropriate time and taking any flak from players.

The STRI have laid down specifications for bunker sand and a good supplier will regular test their products to ensure they meet these parameters.

At present trials are being carried out by STRI in conjunction with WRAP (Waste Resources Action Programme) to determine the viability of using sand derived from recycled glass as an alternative for bunkers.



Bunkers are the bane of many golfers lives and likewise they may be a headache for some greenkeepers because they need a lot of attention. Finding the right quality sand and having the equipment to dress and maintain it, is a major part in winning the battle.

COMPOST TOP DRESSING

It had to come to an end - applying tons of artificial chemicals into the soil in the form of fertilisers, pesticides and weed killers.

The indications are that legislators recognise the folly and each year are implementing more stringent controls on what can and cannot be used. Increasingly man is beginning to realise that he will have to turn to natural solutions for the answers.

No golf course is the same and during the boom period when they were springing up across the country, like mushrooms, many were built on farmland with very little consideration given to the underlying soil structure, especially as far as fairways were concerned. More attention was paid to the greens.

With the plethora of courses that are now available, players have plenty of choice, so the condition of all the playing surfaces is constantly under the spotlight.

Any greenkeeper will tell you how pernickety golfers are, so maintaining high standards is a constant battle. To compound this situation significant weather changes have occurred. Long periods of drought and milder winters are becoming the norm.

This has meant courses that were built over difficult soil conditions suffer quicker than those where consideration was given from the start to drainage and root zone layers. Many of the older courses were designed and built at a time when nobody could envisage the climatic changes and the growth in the sport.

This must leave many greenkeepers in a dilemma as to how they can maintain acceptable playing surfaces. Their armoury of chemicals and fertilisers is rapidly depleting and for many, budget restrictions also curtail some of the programmes they would like to carry out.

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Area untreated against one that was treated with compost

In this type of situation, greens have the priority. So what can be done to improve the vast expanses of fairways and the tees? One answer is to investigate the possibilities of using high quality green organic compost as a regular top dressing.

At present it is relatively inexpensive, at least 50% less than a proprietary brand. Unfortunately, there is a slight problem when compost is mentioned, most people think of a heap at the bottom of the garden so it is important to point out this is not your run of the mill compost. This material is very different; it is made to the highest of standards and graded to meet the requirements of the turf industry.

The usage of organic waste in this country has been, and still is, slow on being taken up, compared to some of our Europeans partners. Germany realised the need to develop composting and its uses well over three decades ago. Only in recent years have there been any significant developments in UK, but there is still a long way to go.

At least some organisations and golf clubs are beginning to look closer at the possibilities of using recycled material, as an alternative source of both soil improver and slow release fertiliser. This is mainly as a top dressing for their fairways.

By its nature, green waste compost contains various nutrients with Nitrogen being the main one. This is generally in a slow release form and there are micro-organisms present to work in conjunction with the soils bacteria to release the nitrogen for the plants.

Potassium (potash) is also present to help produce strong plants that are less prone to disease. The addition of plenty of organic matter is beneficial to all types of soil.

It improves the soil structure, thereby the flow of water and the levels of moisture are retained for longer periods. In a nutshell, it's a natural phenomenon to recycle organic matter; it is only when man starts changing the rules that the problems start occurring.

As far as compost for top dressing is concerned, the key to the right end product, is the company carrying out the composting and the quality of material from their suppliers.

Tree Fella who is based at Shoeburyness in Essex has recently made a considerable investment in the latest composting system to ensure the highest quality product.

All the base material is sourced from reputable suppliers to ensure that it is free of unwanted foreign bodies. In some cases to ensure this, it is sorted by hand. On reaching the composting site it is shredded and placed in large covered bays.

These are closed off when full and fans introduce air into the organic matter through a series of under-floor ducts. If the unit becomes too hot, air can also be supplied via an air pipe in the roof, this ensures that the active compost remains at the required temperature.

Regular monitoring of moisture levels is carried out to maintain optimum conditions for the micro-organisms to carry out their work of breaking down the organic matter.

After four weeks the compost is removed from the bays and placed in windrows outside where the process continues. During its remaining period of maturation, the windrows are regularly turned to maintain throughout the required oxygen and temperature levels.

Where compost is for golf course use it is left to mature for 16 weeks. At this stage the compost is a rich dark colour dark peat, it is then screened to the specified size and is ready for delivery.

The team at Tree Fella recognise the importance of quality control at all stages and are BSI PAS 100 approved. This scheme, which was launched in November 2002 was

sponsored by the Waste and Resources Action Programme (WRAP) and developed by The Composting Association.

BSI PAS 100 is published by the British Standards Institute and specifies the minimum requirements for the selection of suitable input materials, the processing of the compost, quality of the final material and labelling.

The main objectives in drawing up BSI PAS 100 are to give users confidence in the end products and enable producers to differentiate their products as safe, highly reliable and with a high performance level.

Records are kept at all stages of the process and there is a minimum frequency for sampling and analyses. Recommended guidelines are given regarding temperature control and turning for the sanitization of the compost.

In 2002 ReMaDe Essex a local government funded recyclable market development project, commissioned Enviros Consulting Ltd to carry out compost trials at Lexden Woods Golf Course, Colchester.

Two plots were established, one on an extensively worn tee, the other on a fairway. These were treated with compost screened at 10mm and applied at depths of 6mm and 12mm.

Comparisons were drawn with other plots, an untreated area and one which had been top dressed with a standard sand based mixture. The trials demonstrated that the composted areas improved in colour, growth was not excessive and grass re-established itself on the worn tee more rapidly than the untreated and sand based areas.

A number of local course managers and greenkeepers were invited to a discussion and workshop regarding the trials.

From the information gathered, plus the findings of Enviros Consulting Ltd, a number of recommendations were drawn up regarding the use of compost top dressing on courses.

These include:

- Top dressing to be mainly carried out in spring and autumn when the soil is warm and moist.
- Only fine particle (10mm) compost should be used and worked into the turf.
- Application rates are up to 6mm deep on fine turfs and fairways and 12mm for tees and courser grass areas.

Neil Sjoberg, owner of Epping Golf Course, was one of those who attended the workshop. He decided compost could be the answer to his problem of 15 hectares of fairways with poor quality turf. This was largely due to the fact the course had been built on land left over from the construction of the M11, the underlying soil being heavy London clay.



If your business is Turf Management, the Golf Industry or Club House Management, make it your business to attend



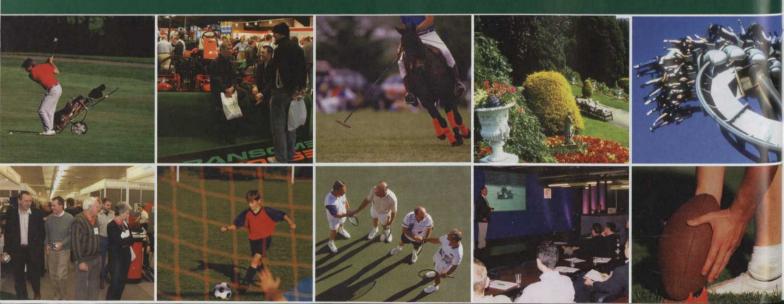
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▲ Fairway, May 2004

During March 2003, 100-tones of 10mm compost where purchased from Tree Fella and spread at the rate of 25-tonnes per hectare at a layer of 6mm thick. This disappeared in two days and within a month there were signs of a change. The grass had taken on a darker colour, was thicker and golfers were reporting that the playing surface had greatly improved. A second application was carried out in July 2003 and this spring has seen a marked improvement in all the treated fairways.

One of the main objectives of this exercise is, by regularly applying this relatively inexpensive compost, the underlying soil profile will be altered and opened up, so stronger root systems can develop and denser top growth will ensue.

Compost for turf applications is still fairly new, but as can be seen from the above, there is plenty of research taking place to increases both the standards and quality of the finished material.

In addition to the commercial sector, STRI are carrying out trials with some golf clubs regarding the viability of composting their own green matter.

In-house recycling is not new, as many greenkeepers in the past produced their own top dressing, simply because there was nothing else readily available. Modern composting methods have eliminated most of the problems that were experienced at that time.

For those course managers and green keepers interested in using composted organic waste there are some tips worth spending time following up.

- Finding the right composter is paramount. It is not the answer to simply contact a supplier. You need to ensure that the end product is made correctly and the raw materials are of the highest standard. If the composter is BSI PAS100 certified then this means the quality of the material is produced to the highest standard.
- Have a sample of the composted material analysed. STRI are one
 organisation that will carry out this work, but there are other labs
 throughout the country. The kind of information you will receive
 includes, NPK and ph levels, the presence of any contaminates plus
 overall particle size.

- If an outside contractor is used to spread the top dressing then it is important to ensure they are experienced in golf course work.
- It is worth finding out if there is a ReMaDe member in your locality.
 Contact them, as they can give you plenty of free advice and put you in touch with suitable composters. Your local authority or county council will tell you if there is one operating in your area.

Organisations that can be of help are:

- ReMade Essex (www.remadeessex.org.uk)
- WRAP (www.wrap.org.uk): the contact is Louise Hollingsworth (Organics Technical Manager).
- The Compost Association (www.compost.org.uk). This website includes a summary of the BSI PAS100 requirements for certification and will have a list of member.

It is obvious that man is messing the planet up for their children and grand children and future generations.

Over the last five decades we have virtually filled every available hole in this country with waste and built hills and small mountains of the stuff.

Millions of tonnes of inorganic fertiliser and other chemicals have been applied to the land.

Our rivers steams and lakes have been polluted with nitrates, industrial waste, effluence and the life sustaining air we breathe is heavily contaminated.

It is now slowly dawning on humanity that something has got to be done. Recycling our green matter is miniscule compared to other steps that will, over the course of the next few years, have to be taken to slow the process of destruction down.

Using organic matter is a contributory factor and after all it is only emulating what nature has been doing for millions of years.

Using recycled organic matter in the form of a top dressing will not be to everyone's liking, but legislation is already curtailing a lot of past turf management practises and alternatives will have to be sought.

Is recycled green material not worth considering?

An edited version of Nigel White's comprehensive thesis into fairyrings. Nigel is Course Manager at Scraptoft Golf Club.

HNC Managing Sports Turf. Improving an area

Over a recent spring and summer several fairy rings appeared on one of the greens at Scraptoft Golf Club. While at the moment the problem fairy rings are small there is potential for them and the problems associated with fairy rings to increase.

The maintenance procedures outlined below are carried out on the greens at Scraptoft Golf Club.

CUTTING: The greens are cut to between 3.5mm and 7mm with a ride on type mower but when ground conditions are too wet or when grass growth is minimal the greens are cut with a Certees mower. Turfgrass clippings are removed after every mowing. Verti-cutting is carried out every three to four weeks in the growing season depending on the weather and levels of play and stress on the greens.

AERATION: Typically, in any given year, an aeration programme on the greens would consist of six winter slitting, an autumn and spring half-inch hollow core followed by core removal and heavy a top dress. A deep aeration like Vertidrain or earthquake is carried out in late autumn, depending on ground conditions. No quad tining is carried out as lack of equipment and budgetary constraints inhibit this practice. All aeration procedures are carried out by contractors (apart from slitting) because at present the golf club does not own any equipment suitable for the job.

SURFACTANTS: Wetting agents are applied in granular forms just after hollow coring and before top dressing. One or two liquid applications are applied throughout the summer months and in dry spells hand watering is also carried out.

FUNGICIDES: Typically fungicide applications are carried out in spring and in autumn, usually between two and four applications a year. The applications are both curative and preventative. Products used include, carbendazim, fenarimol and chlorothalonil. These are usually for the cure or prevention of Microdochium nivale (fusarium patch disease) and occasionally anthracnose.

TOP DRESSING: Heavy dressings after Spring and Autumn hollow coring is carried out to encourage soil exchange. Light dressings applied four to six times throughout the growing season to prevent layering between the thatch and dressing. With just over one and a half hectares 9000kgs are applied per annum.

Throughout the year the greens are firm, free draining and have reasonable pace, smoothness and consistency, which are playable for the majority of the year.

They are free from weeds, worms and disease, and are composed of approximately 90% Poa anuna other grass species make up the remaining 10%. The thatch levels on the majority of the greens are between 20 and 40 millimetres.

The growth rates are even and consistent throughout the main playing season, with 100% grass coverage being the norm. However recently on the 10th green some fairy rings have appeared.

"Fairy rings appear as circles or arcs of dark green grass, often with thin or dead grass just inside or outside the rings. Fairy rings can be caused by one or more of about sixty species of soil inhibiting fungi that feed on

decaying organic matter, sometimes mushrooms appear in the rings, especially following rainfall or intensive irrigation.

"As the fungal mass grows the soil can become hydrophobic, resulting in desecration of the Turfgrass. There is no easy or inexpensive way to control this disease. The most effective measure involves stripping the sod, fumigating the soil and replanting with clean sod." (Turgeon. 1999).

"Disease is an interaction between the plant and a pathogen that disrupts the normal growth and appearance of the plant.

- Turfgrass disease development requires three components; Susceptible Turfgrass host (always present).
- · Virulent pathogen (always present).
- Conducive environment in which the host and pathogen interact (changes frequently).

Any stress (environmental or of human origin) placed on the turf will weaken it and make it more susceptible to disease development.

Concentrate on managing the environment of each individual area on the Golf Course to manage the potential problems. Most fungi are totally harmless, using only dead organic matter for growth.

These fungi are extremely important in turfgrass as decay organisms that help reduce thatch, and as competitive organisms that help provide natural biological controls. Excess thatch increases the population of fungi that potentially cause disease if the proper environmental conditions develop.

Therefore excess thatch may also create a stressful environment, especially when the thatch layer becomes hydrophobic. Roots may live in the thatch and never move into the soil layer." (Schumann, G.L. et al, 1998).

During the growing season the fairy rings have only a minor effect on the playing conditions. With the potential for the rings to increase in size and their effect on the aesthetic appearance of the green warrants an investigation into a process on how to eradicate them.

As Schumann mentions above," excess thatch may also create a stressful environment, especially when the thatch layer becomes hydrophobic". It seems that excessive thatch levels and disease go hand in hand.

Historical means of fairy ring eradication have been disruptive, expensive and even dangerous; also many of the treatments were ineffective. Following an extensive literature search new methods of fairy ring management using chemical (fungicides) control have shown to be very effective in the control of fairy rings.

Following an extensive literature search the only current and effective treatments for fairy rings was found on the Internet.

I read of two recent research studies undertaken in the States, which have successfully used azoxystrobin to treat established fairy rings. At present azoxystrobin only has a UK licence for the treatment of Microdochium nivale (fusarium patch).

Before the hydrophobic conditions associated with fairy rings occur a cultural programme of aeration and thatch reduction is seen as best practice as a preventative measure. Also substituting azoxystrobin fungicide for others

that have previously been used, I'm sure, will have a positive effect not only on the fairy rings but other diseases as well.

During the growing season the fairy rings have only a minor effect on the playing conditions. With the potential for the rings to increase in size and their effect on the aesthetic appearance of the green, warrants an investigation into a process on how to eradicate them.

Historical means of fairy ring eradication have been disruptive, expensive and even dangerous; also many of the treatments were ineffective. Following an extensive search new methods of fairy ring management using chemical (fungicides) control have shown to be very effective in the control of fairy rings.

STUDY ONE

In the first study which took place in 1997 using fungicides in the control of Localised dry spots (L.D.S.) or type 3 fairy rings and type 1 and 2 fairy rings it was noted that,

"While wetting agents can manage the systems of L.D.S. (as can cultural practices such as verti cutting, areaification, top dressing and hand watering) a fungicide such as Prostar or Heritage is necessary to kill the fungus that causes dry spot or fairy rings. (Gelernter W. 1998).

In studies previous to this one applications of fungicide have been ineffective in the management of fairy rings because traditional fungicides find it impossible to penetrate hydrophobic soils and so have no effect on the pathogen fungi.

STUDY TWO

Fidanza, M. wrote in 2002 following the World Scientific Congress of Golf at St. Andrews, Scotland a paper called 'Conventional and innovative methods for fairy ring management in turfgrass' was presented. The study took place in the States in five different locations, using conventional and innovative methods of fairy ring management between 1996 and 1999.

"Overall best fairy ring control based on creeping bent grass recovery (i.e., <5% reoccurrence in Type 1 and Type 2 fairy ring symptoms from July 1 through to August 5, 99) was observed in those plots with high-pressure injection (HPI) azoxystrobin.

Turfgrass recovery and regrowth effects were first observed five days (July 6, 1999) after treatments were applied. The visual appearance in plots treated with HPI azoxystrobin was easily observed due to the rapid turfgrass recovery and apparent resumption of growth within the treated areas." (Fidanza, M. 2002).

In the two studies the only difference was that one trial was carried out using a high-pressure injector to apply the fungicide and in the other a traditional boom sprayer was used.

It is clearly shown in Table 1 (below) that in the non-treated plot number 10 the amount of percentage localised dry spot and percentage fairy ring damage was high.

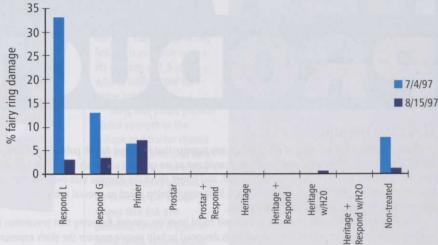
However in plot no 6 and 8 where Heritage was applied at 4oz per 1000 sq ft, the reduction in both diseases and the increase in turf quality were dramatic. In table 2 (above) the results are seen to be very marked, also worthy of note is the reduction in turf quality by using respond and primer wetting agents alone. Prostar is a fungicide that is at present not available in the UK.

▼ Table 1

v lable i			Turfgrass Quality Rating				% localised dry spot damage		% fairy ring damage		# fairy rings per plot	
Trt #	Product	Rate/1000 sq ft	5/2/97	5/30/97	7/4/97	8/15/97	7/4/97	8/15/97	7/4/97	8/15/97	7/4/97	8/15/97
1	Respond L*	3 02	7.7 ab	6.7 ab	6.3 c	6.3 bc	3.7 ab	3.3 ab	33.3 a	3.0 a	11.3 a	5.3 ab
2	Respond G*	5 lb	7.8 a	6.8 ab	7.0 b	6.2 bc	1.0 b	3.3 ab	13.3 ab	3.7 a	4.7 b	6.7 a
3	Primer 604	6 oz	7.2 b	6.9 ab	7.2 ab	6.9 bc	0.0 b	0.0 b	6.7 b	7.3 a	2.7 b	3.7 ab
4	ProStar 50 WP	6 oz	5.3 €	6.0 c	5.5 d	6.0 c	18.3 a	7.5 a	0.0 c	0.0 b	0.0 c	0.0 b
5	ProStar 50WP + Respond	6 oz + 3 oz	7.5 ab	7.2 a	7.2 ab	7.2 b	0.0 b	3.3 ab	0.0 c	0.0 b	0.0 с	0.0 b
6	Heritage	0.4 oz	7.2 b	7.0 ab	7.6 a	7.3 ab	0.0 b	1.7 b	0.0 c	0.0 b	0.0 c	0.0 b
7	Heritage + Respond	0.4 oz + 3 oz	7.8 a	6.8 ab	7.6 a	7.3 ab	0.0 b	1.7 b	0.0 c	0.0 b	0.0 с	0.0 b
8	Heritage *	0.4 oz	7.0 b	7.2 a	7.5 ab	6.9 bc	0.0 b	0.0 b	0.0 c	1.0 b	0.0 c	1.0 b
9	Heritage + Respond *	0.4 oz + 3 oz	7.7 ab	7.2 a	7.4 ab	7.5 a	0.0 b	3.3 ab	0.0 c	0.0 b	0.0 с	0.0 b
10	Non-treated		7.3 ab	6.5 bc	6.3 c	6.1 c	11.0 a	6.7 ab	8.3 b	1.7 a	5.0 b	1.7 b

▼ Table 2

Management of Type B fairy ring symptoms with fungicides and wetting agents



"The most effective way to control diseases is to stop them before plants become infected. Almost all fungicides can act on the surface of the plant to prevent fungal penetration into the leaf surface. In contrast, not all fungicides can stop the progression of disease once fungi have colonised the plant. To do so the fungicide must penetrate the plant surface and control; pathogen activity within the plant", (Agnew M. L. 1999).

The results of the trials are very clear, azoxystrobin is in the new generation of fungicides that penetrate the surface of the grass plant and control pathogens from the inside out. This action of the movement gives the fungicide a chance to work even in hydrophobic soils.

The results of the search were very interesting in that all the research carried out is very novel. Until very recently fair ring management had been somewhat hit and miss but, I'm sure that with new technologies in fungicide development the problem may become a thing of the past.

There was very little that I could find in books.

CHANGES TO MAINTENANCE PROCEDURES.

As with all management techniques the aim is to develop, encourage and sustain healthy turfgrass and to reduce hydrophobic soil conditions to prevent the problem before it arises.

A well-aerated soil with appropriate thatch levels using cultural methods is the preventative answer to fairy rings. It is my intention to make changes to the "Maintenance Policy" in 2004 including:

- Encourage the golf club to purchase a tractor-mounted aerator in order to reduce contractor costs and have the ability to carry out micro tinning during the main playing season. Micro tinning will help reduce the amount of thatch without much disruption to play.
- Increase the amount of verti-cutting from once every three to four weeks to once every two weeks.

However; these methods alone will not remove already established fairy rings. Applying azoxystrobin fungicide, instead of those which have been previously applied, may have a positive effect on the current fairy ring problem and may also inhibit any further outbreaks.

Given the research undertaken the only chemical control available in the UK for fairy ring management is azoxystrobin.

Without doubt azoxystrobin (Heritage) helps reduce the effects of fairy rings; it is even quoted on the University of Nebraska Fungicide trade names. (Watkins 1999) as a control.

However in the UK the license is only for the control of Fusarium patch in turf (see annex 3) and any attempt to control any other disease would be contrary to the Control of Substances Hazardous to Health Act 1989.

A change in the timings of fungicide applications to co-inside with hollow coring, reducing the volume of thatch with more verti cutting and increasing the volumes of top dressing will, I am sure, have a beneficial effect in the greens in general and a positive effect on the current fairy ring problem.

NEW PRODUCTS

SAFETY IN THE SUN

Starved of sunshine for much of the year is it any surprise that the great British public throw caution to the wind at the first sign of summer? Year after year we all get caught out as we gratefully soak up the sun as we participate in our favourite activities such as sailing, walking or golf, and forget about the damage that overexposure can do to our skin. But how much is too much? This is a question that is increasingly being asked as general awareness is rising regarding the detrimental effects of overexposure to the sun.

One product development company in Scotland could have the answer. Believing that prevention is better than cure, it has developed a product, called Sunsure, which is designed to help people monitor the skin's exposure to the sun. The scientifically tested optical lens is a 'magic eye' that detects when the skin has had enough sun before it starts to burn. Used in conjunction with high factor sun creams, regular checks with the device would alert those responsible for others when maximum exposure to the sun has been reached, and the time has arrived to take preventative measures.

It could be the answer everyone is looking for.

"We've found that when people monitor themselves with a Sunsure when they are in the sun they are always amazed just how quickly changes start occurring. People often don't realise just how powerful the sun is," said Managing Director, Donald Smith, of Albyn of Stonehaven.

Further information on Sunsure can be found at www.sunsure.com





GOLF TEE SIGNS

March saw the launch of a new division of RC Marble called Golf Tee Signs. The new division is devoted exclusively to supplying granite signage to the Golf and Leisure Industry.

The decision to establish the new company follows an extremely effective 12 month sales initiative to break into the golf signage market. Golf Tee Signs will be headed by Sales Executive, Dean Poynter.

"We will be looking to consolidate what has been an incredibly successful year and establish Golf Tee Signs as the leading company for granite golf signage in the UK and Europe," said Dean

RC Marble has been supplying quality granite

products since 1957. Establishing Golf Tee Signs is in recognition that the golf sector requires total commitment.

"We have to ensure that we keep pace with the rapid expansion into the golf market, in terms of production, sales and service," said Dean.

"We have already proven that there is a wealth of demand for top quality, granite signs, by competing for and winning significant contracts at prestigious installations such as the De Vere Belfry, De Vere Slayley Hall, and Wentworth Club."

Golf Tee Signs manufacture and supply a range of standard or bespoke Tee signs, point of play markers, fairway distance signs and mow-over discs as well as entrance signs, course maps and other information displays. All are made of natural granite mounted on wood, metal or stone depending on the installation and offer a colourful, natural, durable, and maintenance free solution to long term signage requirements.

For further information Tel: 01422 347127.

NEW LOOK PEDESTRIAN MOWER

Austrian- based Reform-Werke has launched the new Reform M3 range of pedestrian mowers.

The launch follows the acquisition by Reform-Werke of hydrostatic pedestrian mowers from Swiss company Bucher Automotive, a division of Bucher Industries AG. A recognised specialist in agricultural and municipal technology, Reform has revamped the range to include additional Reform features.

Offering all the benefits of innovative Reform technology - including the ability to handle steep slopes, easy handlebar steering, user-friendly operation, optimum weight distribution, ergonomically arranged levers and low centre of gravity - the Reform M3 range ideal for steep terrain. A clutch brake ensures extra safety.

One of the key advantages of the M3 range is the ability to switch into reverse gear without having to release the handlebar. A choice of three forward and three reverse gears means the mowers can be tailored according to different terrain and forage conditions and the LK and DK models also offer three forward and reverse crawler gears. The patented independent wheel steering brake clutches on the and LK models are operated by means of a series of conveniently positioned levers on the handlegrips and make for easy manoeuvrability with the minimum of effort.

Other key new features include a new rubber steering column bearing, developed in conjunction with the Vienna Technical University, which ensures the mower is safe to manoeuvre and keeps vibration to an absolute minimum. Vibrations are further damped by means of rubber bearings on the handlebar. A clamp lever enables the steering column on all



three M3 models to be adjusted to any height: while on the LK and DK models, the handlebar can also be adjusted horizontally for mowing in even the trickiest situation.

All three models feature the new ultra-large appliance connector with graduated connection pin and automatically engaging pto - making it simpler to change the appliance attachment without tools.

Prices for the Reform M3 range start at £4,962. For further information Tel: 01423 358928.

ATTILA BROCHURE LAUNCHED

Etesia has launched a new brochure which provides a comprehensive over-view of the company's full Attila range. Included is the recently launched 180cm Attila A180 all-terrain brushcutter. The special feature of this machine is its hydraulic automatic self-levelling system which ensures that the operator, engine and controls are always in the vertical position, while the floating cutting units follow the terrain's contours. This provides total comfort and safety for the user when working on banks up to 27 degrees.



The brochure also includes Attila 95cm and 85cm ride-ons, plus the AV51 pedestrian machine. Telephone: 01926 403319 for a copy.

NEW KAWASAKI BRUSHCUTTER

Kawasaki has given the UK brushcutter market a sharper cutting edge with the addition of two new models to an already impressive line-up.

Significant technical advances reinforce the Japanese manufacturer's established reputation for performance and durability within the professional and domestic markets and the two new models are expected to increase market share further.

The loop handle KBL27-A and the horn handle KBH27-A come equipped with improved, 27cc two-stroke, horizontal shaft petrol engines and will replace the existing KBL26-A and KBH26-A brushcutters within the seven model line-up at the lighter end of the range.

Among the improvements are enhanced operation and smoother start with the introduction of a new carburettor fitted with a slow idle starter device which prevents the blade turning during start-up. The start-up operation has been further improved through reduced pulling force made possible with Kawasaki's Advanced Recoil (KAR) starter which is a standard feature

A built-in spark plug, fully covered carburettor, one-piece fan housing and advanced overall shape give the two new brushcutters additional features for what has emerged in the UK as a very discerning market over recent years.

A new nylon line cutter has been designed to add to the range's user-friendly reputation while the high ergonomic standards for the benefit of operators focusing on balance, weight and vibration, inherent within the lineup, have not been compromised in any way. Full compliance with EPA and EU emission regulations as well as RFI suppression is standard throughout the range.

The new brushcutters, which are already available from official Kawasaki power product dealers, come with a two year warranty and cost £310 (loop) and £325 (horn) plus VAT respectively. Each new Kawasaki brushcutter also comes with harness and goggles.

For further information Tel: 01285 654777.



NEW FRONT LINKAGES

Opico has launched a neat front linkage and pto for the Kubota ME8200 and ME9000 Series compact tractors. The double-acting linkage is available with a lift capacity of 1.5 tons, with or without pto for either model.

Long side plates provide added strength to the linkage and tractor chassis and the link arms fold back when not in use for added manoeuvrability and safety. An eccentric pin design allows four link arm positions to suit the job in hand: fixed, semi-floating. fully floating and vertical for storage.



The front pto gearbox is capable of delivering up to 200 hp, and hence is well on top of the job with even the ME9000. It features an oil immersed multiple plate clutch using electro hydraulic "Soft Start" engagement to avoid "snatching" and possible implement damage when the pto is engaged.

Like all OPICO front linkages, it is painted in two-pack and baked to give the same quality of finish as the tractor to which it is fitted. Prices are £1456 without pto, £3484 with pto. Fitting service prices range from £140 to £380. For further information Tel: 01778 421111.

IMPROVEMENTS TO MINI EXCAVATORS

Kubota, has unveiled two significantly improved additions to its top-selling KX-3 Series of mini excavators.

The new KX41-3 and KX36-3 models are claimed to be the most powerful minis in their class, setting new standards in quality, performance, operator safety, reliability and comfort.



They are designed for the efficient handling of the broadest range of jobs and their versatility makes them ideal for many different applications and users, from civil engineering to landscaping and for owner operators to plant hire companies.

Among the numerous new features, variable displacement pumps are fitted to both machines for optimum oil flow and pressure, maximising fuel efficiency and minimising noise levels.

Smooth, simultaneous and precise control of the boom, arm, bucket and slew is achieved with Kubota's unique hydraulic system.

An 1100mm arm fitted as standard provides a maximum digging force of 7.8 kN (796 kgf). The digging force of the bucket is 15.6 kN.

It is powered by a three-cylinder Kubota D902 engine with 898cc displacement, providing economical and environmentally clean power, and weighs 1610 kg (with cab).

In addition to the KX41-3S model, which has a standard undercarriage, the KX41-3V features a variable track gauge.

Both models offer two-speed travel. The minimum travelling speed for the KX41-3S is 2.4 km/h and the maximum is 4.3 km/h. For the KX41-3V the respective speeds are 2.2 km/h and 4.0 km/h.

To minimise operator fatique, the cab provides maximum comfort by offering more legroom and a weight adjustable semi-suspension seat.

For further information Tel: 01844 214500.







Central

The first golf tournament of the season was held by courtesy of Crail Golfing Society on April 29 over the Craighead Course and with a "slight" North Sea breeze blowing it turned out to be a real test of golf even for the "good" players.

Nevertheless over 65 members and guests (club officials) enjoyed a great day both on the course and in the clubhouse.

Our sincere thanks go to everyone at Crail for the courtesy extended to us, especially Course Manager, Alan Purdie, and his staff for the excellent condition of the course, Club Secretary, Margaret Hunter for all her assistance, Margaret and her staff in the Clubhouse for keeping us fed and watered throughout the day with her first class catering.

Club Captain, Jim Elder, and Vice Captain, David Manders, who both joined us on the day, with Jim (hope the finger was ok for the golf in Portugal!) presenting our prizes to the winners following the evening meal.

Thanks also to Peter Boyd and Kevin Brunton for dealing with the cards before and after golf. To everyone who supported the raffle by donating prizes and purchasing tickets. "Thanks for your support".

Special thanks are due to the patrons of the Scottish Region for their continued support which contributes towards the provision of the prizes at our tournaments. Hope I have included everyone who helped if not SORRY!

Prize winners on the day were as follows:

Best Scratch (Daval Trophy) Brian Heggie, Aucterarder, 82; Best Nett (Greentech Trophy) Tom Comerford, Grangemouth, 74. 1st Class 1. H/cap (Toro Trophy) Michael Love, Grangemouth, 77 (bih). 1st Class 2. H/cap, Stuart Pearson, Aberdour, 77. 2nd Class 1st H/cap (Section Trophy) Mark White, St Andrews, 79. 2nd Class 2. H/cap, Ian Jarvis, Alloa, 82 (bih).

3rd Class 1. H/cap (Section Trophy) Donald Gardner, Scoonie, 76. 3rd Class 2. H/cap. Malcolm Lowe, Tower of Lethandy, 85. Stewart's Quaich. M. Love/T. Comerford, Grangemouth, 151. Patrons, Peter Taylor, STS, 75. Guests - David Manders - Crail, 79

Remember the Autumn Tournament at Downfied on September 29, there's sure to be a big entry for this one, so get your forms in early!

One new member to welcome this month and he is Jon Methven, from the Dukes Course at St Andrews, Welcome, Jon, and we hope to meet you at some of our future events.

We are in the process of renewing the Section Trophies and it's important

that all 'old' trophies are returned in order that they can be included in the history of the Section.

At the moment there appears to be one missing which is the Trade and Visitors' Trophy, and, as far as I can make out, it was last seen around 1989/90. If anyone has any idea where this trophy is could you please arrange for it to be returned to me or any Section committee member. Thanks!



John Crawford

Ayrshire

The Spring Outing hosted by Prestwick St Nicholas Golf Club was a resounding success with 30 participants. Our thanks to Club Captain, David Gilmour, and the committee for use of the course and facilities, also to Tom Hepburn for help with arranging the day, the bar and catering staff for a superb meal and refreshments and lastly to John MacLachlan and the greenstaff for providing a wonderfully conditioned course, especially in mid-

Prize winners were as follows;

Scratch Prize - Steven Kelly, Lockerbie, 69 pts; First Class: 1. Alan Forrest, Western Gailes, 36 pts; 2. John Mair, Bellshill, 35 pts; 3. Stephen Higgins, Ardeer, 35 pts; 4. Dennis Tweddell, Turnberry, 34 pts; 5. George Brown, Turnberry, 33 pts; 6. John MacLachlan, St. Nicholas, 32 pts.

Second Class: 1. Colin Smith, St. Nicholas, 38 pts; 2. Iain Barr, Largs, 31 pts; 3. Innes Tait, Lockerbie, 31 pts; 4. Richard Fulton, St. Nicholas, 30 pts; 5. Dale Norquoy, Irvine, 30 pts; 6. Martin Lothian, Turnberry, 26 pts.

Trade Prize. Derek Duthie, Aitkens.

Thanks to all who attended in particular those travelling a considerable distance. Confirmation of the Autumn outing will appear in next month's news.

The Scottish Greenkeepers ran out handsome winners in the recent Greenkeepers vs. Club Secretaries match at North Berwick Golf Club. The golf course was in great condition and what a layout! Those that have played there will know but for any who haven't, I must urge you to put it on that 'must play' list now!

That just leaves me to welcome three new members to the birthplace of the Open Section, Iain MacDonald, Largs Golf Club; Steven Kelly, Lockerbie, and Mark O'Brien, Prestwick St. Nicholas.

Any news phone me on 01292 478606. Ee ay ee ay Adios Dennis Tweddell





BIGGA NORTHERN REGION GOLF MANAGEMENT TROPHY 2004

The Golf Management Trophy event is a team event sponsored by Scotts UK Professional. It is open to golf clubs in the Northern Region, and this is the inaugural year for the event in the Northern Region.

The format is aimed at bringing together the various management elements of golf clubs with the opportunity to win equipment for the golf club plus individual prizes, and is an 18 holes Better-ball Stableford competition.

Teams comprise a greenkeeper who must be a member of BIGGA; Golf Club Secretary or Manager; Club Captain or Vice Captain and Chairman of Green or a Member of the Club Committee. The entry fee is £100 per team, which includes the golf and a meal after play.

The events for 2004 are at Teesside Golf Club on Wednesday, August 18, and Carden Park Golf Club on Monday, August 23. There are places remaining at both venues, so if you wish to enter a team from your golf club please contact Peter Larter the Regional Administrator on 01476 550115.

North Wales

After attaining his 25mts swimming badge rather late in life, Andy Peel, from Bull Bay GC, has entered in an Iron Man Competition - it starts from Amlch on Anglesey with a swim across the sea to Conwy where he then jumps on a bicycle and rides around the castle and over the bridge to the Great Orme in Llandudno. After running over the top and down the other side he will swim back to Amlch to run across the finish line. We all wish him the best of luck and hope the sharks are not very hungry on that day.

Also from the Island of Anglesey, Paul Taylor, of Henllys Hall GC, is doing a sponsored parachute jump in aid of the Cancer Ward in Bangor Hospital this will take place in July and if any of you wish to sponsor Paul he has the form





with him at the Golf Club.

The Neil Thomas Memorial Golf day will be held at Aldwark Manor on June 14 and there will be a team from North Wales attending to support this event

The North Wales vs North West match due to take place on June 9 has now been put back two weeks and greenkeepers wishing to play in the team should contact either Jeremy Hughes or Don Pemberton.

John Evans, from Carden Park, has been promoted to Head Greenkeeper on the Cheshire Course and after lots of feedback from the seminar about course matters the top three things most of you wish to learn about is 1. Human resource skills 2. Presentation skills and 3. Fertiliser and Chemical usage.

These are from filled in questionnaires of what you want from your Section.

An autumn educational programme will now be set up to include these topics - details to follow.

Also along with the golf days we are planning different days out for members and their respective partners, the first of which is going to be a trip to the 'races' at Chester. This is a night meeting and if accommodation is required afterwards (maybe you will partake of a few sherbet refreshers?) a list of B&Bs + hotels and local guest houses will be supplied.

This will be an informal outing to show everyone who comes along that there is no 'clique' within the Association. We are here for each and everyone of you to help bring

you deserve.

Being involved in a job that is open to a lot of unwanted criticism and stick from 600+ members of your golf club, is tough enough and support is there for you. All details to follow or contact one of the committee if you are interested.

greenkeeping forward and help you achieve the credit

See you at the tote.

Contact me on - acorngolf@supanet.com

Mesen Cymru

Andrew Acorn

Sheffield

What was a glorious, above average temperature, sunny April day soon turned into a typical "November" day with torrential rain and a drop in temperature of about 10 degrees. But despite that a very good day was had by all for our Spring tournament at Retford Golf Club.

Well done to those who braved the elements and battled on although I don't blame those who trudged off with cards so soggy they were almost

I had the pleasure of playing with Club Captain, Mick Paxman, his Vice Captain Geoff Bealby and an old friend of the Section and former Secretary, Ron Ullathorne, all excellent company, although the break in conditions curtailed the banter somewhat.

The course was in very good condition for the time of year and stood up to the rigours of the day very well. Well done to lan Stephens and his team. Ian has only been at Retford since last November so was somewhat thrown in at the deep end by holding this event. Good luck to him and his team for the rest of the year.

The catering staff should also be congratulated for providing us with what was an excellent meal, and to everyone else who made us feel so welcome.

I would like to thank all the trade for their generous donations to the prize tables - without your support these days it would not be a success.

I would particularly would like to thank our main sponsor on the day TT Pro Turf for their continued support. It was nice to see a member and former Captain, Seymour Harris, of my home club there to represent his great nephew James who unfortunately could not attend.

Thanks also to Peter Fell for selling the raffle tickets. I think you have just found your niche in life. Other sections take note! The members would also like to thank Gainsborough Golf Club and Ping for their generosity to the Section.

Winners on the day were 1. Stuart Piggott, 35pts; 2. Colin "I'm not playing very well" Hopper, 34pts; 3. Andy Unwin, 32pts; 4. Andy Lindley, 30pts; 5. John Lax, 30pts. Well done to all the other prize winners. The trade prize went to Stuart Clayton, 34pts. Nearest the Pin, Geoff Bealby.

Les Purdy very good friend and former trade sponsor to the Section attended the prizegiving. He told me was he glad that he came and it made him happy to see so many old faces.

Just a couple of reminders for your diary the next golf day is the Summer competition to be held at Sickleholme Golf Club on July 12, tee off at 1.30pm

and the Autumn competition on September 6 at Gainsborough Golf Club's Karsten Lakes course. Note the earlier tee off time of 12 noon.

Any news or comments please call me on 01427 614175 or 07904 121690 or you can e-mail me at geoff@wellsy1.freeserve.co.uk.

Geoff Wells



North East

In April, we had our spring competition. at Matfen Hall. On behalf of the committee I would like to thank Craig Parkinson, the Course Manager and his staff on the condition of their course. It was a pleasure to play and, considering it was early in the season, a credit to them all.

The Chairman, Russ Black, introduced BIGGA's new Chief Executive, John Pemberton, to the members and then thanked the following sponsors; Aitken's, Turf Care Supplies, Greenlay, Shorts, Border Turf Services and Scott's. Thanks once again to you all.

The leading scores were as follows. Best gross: M. Barrass, Birtley GC, 73. Best Nett: J. Hood, Alnmouth GC, 72. Assistants' Cup. R. Reid, Pridhoe GC, 75. Others: S. Quince, Parklands GC, 74; C. Parkinson, Matfen Hall GC, 75; J. Hutton, Whickham GC, 76.

Just in case you think they were high scores. We were playing off the back markers and Matfen is a damned lot harder off the white markers than the vellow ones... plus there were slick greens. Out of 35 players only one person managed to keep a six or higher off his card and the same person had five birdies.

It was good to see so many people playing. It's been a couple years since we had such a good turnout, so I hope to see you all at Morpeth for the autumn.

New sheds seem to be the in thing at the moment, as well as Slaley getting a new one, Whickham and City of Newcastle have them too.

Jimmy Richardson



Northern

I must start this month's report with the sad news of the death of Brian Birdsall, Brian was founder of County Mowers. He will be sadly missed and our thoughts and sympathies go to all his family and friends.

Welcome to the large number of new members who have joined us this

The results from the Spring tournament at Garforth were as follows: Scratch Cup: Richard Harris, 81. Division 1: 1. A. Slingsby, 71; 2. P. Thompson, 72; 3. J. Monahan, 74. Division 2: 1. I. F. Stewart, 73; 2. R. Armitage, 80; 3. C. Garnett, 82, BIH. Division 3: 1. J. Watts, 70; 2. I. Donaldson, 77; 3. J.

Baxter, 81. Trade 1: E. Carter; 2. J. Dobson. Longest Drive: R. Harris. Nearest the Pin: P. Larter

Congratulations to all the winners on the day, especially to Andy, Frank and John, who have also won their entrance fees for the National Championship at Alwoodley Golf Club later this year.

A special congratulations must go to Joe Manahan, who hit a hole-in-one on the par-3 7th. Well done Joe!

A large thank you goes to everybody at Garforth Golf Club, in particular Colin and his team for producing a fantastic course, and Anne and her team for a fabulous meal. It's just a shame the weather put a dampener on what was otherwise a great day.

As already mentioned the National Championship will this year be held at Alwoodley Golf Club, Leeds. It will be held over two days, October 4 & 5. The price is £85, to include lunch at the Golf Club each day, and dinner on the evening of the Monday.

As it's being held on one of our own Section's courses let's make an effort to have as many Section members playing as possible. An entry form was in the May edition of the magazine.

The next event will be President's Day, to be held at Bradford Golf Club on June 23. This event is being sponsored by Palmer Landscapes. If you would like to play in this event please can you let me know at least one week before the event.

Adam Speight, 16a Hodgson Fold, Myers Lane, Bradford BD2 4EB. Tel: 01274 638366

Mobile: 07739319060 Email: adam@speight1156.fslife.co.uk. Adam Speight

North West

Well now that May is here and all the excitement of the Masters in Augusta is over perhaps you can all get down to tending your own courses in the way you know best. The ground temperatures are still low and the finer grasses are still struggling, but I am sure within the next week or two your courses will be at their best.

On Tuesday, April 20, we played the Spring Tournament at Ellesmere Golf Club and had a great day. The turnout was not so good, for one reason or another, with only 16 greenkeepers and 14 guests but we had a very enjoyable day.

While ringing various greenkeepers at the back end of last year to see if they would host the Spring Tournament the response was 'I would rather not because it is too early, and the course will not be at its best'.

Well Trevor Manning agreed to host it and although it is early his course was in great condition. I know that Trevor was at least one man down prior to our visit and although he was playing himself, he was still working hard while the third game prepared to tee off.

I would like to thank Trevor and his staff for all their hard work, and also Ellesmere Golf Club for allowing us courtesy of the course. Also I thank the steward and his staff for first class meals, and keeping the bar open all day.

The results on the day are: Best Gross — Trevor Manning, Best Nett — Steve Johnson, Best Vet - Peter Hogan, Best Guest - Mike Lewis.

The Longest Drive and Nearest The Pin and Longest Drive which are sponsored by Rufford Technology were won by Steve Johnson and Neil Austin, respectively.

Thanks to our Patrons; Cheshire Turf Machinery, Acorn Equipment, R J Campey, North Staffs Irrigation, Alpha Amenity and Rufford Technology, the prize table looked splendid. Thanks also to Bill Merritt for purchasing prizes, and doing the score cards.

Head Greenkeeper on the move is Warren Bevan, he is moving from Stockport Golf Club to Lancaster Golf Club. Good luck to Warren, at least you're still in the North West Section.

The Summer Tournament is at Wigan Golf Club on Thursday 24th June. All applications to Bill Merritt, The Lodge, Beacon Park Golf Club, Beacon Lane, Dalton, Wigan, WN8 7RU, Tel: 01695 632883. Please include a cheque for £20 made payable to BIGGA N/W. No applications will be accepted after June 20.

That's it for now but you can contact me on 01517 245412 or 07791583387.

Bert Cross





GOLF MANAGEMENT TROPHY 2004

The Golf Management Trophy event is a team event sponsored by Scotts UK Professional. It is open to golf clubs in the Midland Region, and has been running successfully in the Region since 1997.

The format is aimed at bringing together the various management elements of golf clubs with the opportunity to win equipment for the golf club plus individual prizes, and is an 18 holes Better-ball Stableford competition.

Teams comprise a greenkeeper who must be a member of BIGGA; Golf Club Secretary or Manager; Club Captain or Vice Captain and Chairman of Green or a Member of the Club Committee. The entry fee is £100 per team, which includes the golf and a meal after play.

The events for 2004 are at Kirby Muxloe Golf Club on Thursday, July 22, and Dunstable Downs Golf Club on Thursday, August 12. There are a few places remaining at both venues, so if you wish to enter a team from your golf club please contact Peter Larter the Regional Administrator on 01476 550115.

Midland

As you may recall from March's notes, I threw a somewhat jovial gauntlet down to Mr Fellows regarding where he was going to get a BIGGA bow-tie? At the Spring tournament Dave, to my astonishment, was indeed sporting such an item. Respect is due, Dave. Does it spin? Perhaps beggars the question! With respect, I only jest.

Yet again our Section scores a first in fashion, and maybe gives John Pemberton food for thought in his new position as BIGGA's Chief Executive. Congratulations John, we look forward to your new ideas and continued support.

The Spring tournament was held at Trentham GC, and despite the weather's best efforts to drown us, a great day was enjoyed by all. Congratulations must go to G. Cunningham and his fine team for preparing the course so well in such difficult circumstances. There is no doubt you are the wheat, not the chaff, gentlemen. Well done.

The results of the day were; Best Gross: M. Hughes. Nett: 1. D. Fellows; 2. D. Gibbons; 3. M. Hughes; 4. A. Walker; 5. P. Rainsford. The main prize table being generously sponsored by Steve Hanlon, of Burrows. Longest Drive: G.Cunningham, Nearest the Pin. K. Swan, both kindly sponsored by W.B.B. Minerals.

As already mentioned John Pemberton is the new C.E. at BIGGA H.Q. One of his goals is to build stronger relationships between H.Q. and us, the grass root members, thus removing the "Ivory Tower" conception many have.



As part of this directive H.Q. Staff are to attend Section events when time allows. This shall hopefully add a personable aspect regarding H.Q., and also afford greater opportunity for us to give opinions directly and ask questions regarding our organisation.

This was more than admirably demonstrated by the presence of the lovely Rosie Hancher, (Sales Manager from BIGGA H.Q.), at our Spring event. We all look forward to welcoming you again in the near future Rosie.

Surely such is an excellent opportunity to present both your opinions, and enjoy our very cost effective events as members, is more than reason enough to support the Section. Also, please remember that you may present anything through me regarding our Section, or indeed BIGGA as a whole. Just call, your opinions are more than welcome, indeed they are needed ladies and gentlemen.

Yet again I'm in danger of over running our allotted lines, just room to welcome two new members. Firstly Gary Carr, from Welsh Border Golf Complex, and John Walshaw, from Izaak Walton Golf Club. I dare say John that you have a copy of the "Complete Angler". I look forward to your advice regarding our fishing event.

Until next month, favour well in whatever you do. Sean McDade

East Midlands

Congratulations should be extended this month to Mark Bindley, of Kirby Muxloe Golf Club, who has just reached 25 years of service to the club.

The Club Captain, Dave Ritchie, made a presentation to Mark on May 12 at the Spring Tournament on behalf of the club. Results will follow next month.

Next year's Autumn Tournament will be held at Cosby
Golf Club on September 7. Sorry once again for such a
short report however I do need more information from you all.
Antony Bindley

BB&O

On a bright sunny day, April 22, the BB&O's finest, including the Tartan Terminator, and most enthused golfers in the three counties gathered at Badgemore Park GC for our first Tournament this year, The Spring Qualifier.

The facilities bestowed to us by Badgemore Park were superb and we were made very welcome by all the staff. Credit to Lindsay Anderson and all the greenstaff for preparing the golf course to a high standard which was enjoyed by all who played, including Vince, from J. E. Ely, who walked away £5 lighter after his ordeal on the 18th and was later seen talking nicely to his wallet in the car park.

Tacit was the main sponsor for the day with Tim Webb presenting prizes to the winners.

The results were: Alistair Higgs, from Calcott Park GC, taking Best Gross, 75. Best Net: Michael Johnson, from Henley GC, 65; Nett 2. Calum Taylor making his first appearance from Hazelmere GC, 68; and the Tartan Terminator himself, Ross Wilson, third with 70, from Donnington Grove GC, losing out on count back after shooting a Gross 75. (he'll be back). Myles Wood, from Maidenhead GC, another first timer to our events with Net 71 picked up 4th place.

Brian Payne Jnr Burnham Beeches GC proved that four Weetabix and a bacon roll with chilli sauce really does work after securing the Longest Drive with a monster hit. Gary Tait, from Gem, picked up Nearest the Pin. The trade prize went to Gareth Aceston, with the intrepid Colin White not far behind, "chalking up" another good score.

James Moor, from Turner Groundcare, produced one of the best cricket scores ever recorded over 18 holes and got the Longest Walk with Max Fuller

scoring a Net 64 and then forgetting to hand in his card. Cost him dearly after playing so well. I am sure he won't forget next time.

Trade were in full support with Avoncrop, Gem, Turners, Sherriffs, Rigby Taylor, Banks and Amenity Technology who supported the raffle so well.

Our next golf day is just around the corner, Calcott Park GC, will play host to our next event, with Gem Professional the main sponsor for the Summer Tournament which takes place on Wednesday, June 23, with tee times starting from 1pm. Entry forms should be with you now, alternatively John Scoones can always be contacted on 07880 550 380 for special tee times and any further information.

News from around the Section - Paul Ballard, Deputy Head Greenkeeper, is leaving Mapeldurham GC after 12 years service to take up renovating and Golf course construction with J E Ely. We wish Paul the very best in his new challenging position.

Mark Day

East of England

The first golf day of the year was held on April 19 at Rutland County Golf Club. A lot of heavy overnight rain left some of our Section worrying about the course being open.

But the course was presented in fine condition so early in the season and all our thanks go to Chris Squires, the Head Greenkeeper. The golf played in excellent weather followed by an excellent meal in a very friendly club atmosphere.



The day was sponsored by Rigby Taylor who were represented by Mike Brear. Many thanks to Mike and Rigby Taylor for the very generous prizes. The results were: 1. J. Hewston, 88-17-71 (bih); 2. Russ Moody, 90-19-71; 3. Simon Bossett, 95-24-71; 4. John Jarrel, 73-1-72; 5. Les Howkins, 78-5-73. Trade Prize: Mike Brear, 87-16-71. Nearest The Pin: Steve Beverley. Longest Drive: Rob Welford.

The second golf day of the year was held on May 11 at Seacroft Golf Club in Skegness. A cool north wind was blowing which made golfing a little tricky. The course was in good condition and the day was a good opportunity to meet the new Head Greenkeeper, Tim Harris and we wish him well in his new job.

The day was sponsored by Amenity Technology who we thank for the prizes, they were represented by Graham Greenwood, of Seoul Nassau. I must thank Graham for acting as a starter and helping with cards. 1. Russ Moody, 85-19-66; 2. Richard Dexter, 74-4-70; 3. Steve Beverley, 90-20-70. Trade Prize: Steve Dickinson, 75-1-74. Longest Drive: Danny Wells. Nearest the Pin: Simon Caudwell.

The first two golf days of the year were also the Section qualifiers for the National Championship later in the year. Qualification was split into three handicap categories: 0-9, Les Howkins; 10-18, John Hewson; 19-28, Russ Moody.

Planning has already started for next years fixture list. If anyone would like to hold an event please let me know ASAP.

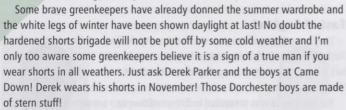
See you all soon Les Howkins

SOUTH WEST & SOUTH WALES

South Coast

Well spring has been in the air for the odd day of two. As usual a couple of warm days, sunshine and our members think that summer is here but as per usual those days are followed by the inevitable cold winds and a timely reminder that we are still very much in

I spoke to Tony Gadd today and he told me that he had three seasons in one day last week at Barton-on-Sea. Oh the life of a greenkeeper.



Anyway enough waffling, the Section has been fairly quiet for the last month but we have all been busy on our golf courses. We have seen some excellent growing conditions and even at Parkstone, have been busy keeping on top of the growth.

I have had some information from HQ about possible training courses for the autumn period, so if anybody wants to attend a specific course then please contact me so I can arrange dates etc with Ken Richardson.

I have had some interest in running a Higher Management Skills Course with Frank Newberry, so if anybody else would like to attend what would be a highly rewarding and beneficial course, then please let me know as soon as possible.

Very belated congratulations to John Pemberton who has become our new Chief Executive. John has done a superb job over some very difficult months and we are in his very capable hands. I know John will help our Association go from strength to strength. Good luck John and, once again, congratulations!

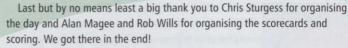
Our first tournament of the year was held at Hartley Wintney GC on May 6. The 27 hole Stableford was sponsored by Avoncrop and Vitax and we had an excellent turnout. It was great to see some new faces at a Section event.

Spencer Haines and his team had worked extremely hard in preparing the course under very trying conditions, as it had decided to turn into monsoon season the week running up to the tournament, much to their dismay. Luckily for us the weather stayed fine - there's a lot of truth in the saying 'the sun shines on the righteous'. Joe Crawley and Colin White once again put so much time and effort into the excellent prize table which was very well received, so the added bonus of a free entry to the national tournament for divisional winners was the icing on the cake!

Winners on the day were: Division 1. Alan Magee, 56pts. Division 2. Paul Cooper, 62pts. Division 3. Shaun Whittle, 60pts. Longest Drive: Brian Forder Nearest the Pin: David King

Many thanks to Hartley Wintney for their excellent hospitality and to Spencer Haines and his team for all their hard work in presenting the course so well for us. Good luck with the nouveaux cuisine in your new facilities with your new microwave!

Without sponsors we couldn't have such wonderful golf days, so many thanks to Avoncrop and Vitax. We still haven't managed to get Joe Crawley playing golf yet, but we still live in hope.



Chris left feeling very stressed after taking some much needed flak from the blue side of the Section, and reliving the missed 45 foot putt on the last for that much needed point. Well 10 pts is so much better than 9! Sorry Chris!

Section rules now. No more Pompey/Saints banter! Well only a little bit. It was very nice to see our Regional Administrator, Derek Farrington, in attendance. Derek retires at the end of the month and we wish him a happy retirement.

Our next port of call is Parkstone Golf Club on July 8 for our summer invitation tournament sponsored by Rigby Taylor and Huxleys. Your guest should be a member from your club or secretary, manager etc. Numbers are very limited so please get your details to Chris Sturgess, 40 Kinsbourne Way, Thornhill, Southampton, Hants, SO19 6HB.

Cost for the day is £18 per person which includes golf, soup and sandwiches on arrival and a BBQ after the golf.

If you have any news for next month's notes then please contact me. Telephone: 01202 661106 Mobile: 07966 386232

Email: a.mccombie@ntlworld.com

Good luck with your work. Until next month Alex McCombie

South Wales

Creoso I pawb un waith eto. Hello to all of you once again. Sorry for the lapse in recent months.

A great day was had by all at the recent golf day at Tenby Golf Club. Thanks go out to Chris for preparing a superb golf course and to the catering section for delicious food. Amtec sponsored the day and first prize was taken by Kington Golf Club.

Congratulations must be given to Cardigan Golf Club who recently won the inaugural "Welsh Golf Club of the Year" award co-run by the Welsh Golfing Union and Tower Gate Insurance. To accompany the award there was a cheque for £6,000.

I would like to urge all readers to contact me with any news that may be used in the Section.

Sorry for the limited amount of information this month I will improve next month.

Cofion cynnes/Best Wishes Kerry Jones

SOUTH EAST



East Anglia

On April 21 our merry band arrived at Newmarket Links Golf Club. Lovely day. A total of 65 turned up which is a world record for a first meeting of the year in East Anglia.

The course was in fine fettle (as were the fillies) thanks to Rob Boyce and his team. The day was sponsored by Tacit with new white flags and everything.

The Club Captain, Basil Warren, made us all very welcome on behalf of the club and Tim Webb, from Tacit, presented the prizes to the worthy few, as follows: Best Gross: Alan Sharp, 79 pts. Best Nett: Rob Boyce, 72pts, who wins Spring Shield. 0-9 Section: 1. Rob Boyce, 72 pts; 2. Alan Sharp, 73 pts; Mike Virley, 76 pts. 10-18 Section: 1.Steve Millard, 75 pts; 2. Kevin Hodges,



75 pts; 3. Neil Worger, 76 pts. 19-28 Section: 1. Robert Ransome, 73 pts; 2. Nathan Kidd, 79 pts; 3. Martin Brightwell, 80 pts. Trade and Guest: 1. Tim Webb; 2. Edward Clarkson.

Nearest the Pin were Mike Buck on the 3rd; Tim Webb on the 12th and Steve Millard on the 17th. Longest Drive was Nick Brewster (all the way from Plymouth)

The starter was Claire Kilmurry, from Vitax, and she kept smiling right to the end. The lovely lady was also counting how many of us actually reached the fairway with our first drive. Out of 65 players about 15 actually made it. Keep practising lads.

Nearly forgot the loo seat. The recipient of which was Colin Rushbrook, for wearing a nice bright shirt to brighten a dull day.

It was also the last official meeting for Derek Farrington, our regional BIGGA man. He has done us proud for the last eight years and I'm sure we shall see him in the future.

There are several trade lads and lassies to mention. The main man for the day was Tacit, other prizes were from Bartram Mowers, SISIS, Vitax, Aitkens, Toro, Scotts, Textron, Sheriff, Consultant Clarkson, Headland Turf, Ben Burgess and Thomlinson Groundcare. Thank you all for your support.

Our thanks again to Newmarket Golf Club for a lovely course and superb hospitality. By the time you read this it will have hopefully stopped raining, the grass will be growing like the clappers and your greens will be at their best, unlike now as it's freezing cold and the greens are at their worst.

A typical East Anglian spring, but every year (just after Augusta) it's "have you top dressed yet?" 'my lawn's better than your 18th!" "greens are bumpy" etc, etc.

My notice reads "Contrary to popular belief the green staff do not control the weather!" That's the polite one. The other one's much shorter - one word.

Mick Lathrope

Surrey

Firstly, a big thank you to Derek Farrington, our local contact with BIGGA for all the hard work and friendly assistance he has given to all Surrey members over the past eight years. Derek retires at the end of May but we would still like to extend to him our welcome to all our future golf events.

Derek is a member at Coombe Wood Golf Club, but after his favourite tipple of red wine, he can often be seen ending his round on the 18th green at the neighbouring Coombe Hill Golf Club and he only realises he has changed courses when he can't find his car in the car park! Good luck and good health to Derek from us all and we look forward to seeing him as our guest at Woking Golf Club.

Cuddington Golf Club was the venue of our golf event in April and as the day was warm and sunny and the course presented in excellent condition, we all had a really enjoyable competition.

The day was sponsored by Avoncrop, whose representative, Gary Ogilvie, resplendent in Saville Row suit and hand knitted tie, gave the good quality prizes to our better bandits/golfers.

These include Chris Varron, 44pts, Adie Locke, 36pts, followed by Steve Holmes and Nigel Colley. Nearest the Pin was Lee Blackburn and Longest Drive, Chris Lomas. Many thanks to Cuddington Golf Club and their Course Manager, Stuart Sheppard.

I would also like to take this opportunity to thank my playing partners, Gary, from Effingham, and Ivor, from Gatton Manor, for the encouragement they gave me after I missed a 12 inch putt for a birdie and also to remind Gary that a drive that does not reach the red tee does not require the necessary forfeit and state of exposure to be continued for the whole round.

Brian Willmott



Firstly I would like to apologise for the lack of notes in last month's issue. Graham Prosser has had to relinquish the writing of our notes due to work pressures. The committee would like to thank Graham for all his sterling work over the last 18 months.

The Northern Ireland Section would like to wish John Pemberton all the very best in his new role of Chief Executive of BIGGA. I have met John on a few occasions and have found him very helpful and approachable.

It has been a difficult period with the untimely death of Neil Thomas so I would encourage every member of BIGGA to rally around and give John and the Association staff our full support. They all work hard to improve our standing in the industry. We hope to send a team from Northern Ireland to the Neil Thomas Memorial Golf Day on June 14 at Aldwark Manor.

I organised an educational visit to the K Club, in County Kildare, at the end of March to primarily view the new Palmer Course which was opened last

We also got a chance to walk round part of the Smurfitt Course. This we all know is the venue for the 2006 Ryder Cup. Basically, I am not even going to try to describe how impressed we were with the K Club.

The new Palmer Course cost 16 million Euro to construct with the 7th hole costing a cool 2.5 million Euro. The greens are A4 Creeping Bent. The whole design and layout of both courses has to be seen to be believed. My best advice would be to go there and play both courses.

I would like to thank Gerry Byrne, Course Manager at the K Club, and his two Superintendants, Eugene Hennessey and Andy Sheehan, for giving up their time to show us round and answer all our questions. To Gerry's Secretary, Ann and the staff, who provided sandwiches and refreshments, a big thank you.

Your hospitality and kindness will not be forgotten by all who attended. Our best wishes to the K Club for the Ryder Cup in 2006.

Our Spring Golf Competition was played at Ardglass Golf Club on the Co. Down Coast on April 6. While we travelled to the venue the heavy showers were torrential but fortunately the afternoon stayed sunny but very windy.

It was good to see Peter Boyd, our Regional Administrator, over from Scotland to meet up with us again. Hope you enjoyed your visit Peter. Many thanks to our sponsor Ultra Plant Spreaders. Kevin and Cahill Gates have provided some very generous prizes. Thanks to Ardglass Golf Club and staff for their hospitality and to John Moore and his Greenstaff for having the course in such top condition so early in the year.

Results were:- 1. Michael O'Neill, Fortwilliam, 34 pts; 2. Peter Boyd, BIGGA, 32 pts; 3. Ken Henderson, Allen Park, 31 pts; 4. Gary Murphy, Silver Wood, 30 pts; 5. Noel Crawford, R.C.D, 30 pts; 6. Emmett Curran, Downpatrick, 29 pts.

Finally, I am presently forming a Greenkeeping Support Team for this year's British Seniors' Open Championship at Royal Portrush for the final two days on July 24 & 25.

A greenkeeper will accompany each match on the final two days. All members will be notified by letter. If you are interested please contact me at Allen Park on: 94429001. The next golf days will be at Edenmore Golf Club on May 25 and Galgorm Golf Club on July 6, 2pm tee times.

Kenneth Henderson



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The solution to the May Turftime Teaser was 'Thiefbeaters'. The lucky winner of the Bottled beers, Radio and separate Radio Alarm clock is Mr G Arnold from Erewash Valley Golf Club -**CONGRATULATIONS!**

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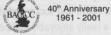
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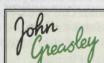
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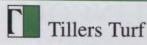
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Recruitment

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Requires a

HEAD GREENKEEPER

A long established private members club, 18 hole par 70 located 3 miles North of Leicester.

The successful applicant must be an experienced greenkeeper with relevant qualifications and the ability to supervise, motivate and train staff. Sound practical skills and a good working knowledge of turf machinery are essential.

Candidates must be proactive, flexible and hardworking with good planning, budgeting, organisational and leadership skills.

> The candidate will be expected to work with the Club's committee to deliver the highest standards of course presentation.

> Salary negotiable. Closing Date: 30th June 2004

Apply in writing with C.V. to:

The Secretary, Birstall Golf Club, Station Road, Birstall, Leicester, LE4 3BB Website: www.birstallgolfclub.co.uk

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Tel: 01536 510515 Fax: 01536 510691 Email: enquiries@boughton-loam.co.uk

NORTH HANTS GOLF CLUB

Founded 1904

Requires

DEPUTY HEAD GREENKEEPER

North Hants Golf Club is a well renowned course in North Hampshire, which is situated on the outskirts of Fleet. The course has previously held Open Pre-Qualifying, PGA and County events as well as the hosting annually of The Hampshire Hog.

This Braid/Colt designed course measures 6,472 yards, has recently undergone drainage and irrigation upgrades and is underway with a bunker refurbishment programme. A newly built greenkeepers accommodation was completed in 2002 and course machinery is regularly updated.

Applicants should ideally possess the following:

NVQ to level 3 or equivalent with PA1, PA2 and PA6

Good knowledge of Health & Safety

It would be essential to have machinery and irrigation knowledge

A good team player is required who has the ability to manage and motivate our present team of greenkeepers and to assist the Head Greenkeeper in taking the golf course forward and also to deputise for him in his absence.

A competitive salary package is offered subject to experience and qualifications, which will include a 3 bedroom cottage adjacent to the course.

Applications should be made in writing no later than Monday 14 June 2004, including your Full CV to:

Gordon Hogg, Secretary, North Hants Golf Club, Minley Road, Fleet, Hampshire GU51 1RF Or email secretary@north-hants-fleetgc.co.uk

LINCOLN GOLF CLUB

Due to an impending retirement, we are seeking an experienced

HEAD GREENKEEPER

to lead our greenkeeping team.

Lincoln Golf Club is a traditional members club founded in 1891.

The course is a championship standard par 71, with large practice area and is situated some 10 miles west of the cathedral city of Lincoln.

This is an excellent opportunity for a committed, self motivated person to take charge of a high quality golf course.

The successful candidate will have the following qualifications and abilities:

- NVQ Level 3 and spraying qualifications
- Knowledge of irrigation systems and various types of machinery used on a golf course
- Awareness of and ability to maintain Health & Safety records and standards
- Ability to produce and deliver a work programme and discuss with greens committee

Salary by negotiation.

Apply in writing with full CV to:

Mr Derek B Linton, Manager, Lincoln Golf Club, Torksey, Lincoln LN1 2EG Tel: 01427 718721 Fax: 01427 718721

Email: info@lincolngc.co.uk

Website: www.lincolngc.co.uk

FURNESS GOLF CLUB WALNEY ISLAND

Est. 1872

6363 yard Par 71 links course with its Western border adjacent to the Irish Sea.

Require a

HEAD GREENKEEPER

Applicants for the position should be self-motivated, hard working individuals prepared to accept a challenging hands on role and will possess:

- Relevant qualifications in green keeping including PA1, 2 & 6 spraying certificates. NVQ Level4 / HND in Turf Management
- · Fully compliant with current Health & Safety and COSHH regulations.
- Experienced on links greenkeeping and construction, with at least two years as deputy head greenkeeper and possessing good man management skills.
- A working knowledge of maintenance of modern golf course machinery and irrigation systems.

The successful applicant will be responsible for the management of a small team of staff, the preparation of the golf course budget and possess good communication skills.

Closing date for applications: 30th June 2004.

Please supply in writing together with a current C.V. to:

Mr Tippins, The Secretary, Furness Golf Club, Walney Island, Barrow in furness, Cumbria LA14 3LN



Due to promotion we require a

Deputy Head Greenkeeper

Located just off the B3083, between Blandford and Wimborne.
Ashley Wood Golf Club is an 18 hole undulating downland course, with a growing reputation as one of the best courses in Dorset. It is a private members club, which is renowned for its friendly atmosphere. This is a great opportunity for a committed enthusiastic and motivated Greenkeeper to join our existing team as we strive to continually improve the Golf Course and further enhance its reputation. Reporting to the Head Greenkeeper, the applicant must have a minimum of 3 years experience in all aspects of golf course maintenance with a sound knowledge of irrigation systems.

Applications including a full CV, current salary and an accompanying letter should be sent to Paul Bodle, General Manger. The Ashley Wood Golf Club, Wimborne Road, Blandford, Dorset DT11 9HN



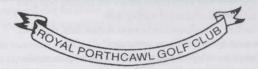
PYECOMBE GOLF CLUB

GREENKEEPER

Pyecombe Golf Club has a vacancy for an experienced greenkeeper, preferably with NVQ 2 and spraying qualifications.

Applications in writing with C.V. details please to:

Ian Bradbery, Managing Secretary, Pyecombe Golf Club, Clayton Hill, Pyecombe, Brighton BN45 7FF



Require an

QUALIFIED ASSISTANT GREENKEEPER

A vacancy has arisen for an enthusiastic, professional Greenkeeper to join our existing team on this Championship Links Course.

Please apply with C.V. to:

David Ward, Course Manager, Royal Porthcawl Golf Club, Rest Bay, Porthcawl, Mid Glamorgan CF36 3UW

ROYAL WIMBLEDON GOLF CLUB

Has immediate vacancies for

QUALIFIED ASSISTANT GREENKEEPERS

to play a major role in the Club's continuing development of its traditional design Harry Colt course. Requirements are:

- · Minimum two years post qualifying greenkeeping experience
- Qualified to at least NVQ Level 3 with PA1, PA2 and PA6 (a)
 - · Understanding of current health and safety regulations
 - · To be enthusiastic, highly motivated and committed

This is an excellent opportunity for a determined career minded person. The Club will provide on-going training, first class conditions and a highly competitive salary.

Applications in writing, or by email, with full CV to be sent to: Mr N A Heasman, Head Greenkeeper, Royal Wimbledon Golf Club, 29 Camp Road, London SW19 4UW. Email: NickH@rwgc.co.uk

CRAYTHORNE GOLF CLUB

HEAD GREENKEEPER + 1st ASSISTANT

This is an opportunity for 2 committed, enthusiastic & motivated candidates to help move forward our existing team.

The applicants should be qualified to at least NVQ 2 or its equivalent with spraying certificates, construction & machinery experience preferred.

Salaries negotiable in accordance with experience.

No accommodation available.

Application in writing, with full C.V. by 30th June 2004.

Mr. A. A. Wright, Owner & Managing Director, The Craythorne, Craythorne Road, Stratton, Burton upon Trent, Staffs DE13 0AZ www.craythorne.co.uk

HEATON MOOR GOLF CLUB

1st ASSISTANT TO THE COURSE MANAGER

We are looking for an enthusiastic, hard working and reliable Greenkeeper who must be qualified to NVQ Level 3, spraying certificates PA 1, 2 & 6 with a sound knowledge of machinery/ maintenance.

Applicants must have at least 5 years experience.

Closing date: 25 June 2004.

Apply in writing with full CV to:

Ian Somerville, Course Manager, Heaton Moor Golf Club, Mauldeth Road, Heaton Mersey, Stockport, Cheshire SK4 3NX

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Completed application forms with C.V to be returned by 23rd June 2004.

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EXPERIENCED ASSISTANT GREENKEEPER

You should be qualified to a minimum of NVQ 2 in Sports Turf Management. This is an excellent opportunity for a committed and enthusiastic individual to join our team.

We are a forward thinking golf club and the successful applicant will be encouraged to undertake further training to progress in the industry.

Salary will be dependent on qualifications and experience.

Applications should be made in writing with C.V. giving details of current/last salary to:

R.J Mason, Head Greenkeeper, Ingon Manor Golf Club, Ingon Lane, Snitterfield, nr Stratford Upon Avon, Warwickshire CV37 0QE



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HEAD GROUNDSMAN

REQUIRED FOR END OF JULY 2004

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The ability to undertake routine machine and general maintenance tasks would be an advantage.

Newly refurbished accommodation available on site (3 bed house).

Application should be sent to:

The Deputy Head (Planning & Resources), Latymer Upper School, King Street, London W6 9LR as soon as possible.

For full details please phone: 020 8741 1851; fax 020 8748 5212.

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MURCIA, SPAIN

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- · HND or higher level of qualification in Turfgrass Management
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- · Excellent supervision and training skills
- Excellent organisational and communication skills, the ability to speak Spanish will be an advantage
- Experience of highest standards of Golf course presentation preferably Nicklaus Design golf course

We offer:

- Economic remuneration in accordance with the candidate's experience and capability.
- Incorporation into an expanding dynamic company, both national and international and within a team totally committed to a magnificent project.

Closing date: 30 June 2004

Interested applicants please forward CV and recent photo to:

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Fax: +34 968 044239 E-mail: Sylvain.durval@polarisworld.com

Web: www.polarisworld.com



LONGNIDDRY GOLF CLUB LTD

Longniddry East Lothian EH32 0NL www.longniddrygolfclub.co.uk

COURSE MANAGER

Established in 1921, Longniddry Golf Club is situated 12 miles from Edinburgh city centre on the southern shore of the Firth of Forth and is part of a chain of famous East Lothian golf courses stretching from Dunbar to Royal Musselburgh.

The course was designed by Harry S Colt, with later modifications by Philip Mackenzie Ross and Donald Steele. The course is in a links location, but more parkland in nature. Longniddry has been used as a 'final qualifier' for the Open at Muirfield, has hosted the Seniors Open and more recently the British Senior Ladies Amateur Open, as well as numerous regional qualifiers.

Applicants should be self-motivated, with excellent managerial and supervisory skills, and will be required to lead and direct a staff of seven. The ability, drive and ambition to present members and guests with a course which delivers the highest standards of playability and presentation are essential requirements of the post. The successful applicant will report to the Board through the General Manager and will be part of the Management Team.

The successful applicant should ideally possess:

- · A minimum of five years experience as a Head Greenkeeper, with demonstrable management experience
- · A proven ability to prepare work programmes and to meet deadlines
- · A proven ability to prepare and work within annual budgets
- · Recognised greenkeeping / agronomy qualifications (min N/SVQ level 3 and PA2 & PA6 spraying certificates)
- · Competence with relevant Health & Safety legislation, to include Risk Assessments
- · Computer literacy and experience with report writing.

The position offers an attractive salary with additional benefits, to include health care and non-contributory pension scheme.

Please apply in writing with CV no later than June 25th, stating current salary. Interviews will be held on June 30th for successful candidates.

For information and a job description contact: Neil Robertson, General Manager, tel 01875 852141, or email secretary@longniddrygolfclub.co.uk

ROWANY GOLF CLUB

ISLE OF MAN

Require a

COURSE MANAGER

Rowany Golf Club is seeking to appoint a highly motivated professional to lead an enthusiastic and committed Greens staff.

The course is widely regarded as one of the most improved on the Island in recent years and the committee are looking to appoint a hands on individual to lead the ongoing development and improvement plans.

Reporting directly to the General Manager the Course Manager will be expected to take responsibility for all day -to- day management and maintenance of the course including the supervision and deployment of the existing Greens staff.

The successful applicant is likely to be a qualified Greenkeeper with significant experience and ideally be qualified to NVQ Level 3 (or equivalent) with PA1, PA2 & PA6 spraying certificates and should be able to prepare and work within an approved annual budget. Strong communication skills are also considered critical to the successful fulfilment of the role, as is detailed understanding of all Health and Safety issues.

Please note accommodation is not provided.

Closing date for applications: 31st July 2004.

Please apply in writing with details of experience to date together with current remuneration details (and expectations) to:-

Mr C A Corrin, General Manager, Rowany Golf Club, Port Erin, Isle of Man IM9 6LN



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FAIRFIELD GOLF & SAILING CLUB

An opportunity exists for a dynamic and highly experienced

HEAD GREENKEEPER

with a proven track record to lead the greens team at this popular,

East Manchester private Golf club.

Fairfield was established in 1892 and is located in a green oasis just 4 miles from the centre of Manchester and in the future is planning to expand its course and facilities to meet the increasing demands of the modern sports person. The successful applicant will have the opportunity to contribute significantly to the development plans of the club and be in at the start of this exciting phase in the club's history.

Salary is negotiable, dependant on experience and qualifications. Applicants should be in writing and should include a full C.V together with two references.

Letters of application to: The Manager, Fairfield Golf & Sailing Club, "Boothdale", Booth Road, Manchester M34 5QA

LLANYMYNECH GOLF CLUB DEPUTY COURSE MANAGER

The deputy course manager would work closely with the course manager and deputise in his absence.

The position would be suited to a candidate who:

- · Has a minimum of 5 years experience in greenkeeping
- Would be qualified to HNC or NVQ Level 3 with PA1, PA2 and PA6.
- · Have experience of current Health & Safety Regulations.
- · Show knowledge in machinery and irrigation maintenance.
- · Be enthusiastic, highly motivated and committed.

See us on www.llanymynechgolfclub.co.uk. Applications by 21st June.

Please apply in writing with full CV including current salary to:

Mr D Thomas, Club Secretary, Llanymynech Golf Club, Pant, Oswestry, Shropshire, SY10 8LB Tel: 01691 830983



Requires a

DEPUTY HEAD GREENKEEPER

Little Aston Golf Club was founded in 1908 and is a classical Harry Vardon designed course situated in mature park land close to the motorway network less than 4 miles from the M6.

We are a championship course and presently a regional qualifying venue for The Open Championship.

We have a vacancy for a committed enthusiastic and motivated green keeper to join our existing team as we strive to continually improve the Golf Course.

All applicants must be qualified to NVQ2 with Pa1, 2 and 6 spraying certificates with experience in maintaining golf course machinery and irrigation systems. The successful applicant must have knowledge of Health and Safety Legislation and be able to motivate other members of the team when deputizing for the Head Greenkeeper.

Further training will be provided and encouraged.

Salary negotiable depending on qualifications and experience.

Written applications with full CV by 21st June 2004 to: Glyn Ridley, Club Manager, Little Aston Golf Club, Roman Road, Streetly B74 3AN

Feature listing from June 2002

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 & County 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; Toro Student of the Year

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

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

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

December 2003; BTME & ClubHouse Preview; Downfield GC; Compact Tractors; Architecture; Bio-tech

January 2004; Ipswich GC Profile: Grass Seed; Environment Competition Awards; Utility Vehicles (sit in)

February 2004; Harrogate Review 2004; Tyneside GC; Utility Vehicles (sit on); Irrigation

March 2004; R&A Best Practice; Trentham Park GC; Drainage; Spraying

April 2004; Know your Rules; Tournament Preparation; Landmarks in Greenkeeping;

May 2004; Goodwood Club; Seed or Turf?; Biological Product Survey; Water Features; Recycling: BIGGA Environment Competition

Chairman's Column

Wallet Lighter But I'm Richer!

Well I hope you all survived the madness this Spring! In this part of the country growth has been as prolific as I can remember. Even with a staff and machine resource like that at Carden it has been a real struggle to keep on top of cutting never mind all the other detailed operations expected of us at this time.



I know many of you are not as fortunate in terms of availability of machines and labour and I can only hope that your club has been supportive of your efforts. While we do have a comparatively large staff at Carden it has been under strength in numbers, and I would like to take this opportunity to thank my team for an extraordinary effort during the last two

My Head Greenkeeper on the Cheshire course, Martin Thompson, has moved on to become a Work based trainer with Myerscough and I wish him every success for the future. He had a great input at Carden and I will miss him.

There will, no doubt be some of you out there who have less than understanding committees and members, and, I think we are all in agreement that this is where BIGGA needs to concentrate its efforts the education of Golf Clubs leadership and the Golfing public. To this end, by the time you read this, I will have made a presentation at the EGU Chair of Green/Owners seminar, on the role of the Course Manager. The EGU have in the last few years been very supportive of BIGGA and its aims and we are grateful for the platform they give us. Of course, a few BIGGA members speaking at events is not going to be enough to change things and you all have a responsibility to communicate effectively with members and colleagues. If this is an area in which you are inexperienced or are anxious about then I encourage you to speak to Ken Richardson about training opportunities in this vital skill.

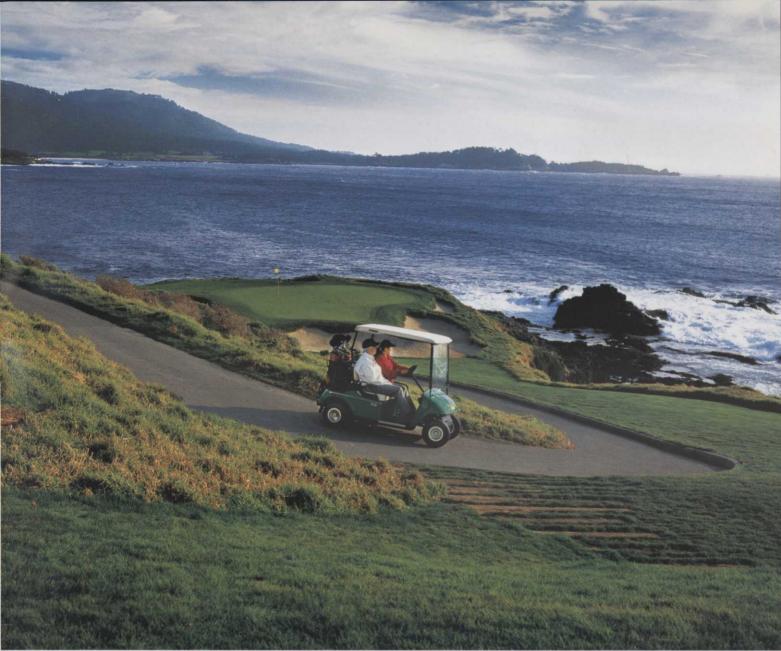
It hasn't all been pressure and doom and gloom in the last few weeks however. We have had several visitors to Carden and they have given Claire and I the opportunity to see some places we haven't been to in a while, renew old friendships and make some new ones. So, thank you to John and Judith Pemberton, Stan Zontek, Bruce Jamieson and Gordon and Marilyn Witteveen for your company. My waist line has expanded, my wallet's a little lighter but I am richer!

One of the encouraging aspects of the Associations resources at the moment is the increasing use of the forums on the website and, more importantly the content and quality of the threads. As time becomes more difficult to find for all of us, the use of this tool will grow as a means of learning, staying in touch and making new contacts. To all of you who are regulars on the forum congratulations on producing some interesting debates and thank you for your input.

The staff are busy at Headquarters preparing for the first Neil Thomas Memorial Trophy and I hope many of you will take this opportunity not only to remember Neil but also to visit BIGGA HOUSE. You will be made welcome and I am sure be impressed by the staff and their commitment to you. BTME 2005 is looking very good with full support again from our Trade partners and a few new ideas that you will learn about shortly. This year you will also see an updated and expanded directory which I'm sure will prove useful. The new staff have settled in well and its good to see the positive and progressive attitude at HQ considering the difficulties of the last 12 months. Give them time and your support and they will deliver.

In closing I wish you all the best for the Summer, don't forget your families (a reminder to myself as much as anyone!) and remember speed can kill!

Andy Campbell MG GCSA Chairman







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