GI

GREENKEEPER INTERNATIONAL

Published by the British and International Golf Greenkeepers Association £5.50 NOVEMBER 2015



The greatest Staging The hosting of the 40th Ryder Cup reviewed inside





BIGGA



u.bigga.org.uk 01347 833800 | Fax - 01347 833801

GREENKEEPER INTERNATIONAL



Production



Editorial



Advertisina -01347 833802

Midlands Plc, The Maltings, Manor , Bourne, Lincolnshire PE10 9PH 01778 391000 | Fax - 01778 394269

ibility can be assumed for unsolicited s. The right is reserved to edit sions before publication. n every care will be taken, no



WELCOME FROM BIGGA



Great boost for BTME

I always consider the changing of the clocks in late October to be the official end to the season signifying dark nights, the onset of winter and the switch to 'Conference season'. Writing this just after the warmest Halloween on record, (23.5°C in Gravesend!) I'm not quite sure the seasons are entirely going to plan but certainly it is time our attentions turn to education, conferences and of course BTME.

The launch last month of our most extensive Continue to Learn programme ever has been extremely well received, bookings are 30% up on last year and already some of the workshops are approaching capacity. Additionally the news that exhibitor bookings are going superbly, meaning we will be utilising four halls of the Harrogate International Centre once again, is very encouraging. BTME is a critical event to the turf management industry and for greenkeeping in particular. The combination of top class education, cutting edge products and services in the exhibition halls and the unique networking opportunities that Harrogate provides makes BTME an unmissable event.

On that note I am thrilled that BIGGA Partners Jacobsen, John Deere and Toro/ Lelv have committed to exhibit in 2015 albeit in a low key way and have also committed more than a year in advance to an extensive presence in 2016. This is a great show of support to the event and the industry.

Over the next few weeks the interview processes will take place to identify the members who will make up the BIGGA Delegation sponsored by Bernhard & Co to attend the Golf Industry Show and for the first time those that will join the John Deere sponsored volunteer team for the TPC at Sawgrass. As always the quality of applications is incredibly high and I know that for both initiatives the Association will be represented well. Good luck to all those who have made it through to the interview

stages, the opportunities on offer are genuinely once in a lifetime experiences that can have a profound impact on greenkeeping careers. We are grateful to our sponsors for working with us to bring such valuable opportunities to our membership.

The next few weeks will also see the inaugural series of Regional Gatherings, these events, free to BIGGA members, are aimed at providing excellent education and also an opportunity for BIGGA to engage with members at regional level to discuss the important issues facing the industry and the Association itself. I am looking forward to meeting many members across our five regions and hope you are able to attend and join the discussions.

Finally may I offer two sets of congratulations in relation to the BIGGA National Championship sponsored by Charterhouse and Kubota recently held at the stunning Liphook Golf Club. Firstly to Gordon Sangster of Cathkin Braes Golf Club who successfully defended his title with some fantastic golf against a high quality field. Equally to David Murdoch MG, course manager at Liphook, his excellent team of staff and the very many volunteers who helped out over the couple of days. The golf course was simply magnificent and despite monsoon conditions on the first day and overnight, provided an immaculate challenge for the assembled competitors.

Enjoy the read



Jim Croxton, BIGGA CEO



CONTENTS

A look at what's inside the magazine this month

NOVEMBER 2014

FEATURES

20 Gordon's at the double

The story of the BIGGA National Championship 2014

24 Getting to the root of it

Henry Bechelet and Andy Owen discuss root development

28 Sustainable bunkers

Ecobunker's Richard Allen explores sustainable bunker solutions

32 Resilience through change

Liggy Webb explores overcoming tough times

34 Greenkeeping at the Ryder Cup

The world's biggest golf tournament from a greenkeeping perspective

38 Making amends

Dr Terry Mabbett looks at soil amendment products

42 Headland's 20/20/30 approach to help fend off turf disease

How to guard against the onset of Fusarium Patch

44 What goes around comes around...

How rotary mowers can come into their own

46 Turf biology

Paul Miller's latest article

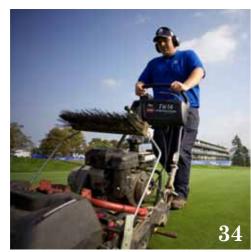
50 Revolution - a sustainable tool for greenkeepers

How Farmura is leading a revolution in water usage



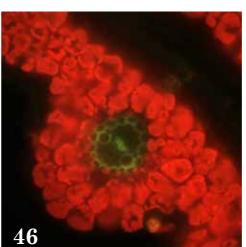


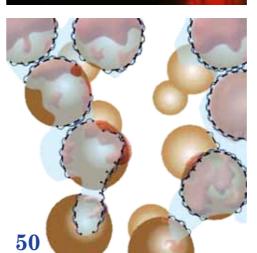












REGULARS

3 Welcome from BIGGA

8 Newsdesk

14 Membership News

6 Chairman's Word

16 L&D News

18 Industry Update

52 Around the Green

58 Buyers' Guide

60 Greenkeepers Training Committee

61 Recruitment





This month - find your Membership Handbook in the bag...



Chairman's Word

National Chairman, Chris Sealey, gives his thoughts for the month

Continue to Learn for all

I must start this month's column with a final mention of the Ryder Cup. It's the third I've been fortunate enough to attend, and it just keeps getting bigger and bigger. There are more spectators, more media and more sponsors than ever, the scale of the set up is amazing.

There is no doubt it's a completely different event to any other in golf - imagine Bubba Watson encouraging noise from the crowd at The Open and hitting his tee shot to loud cheers! In my view its high profile can only be a good thing for the sport.

The home greenkeeping team and the volunteers did a fantastic job – the weather was in their favour, but the hours remained long and the work was arduous at times.

They are a credit to the industry. The week also provided a good opportunity to spend time with Board members from the GCSAA, even though the eventual result went against them it was great to discuss greenkeeping and the

industry in general with them.

At Chippenham...yes, the grass is still growing! We still need to tweak certain parts of the course which are now unused after our renovation, and we've carried out hollow tining and topdressing.

The leaves are starting to come down so obviously there's plenty of work to be done there, and I know many of you will be in the you to progress in your career in turf same boat.

I want to encourage as many members as possible to attend the Regional Conferences, three of which take place in November

The Conferences are fantastic educational opportunities as well as a chance to network with fellow members and I urge you too show them your support where possible.

Hopefully you've already booked your slot at Continue to Learn 2015.

It's a fantastic programme, the largest ever with a varied range of speakers.

It's important to note that the entire programme – and this includes the Turf Managers' Conference – is not just for Head Greenkeepers and Course Managers.

Regardless of the level you are at. there will be a seminar, workshop or presentation for you which will help equip



"A seminar, workshop or presentation will help equip you to progress in your career in turf management"

management.

To return to the Ryder Cup, you can catch Steve Chappell's 'Ryder Cup 2014 -The Journey Continues' seminar during Continue to Learn.

Also Chris Tritabaugh, Golf Course Superintendent at Hazeltine National, host of the 2016 Ryder Cup, will be presenting a seminar - just two of the highlights in this year's programme.

On a personal level I approach BTME with slightly mixed feelings as I will begin the week as Chairman, and end it as Past Chairman! But I've thoroughly enjoyed my time in the role, and a busy and successful BTME 2015 will be the perfect way to end

Until then there is still much to do and I look forward to meeting as many of you as possible at BIGGA's various events over the next three months.

Regional Conferences

Don't forget to attend the Regional Conferences being held in November, next February and March...

South East Regional Conference -Wednesday 12 November, Colne Valley Golf Club

South West & South Wales Regional Conference - Wednesday 19 November, Somerset County Cricket Club

Midland Regional Conference - Wednesday 25 February 2015, Stonebridge Golf Club, Coventry Scotland Regional Conference -Tuesday 3 March 2015, Carnegie Conference Centre, Dunfermline

Contact details

Funding your future

The funding and assistance provided by BIGGA Partners and BIGGA Education Supporters underpins the Association's considerable investment in Continuing Professional Development and all our educational activity. They are investing in the future of BIGGA members. we are hugely grateful and urge you to show them your support













































Individual Contributors: Steven Tierney MG, Chris Lomas MG, Andrew Campbell MG CGCS, W J Rogers, Sam Langrick, Espen Bergmann, Nick Gray, Steve Dixon, Richard McGlynn, Douglas Duguid, Jaey Goodchild, Michael Beaton, David Barker, Greg Evans, Frank Newberry





NEWSDESK

The latest news from around the globe



LOOKING FORWARD TO BTME

As the clocks go back it's time to look forward to BTME 2015 as bookings continue to pour in for the superb Continue to Learn education programme and four halls of the Harrogate International Centre prepare to feature hundreds of exhibitors.

Europe's biggest turf management exhibition has also been boosted by the announcement that Jacobsen, John Deere and Toro have decided to exhibit in January. In a move which acknowledges with decision makers from the importance of BTME in the every corner of the industry. turf management calendar, the three brands are set to take small-scale stands at January's event and have also committed to return in 2016 with a full scale presence.

They join over a hundred other exhibitors from across the industry covering course design, club management, drainage, fertilisers, machinery, landscaping, spraying and much more reinforcing the message that a visit to BTME makes you a

better turf manager.

This also confirms that the thousands of expected visitors will be able to tour four halls with two main entrances when the exhibition opens on Tuesday 20 January.

BIGGA CEO Jim Croxton said: "With our largest ever Continue to Learn programme already attracting hundreds of bookings and 3,000 delegates expected. I'm very confident the halls will again be buzzing

"We are therefore delighted to welcome Jacobsen, John Deere and Toro to the exhibition. We believe strongly that the annual gathering of turf management professionals in the unique environment of Harrogate is a not to be missed event, and it's great that these companies have made the decision to

support the event in this way. "Whilst their presence at the event will be low key, it's fantastic that they will be in

attendance and have also committed to exhibiting in full force in 2016."

Gina Putnam, Director, Marketing & Communications International, Ransomes Jacobsen Ltd, said: "With the tough economic conditions being experienced throughout the UK golf industry we at Jacobsen have recently reviewed our marketing strategy and taken the decision to support BTME in 2015. Our policy going forward will alternate between small and large stands, so for 2015 we will have a limited presence, but will return in 2016 with a more significant

"This shift of policy clearly demonstrates our continuing support for BIGGA and the industry in general."

stand.

To avoid the queues preregister for BTME 2015 now by visiting BIGGA's dedicated BTME website www.btme.org. uk, and for more updates follow BIGGA on Twitter@BIGGALtd

BIGGA REGIONAL GATHERINGS CONFIRMED

The next couple of months sees the launch of the BIGGA Regional Gatherings which offer excellent educational and networking opportunities across England and Scotland - and they are all free to attend for all BIGGA members.

The Association has secured the services of a presenter from STRI for each Gathering, and Jerry Kilby from Kanda Golf who wlll be exploring working effectively with committees in his

Each day will also include an update from BIGGA on general business progress, the governance review and future plans, which will lead on to a Q&A session.

The final seminar will be 'Managing Soils for Surface Performance', with each STRI speaker discussing soil management in a holistic fashion with relevance to the physical performance of the playing

Each Gathering begins at 12.30pm with refreshments on offer before Jerry Kilby's seminar begins at 1pm. The BIGGA update is scheduled for 2.30pm before the STRI seminar begins at 3.45pm. There will be coffee breaks throughout the day.

Dates and venues below: Tuesday 11 November -Auchterarder Golf Club - Richard Windows

Thursday 20 November -Scarthingwell Golf Club - Adam

Wednesday 26 November - Stocks Golf Club - Paul Woodham

Wednesday 3 December -Taunton & Pickeridge Golf Club

Wednesday 10 December - SE - Reigate Hill Golf Club. Stella Rixon

CHIPPING SODBURY SCOOP EVERRIS TROPHY

The BIGGA Golf Management Trophy sponsored by Everris has been won by the team from Chipping Sodbury Golf Club.

Course Manager and BIGGA Board of Management member John Keenaghan joined General Manager Robin Goodey, Captain Chris Smith and Chairman Kevin Campbell as the four won with a hugely impressive score of 81 points, and claimed the first prize of a fertiliser hopper kindly donated by Everris.

Market Harborough Golf Club's team of Head Greenkeeper Chris Weir, Chairman Ken Bonser plus Steve Warren and Paul Daffen from the Greens Committee finished a point behind in second place. Third was Cardiff Golf Club with Deputy Course Manager Tony Lafrate, Chairman of Green Nick Cole, Vice Captain Niall Allen and Chairman Richard Coppock flying the flag for Wales.

The superb Frilford Heath Golf Club was the venue for the final and it turned out to be a beautiful sunny day. The format was Stableford, best two scores on each hole to count. All the finalists made it through qualifying events in each of BIGGA's five Regions held in July, August and September, with one of the main aims of the tournament to encourage excellent relationships between the senior decision makers at golf clubs across the Regions.



BTME PRESENTER ON HIS BIKE

BTME presenter Adrian Mortram geared up for Harrogate by cycling the length of the UKcalling at various golf clubs en route!

Adrian, Irrigation Designer and Consultant at Robin Hume Associates Ltd, took on the epic challenge of cycling from John O'Groats to Lands' End with wife to be Sarah.

Beginning at the end of August, the intrepid pair's first golf related stop off was at Reay Golf Club - one of Britain's most northerly courses.

Their route then took them through the likes of Thurso, Inverness, Fort William, Oban, Arran and Dumfries. They then headed across the border into Keswick, Lancaster, Warrington, Ludlow, Hereford and Bristol. Further ports of call included Symonds Yat, Glastonbury, Taunton, Dartmoor, Tavistock, St Austell and Penzance before arriving at Lands' End in the middle of September. They also popped in at Mullion Golf Club - one of the southerly clubs.

The couple were fortunate to enjoy just a single day of rain during a sunny September, and did not suffer a single puncture during their impressive 1,100 mile trek.

Adrian said: "Now I've reached 40 it was a case of proving I was as fit as when I was 30! We had no chain or spoke failures, just a couple of brake failures near Fort William and the Lake District.

"We covered an average of between 60 and 70 miles a day, fuelled by pasty stops – and as you might expect, Cornwall had the best! It was an awesome way of appreciating the varied landscapes throughout the UK at a slower and more gentile pace of life, with time to reflect on how lucky we are to live in such a splendid green and pleasant land."



ADRIAN IS PRESENTING A MEMBERS' CHOICE WORKSHOP ON MONDAY 19 JANUARY ENTITLED 'IRRIGATION SYSTEM **DESIGN AND AUDITING'. TO BOOK YOUR** PLACE VISIT WWW.BTME.ORG.UK

CGCS NEWS

Based on the Annual RPIJ figure for August 2014 the Committee for Golf Club Salaries (CGCS) have recommended an increase of 1.8% in the level of recommended Salary Scale for Golf Club

Managers and Greenkeepers.
The Committee are fully aware that 2014 has been another difficult year for club finances, but believe it is essential to at least maintain parity with the Government RPIJ figure in order to retain current staff and attract new

The CGCS recommended rates of pay package are guidelines only and the Committee is aware that they are for negotiation only and that, as in many industries, some staff will earn substantially more, while others will earn less, depending on the standing of the golf club.

The CGCS wants to emphasise that these scales are for packages' and should be treated as such, whilst taking into accoun individual and team performance and any increase in responsibility and/or qualification.

The CGCS, once again, wishes to remind clubs that they must be aware of any changes to pension or employment legislation.







Agronomic Services are the latest organisation to sign on the dotted line as a BIGGA Education Supporter.

The company – a long-standing supporter of the Association – supplies liquid fertilisers, micronutrients, biostimulants and wetting agents with the aim of ensuring turf managers produce the strongest sports turf possible all year round.

Based in Ripon in North Yorkshire, they work closely with technical advisors and agronomists to find the right solutions for turf managers and also provide and support industry training and education seminars. Their product range includes Oxy-Rush, Floratine, The Andersons, Gro-Power, and Frayssinet Group products.

Agronomic Services Managing Director Jo Snowden said: "We're delighted to be on board with BIGGA. For us this is a fantastic way of communicating with the end user, and ensuring they understand more about our ethos and how our products work.

"Education Supporter status also reaffirms our commitment to educating turf managers which is something we're increasingly involved in and hugely passionate about."

BIGGA's Business Development Manager Jill Rodham said: "This latest agreement again shows the value to organisations in agreeing to become Education Supporters. It shows how committed they are to investing in the future education and development of our members, and also enables us to work closely with them on new initiatives and projects."

Visitors to BTME will again be able to visit the Agronomic Services Stand (A1). For more on the company visit www.agronomics.co.uk and follow them on Twitter@DPSGOLF.



50 YEARS AT ELIE FOR BRIAN

Happy retirement to Brian Lawrie who is leaving The Golf House Club in Elie after an incredible 50 years of service. He joined the club as a 14-year-old trainee, and has stayed at the links course in Fife for his entire working ife, working his way up to Course Manager.

He recalled: "If you had a job in your last year of school n those days you were allowed to leave. I had worked nere in the summer before, so when they said they were looking for a greenkeeper I jumped at the opportunity. "It was either that or joinery but I loved being outside in the fresh air, so greenkeeping came first.

"I've always tried to present the course the best it could oossibly be. Of course, the weather doesn't always allow

you to do that, but I'm proud of my time here."

He added he is now looking forward to his retirement, playing some golf and gardening.

Brian was presented with a bottle of whisky by Robert Meikle on behalf of the Scottish Central Section. He has peen replaced by Stuart Brown.

COMMON JUNIPER - SMALL NATIVE CONIFER WITH A BIG DISEASE PROBLEM



Common juniper (Juniperus communis) is only one of three British native conifers (English yew and Scots pine are the others). Once very common this small conifer, which was already rare due to destruction and decline of its traditional sites, is now being pushed towards the very edge of extinction by yet another exotic disease arriving in the UK on plant imports.

Golf courses in Scotland and northernmost England (Cumbria and Northumberland/Durham) are most likely to harbour wild, native common juniper because the remaining 400 hectares of substantial juniper woodland is now concentrated in these areas.

Early in 2012 Forestry Commission (FC) announced finding Phytophthora austrocedrae in common juniper woodland at the Moor House-Upper Teesdale NNR (National Nature Reserve) and perhaps the most important remaining habitat for this increasingly rare native conifer in northern England. Reports trickling out over the next two years showed a few wider infections mostly in Scotland and Cumbria but also some in the nursery sector.

Suddenly in spring 2014 a map appeared on FC's website showing no less than 60 wider-environment outbreaks mostly in Scotland with most of the rest in Cumbria. FC claims to have no idea how the pathogen arrived in the UK. It has only previously been recorded in Chile and Argentina on Austrocedrus chilensis (Chilean cypress). Imports of species from the plant family Cupressaceae, which includes junipers and cypresses, are banned from non-EU countries.

Virtually all remaining wild common juniper sites in the UK were in natural decline before arrival of P. austrocedrae, with replanting already

well-established as part of juniper woodland restoration. Looking at the sheer number and pattern of outbreaks it now looks highly likely that contamination of these sites by non-native plant sources from within the nursery sector has played a key part in disease

occurrence and spread. Phytophthora austrocedrae has almost certainly entered the UK from Europe, probably non-native junipers and related conifer species. If so, this means the pathogen is established within the European nursery sector but as yet undifferentiated from other Phytophthora species. These may include P. ramorum and P. lateralis which like P. austrocedrae are in the same sub group (Clade 8) of the Phytophthora genus. These genetically close Phytophthora species can be difficult to distinguish from each other even when using modern molecular techniques. The

genetically closest described relative of P. austrocedrae is P. syringae which is common in the UK and causes fruit rot of

Wild common juniper and one of only three British native conifers is a small tree with a big problem. Given the scarcity of juniper woodland the 60+ outbreaks now reported might prove to be the end of Juniperus communis in the UK. Only realistic option may be to re-establish wild common juniper on some of its previously significant sites in the drier areas of southern England where the moisture loving P. austrocedrae funguslike pathogen may not be able to survive. Such sites were once plentiful especially on chalk and limestone as evidenced by the wealth of 'juniper place names' still existing to this day and notably 'Juniper Hill' on the North Downs in Surrey.

Dr Terry Mabbett

NICK PARK MEMORIAL GOLF TOURNAMENT

took place at Temple Golf Club in Berkshire on September 29.

Friends of Nick, supporters of the 'Campaign for Real Golf' and Temple members gathered to remember Nick and play a Temple course close to the Willie Park original design and length, with a restricted distance ball.

Prior to play Malcolm Peake, the tournament organiser, Co-Founder of REAL and a member of Temple, reminded everyone what the day stood for. To remember Nick and all that

The Nick Park Memorial Tournament he had achieved - as a great friend to many, an expert on all matters relating to the golf course, a recreational golfer, fine fisherman and someone who appreciated the finer things in life.

Scoring was remarkably good with over half of the field recording 30pts or more. Jill Dean won the Ladies' event with 29 points with Stig Backen claiming the Mens' prize with 38. Thanks to both Jean and Nan Park for providing the prizes.

For more details on the campaign visit www.realgolfcampaign.org







BIGGA's South West & South Wales Regional Administrator Tracey Harvey has presented this year's Photo Competition winner with his prize of an iPad.

Jon Wood, Course Manager at Trevose Golf Club, was

revealed as the winner in last month's GI

Jon said: "I was delighted to win the iPad, it's been a busy time so my young son has been using it more than me so far!"

Jon also wins a framed print of his picture.

NORTH EAST SECTION AT ALNMOUTH



The BIGGA North East Section Autumn Tournament took place on a beautiful sunny October day at Alnmouth Golf Club. Jim Storey and his team had prepared their usual high standard course to challenge the likes of Jack Friar returning from Liphook.

With some excellent scores Jim a score of 76 (Par 71), Jack Friar

won the Stableford with 37 Points, Mark Linsley was runner up with 34 Points and Colin Donaldson in third place with 33 Points.

A great day and thanks go to all the sponsors for 2014 (Rigby Taylor, Rickerbys, TSL, Lloyds, Shorts of Whitburn), to Alnmouth Golf Club for excellent hospitality Storey won the Gross Trophy with and course presentation and to all who attended.



MEMBER SWIMS THE SOLENT

A BIGGA member took the plunge recently when he swum the freezing cold Solent for charity - despite not being able to swim months before!

Kevin Hensman, greenkeeper at Rowlands Castle Golf Club, had to take lessons before the 4.5 mile challenge, with the aim of reaching the Isle of Wight.

It was all in aid of the Oakley Waterman Caravan Fund. Six-year-old Oakley died after suffering from a rare cancer, and his final wish was for a caravan to be built to allow other children suffering from life-threatening illnesses could use it for a break from hospital.

Kevin joined 22 other swimmers including greenkeeper colleague Jim Fancey for the swim. He takes up the story.

Kevin said: "22 swimmers, 22 kayakers, a fishing boat and the Gosport Ferry came along for the day. The ferry also held the family and friends, some of which had to take a day off work just to see us!

"All we had to do was swim across...forgetting the fact that one of the largest container ships in the world was just leaving Southampton and heading our way. The stomach churning nerves before we got into the water for me was too much. I couldn't look anyone in the eye, including Jim!

"At 8:45am we started, I was in the slow group and Jim was in the fast group, 10 minutes behind. The aim was to meet at the first checkpoint at the same time. The first mile swim seemed to take forever but finally everyone made it.

"Here we had to wait for clearance from the harbour master to continue across the shipping lane. We waited for about 10 minutes and quickly became cold. Fortunately we got the all clear and entered new territory, further out than any of us had been on our training.

"The final leg was emotional. Everyone's hard work had paid off. With about 200 meters to go the swimmers stopped and gathered together.

"We congratulated the support team with a round of applause and then left them for the final swim. I swam until my hands touched the sand beneath. All the swimmers stopped and congratulated each other before walking through the shallow beach to the warm welcome of supporters.

"Jim and I celebrated with a beer, but just one mind. It was maintenance week and we had a hard days work to look forward to the next day!"

To date, Kevin and Jim have raised £1,050. The whole group have raised £12,250 and its still rising! Donations are still being accepted on Kevin's Just Giving page: www.justgiving.com/JamesandKevinswim



YOUNG GUNS IN NORTH EAST

The BIGGA North East Section is benefitting from the input of several younger greenkeepers with a series of education camps also being planned.

Stuart Imeson (who was profiled in April's Greenkeeper International), became Head Greenkeeper at Dunstanburgh Castle Golf Club aged just 18. Now 23, Stuart is Education Officer on the North East Committee and is hosting the first education camp on Bunker Building.

Assistants are invited to spend the week at Dunstanburgh's stunning links, with accommodation and evening meal provided, learning all about the design, construction and maintenance of bunkers on the course. If interested please emai BIGGA's Northern Regional Administrator Sandra Raper on Sandra@bigga.co.uk.

Jack Friar is just 19 and has ust been appointed the new Head Greenkeeper at Percy Wood Golf & Country Retreat on a trial basis. The average age of the greenkeeper members of the BIGGA North East Section is now just 29, the committee are young and progressive and constantly find ways to bring greenkeepers together to learn and encourage each other. To find out what you can do for your Section contact your Section Secretary – all the details are in the new handbook.



VOLVO VOLUNTEERS AT THE LONDON CLUB

A team of greenkeeping volunteers recently helped out in testing conditions during a successful Volvo World Match Play at the London Club.

The 19-strong team were on site as the first heavy rain for several weeks hit the course, particularly during the practice day.

But thanks to the superb efforts of the home greenkeeping team, aided by the volunteers, the tournament (won by Mikko Ilonen) was a great success with the greens stimping at over 11 feet despite the rain.

Golf Courses Estate Manager and former BIGGA Chairman Peter Todd said: "After having one of the driest Septembers on record and praying for rain, we should have been careful what we wished for! We went from hand watering greens one month to pumping bunkers the next.

"From 1 October to championship Sunday on the 19th we had 131mm of rainfall, 45mm of which fell on practice day alone. Monday of tournament week was basically used to put back together all the bunkers, using four pumps, two sand pros and a lot of manpower.

"Working closely with Eddie Adams, Senior Consultant for the European Tour throughout the week, we mapped out a daily plan based on our knowledge of the course and the changeable weather forecast. It was imperative to grab every opportunity to mow with the short weather windows and day length.

"Despite the adverse weather, our greens

were the real stars, running at a consistent 11 feet plus on the stimpmeter all week.

"The satisfaction for the team came from the very positive feedback from the pros and TV commentators. They were very complimentary about the consistency across the course, in particular the putting surfaces.

"The volunteers were involved with mowing greens, tees, preparing bunkers and a whole host of essential tasks that made the event such a success. It was great to meet so many new faces and share the tournament experience with them. All the volunteers added to the camaraderie, lifting team spirits to a real high and we can't thank them enough for all their efforts."

Tournament support was provided by Lely UK, Bernhard and Co. and Double A, which was very much appreciated by the club and the tournament organisers. Events of this scale would not run so smoothly without the additional equipment and technical support provided by these club suppliers, which was very much appreciated by everyone at The London Club.

Peter and all the team would like to thank all the volunteers for their fantastic efforts: Wesley Lenihan, Martyn Fuller, Keith Murray, Adam White, Chris Kibble, Michael Long, Dan Fisher, Aaron Launchbury, Christian Pink, Oliver Hook, Martin Brown, Joe Kelly, George Little, Jon Cary, Simon Hutton, Steve Ellis, Paul Massey, Anthony Stockwell and Ross



Membership

News

The latest news from BIGGA

WE NEED YOU!

Have you taken advantage of BIGGA Xtra Benefits? Have you won a golf competition, got a charity event to promote or have an so contact steve.castle@bigga. unusual and interesting hobby? We're always looking to feature

BIGGA members in the magazine, co.uk and you could find yourself in the next issue of GI.







TAKE ADVANTAGE OF XTRA BENEFITS

This month it's time for another push for the BIGGA Xtra Benefits scheme which more and more members are taking advantage of-don't miss out!

One of the many BIGGA members to benefit from the scheme, which was launched on the opening day of BTME 2014, is Kevin Moore, Head Greenkeeper at Whitwood Golf Club in West Yorkshire.

He's used the benefits in a variety of ways.

He said: "I've used the benefits for shopping cards that give me a 5% cashback for every amount deposited, and I've also used the cinema vouchers as well.

"This is just one part of the benefits of BIGGA membership, and in my opinion the benefits of being a BIGGA member are now are greater than previously,

and this can only strengthen the greenkeeping industry as a whole."

BIGGA are working hard in partnership with benefit management specialists Parliament Hill to provide the very best offers, discounts and bonuses

A spokesman for Parliament Hill said: "We realise that it's becoming increasingly easy to find 'competitive' deals and offers through work or on the

"That's why the collective buying power of the membership has been harnessed to bring you, wherever possible, prices which we believe are very hard to beat."

You'll find that more benefits will bear a price promise stamp:

• Provider Price Promise - This stamp means that you should be getting the best possible price

/ deal that this company makes available.

• National Price Promise - This stamp means that you should be getting the best possible price / deal in the UK, for this product or

• Free Price Promise – This stamps means that you will get the service for free

"Although there will of course be exceptions, we intend to ensure that our members can always access the very best prices available.

And if we're ever wrong, we'll do our best to make sure that you end up with the best rate AND something extra in recognition of your time.

(Terms and conditions apply on a written like-for-like basis).

Please try these benefits out and tell us what you think!"



zwitter 🐿

BIGGA Regional Offices

07776 242120



Roger Butler 07525 593 359



Olive Osgood 01737 819343 07841 948410

South Wales Tracey Harvey 07841 948110

OTHER USEFUL NUMBERS

(Full Members only)

Personal Accident Helpline

Greenkeepers Legal

ww.arclegal.co.uk/carefirst



For the best value on Ransomes Jacobsen Pre-Owned equipment, please visit

www.ransomestrader.com

Factory Rebuilt

Ransomes Jacobsen's Certified Pre-Owned equipment is completely rebuilt at our Ipswich manufacturing facility using the same OEM parts, factory assemblers and technicians we use on our standard equipment lines

Factory Inspected

Every piece of Certified Pre-Owned machinery is given up to a 400-point inspection to ensure you get the highest-quality machine possible

Factory Backed

All Ransomes Jacobsen Certified Pre-Owned equipment comes with a one year factory warranty giving you peace of mind that your investment is fully protected



GI/CPO/11/2014

Point of Play





CONTACT EAGLE FOR MORE INFORMATION

t + 44 (0)1883 344244 e info@eagle.uk.com w www.eagle.uk.com



Manufactured in the UK at the Eagle Plant

Hardwood from **£225** EaglePlex from £179 (+ Delivery and VAT)





The latest from the Learning and Development department at BIGGA

Learning & Development News has the latest updates on CPD and everything related to greenkeeper education

and training, supported by our BIGGA Partners, BIGGA **Education Supporters and Individual Contributors –**

funding your future. Contact the Learning & Development team at BIGGA House for more information.





















































Individual Contributors: Steven Tierney MG, Chris Lomas MG, Andrew Campbell MG CGCS, W J Rogers, Sam Langrick, Espen Bergmann, Nick Gray, Steve Dixon, Richard McGlynn, Douglas Duguid, Jaey Goodchild, Michael Beaton, David Barker, Greg Evans, Frank

He said: "Seeing presentations from speakers who are right at the top of industry can only help my career, ultimately I want to work my way up to be a Course Manager one day and I think attending these sort of educational events gives me a head start.

IMPROVE YOUR CAREER PROSPECTS

topics as diverse as soil properties,

customer service awareness,

matter management and water

change resilience, organic

conservation!

AT CONTINUE TO LEARN

"You can use any aspect of the Continue to Learn programme to your advantage. There were so many I was interested in attending, from ecology to grass composition, but I've decided to go to the 'Mathematics for Modern Greenkeepers' Workshop. This is an area that I know I need to work on so it's ideal for me to develop my

Don't forget that there are many

Seminars which are completely free to attend. Turn to the vellow section of the Continue to Learn booklet which was sent to all members alongside October's issue of Greenkeeper International. All you have to do is pre-book

your spot then get yourself to

Harrogate!

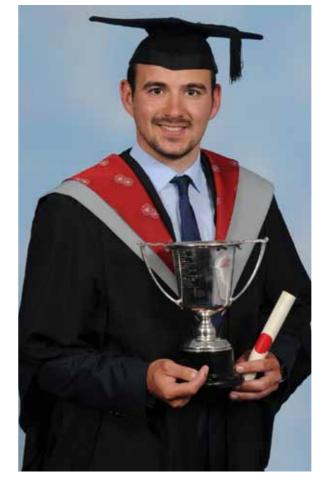
These include presentations on guidelines for using fertilisers, stress management in turf, managing fairy rings and more. Sam Evans, Deputy Head Greenkeeper at Oakland Park Golf Club, is even presenting a seminar on how BIGGA's many educational and development opportunities

can benefit your career. Continue to Learn places are being snapped up so book now to avoid disappointment.

Visit www.btme.org.uk or click on the 'Events' tab on the BIGGA website to reserve your place.







CHRIS WINS RANSOMES AWARD

Chris Trimble, BIGGA member and greenkeeper at The Mere Golf Resort and Spa in Knutsford, Cheshire, is this year's recipient of the Ransomes Jacobsen-sponsored best student award at Myerscough College.

For the past three years, Chris has been studying for his BSc Sportsturf Science and Management degree and graduated this summer. He began his career at Royston Golf Club in 2007 before taking up a six-month seasonal position at The Mere. He subsequently joined the greenkeeping team at Sunningdale, before returning to The Mere on a permanent basis is 2013. In July this year he was one of the R&A scholars supporting the home greenkeeping team at The Open at Royal Liverpool

In recognition of his achievement, he will be invited to the Jacobsen Future Turf Managers programme, held annually at Charlotte in North Carolina, where he will spend a week with recent US graduates to broaden his understanding of the global turf maintenance sector.

Chris said: "I was very surprised and delighted to receive this award and I am really looking forward to my trip to Charlotte. Ransomes Jacobsen have long and established links with Myerscough, supporting specialist turfcare education at all levels. I thank them for this opportunity."

Course tutor Stewart Brown added: "Chris has worked consistently hard for three years and proved to be a very able and excellent student. His academic study has been of the highest order and he is a very proficient greenkeeper. He is well on his way to achieving his ambition of becoming a Golf Course Manager and thoroughly deserves this Higher Education accolade.'



SCHOLARSHIPS

Three BIGGA members have recently been awarded Higher Education Scholarships supported by Jacobsen.

Sam Evans, Deputy Head Greenkeeper at Oakland Park Golf Club, will be studying a Level 4 in Sportsturf Management.

Joe Dormer, greenkeeper at West Sussex Golf Club, will be studying a Sportsturf Foundation Degree.

Finally Leigh Powell (pictured above) greenkeeper at Hockley Golf Club, will be undertaking an NVQ Level 4 in Sports Turf Management.

Leigh said: "I'm extremely pleased to be awarded the Scholarship. The Scholarship is a massive help towards my personal development and achieving my goal of becoming a Golf Course Manager. Thanks to BIGGA and

For more info please visit the website and click on Education>Funding Opportunities.

NEW LIBRARY BOOK

The latest addition to the BIGGA library sponsored by John Deere is Turfgrass History and Literature: Lawns, Sports and Golf'.

Compiled by James B Beard, Harriet J Beard and James C Beard, it is a detailed chronicle of the evolution and history of turfgrass. Selected quotes and unique original photographs depict early activities, equipment and conditions in the field of turfgrass.

Members may borrow up to two books for up to six weeks and the only cost is return postage. To withdraw your books access the Library in the Members area of the BIGGA



SAMI Congratulations to BIGGA's Head of Member Development Sami Strutt who has achieved a Foundation Degree in Business

and Management, awarded by

Leeds Metropolitan University. Sami studied for the Degree for two years and commented: "It's a huge personal achievement, it required a massive amount of time and effort. The skills and knowledge I've acquired have developed me both personally and professionally. I'm very proud of myself, but I'm very glad it's all over and that I passed with Merit.

"I have such respect for all the BIGGA members who are undertaking and have achieved their Foundation Degrees, it's no easy feat when you work full-time and have to juggle personal life and assignments - I know from personal experience

CPD APPROVED MEMBERS

Jason Brooks, Torquay GC Edward Stant, Trentham Golf Ltd Robert McDowell, Wishaw GC Simon Torr, Bearwood Lakes GC PLC Kevin O'Neill, Muswell Hill GC Greig Easton, St Andrews Links Trust Mark Openshaw, North Hants GC Allan Patterson, St Andrews Links Trust Gwynn Davies, The Mere Golf Resort



Continue to Learn 2015 at BTME

bookings pouring in - and if you're

improve your career prospects and

2015 is off to a flying start with

a young greenkeeper looking to

make the next move it's vital for

It's important to note that

Continue to Learn and the Turf

Managers' Conference is not just

for Course Managers and Head

Greenkeepers - in fact this year

The offering covers everything

their career including mechanics,

budgeting, people management

and managing conflict and grass

Tom Freeman, First Assistant

Club, is already looking forward to

attending his first Turf Managers'

Conference, which will feature

Greenkeeper at Kingsdown Golf

the focus more than ever is on

assistants need to progress in

Assistant Greenkeepers.

voluto attend

identification.

INDUSTRY UPDATE

The latest turf industry news from around the globe



GREENMECH AT GREETHAM

Greetham Valley Golf Course spends considerable time and effort on investigating viable and sustainable ways to reduce their carbon footprint.

They have installed a biomass boiler powered by woodchip, some of which is produced onsite from their own coppiced trees.

To make that possible the Club purchased a GreenMech ChipMaster 220 wood chipper.

Greetham Valley Hotel, Golf Course and Conference Centre is set amidst beautiful Rutland countryside, minutes away from the tranquil Rutland Water Nature Reserve.

This two 18 hole championship golf course,

and 9 hole par 3 academy golf course, is set in 276 acres. Originally farmland, owner Robert Hinch has transformed the area by planting 25.000 trees over the last 25 years, which is in addition to the 10 acres of original woodland that was there.

With so much need for maintenance and thinning out of the trees Robert decided on an in house system using their own wood chipper.

The resultant chipped wood could then feed a massive boiler to provide heat and hot water for their Lounge Bar, restaurants and Club changing rooms as well as their 35 bedroom hotel and all eight of their Rutland Lodges.

For tackling a really big job such as this, Robert settled on the GreenMech ChipMaster 220 with its substantial 220mm chipping capacity to get the job done. Engineered with a 50hp

Isuzu water-cooled diesel engine it has a unique patented Disc-Blade chipping system to ensure a constant chip quality and give a dramatic proven cost saving over a conventional straight blade.

It has a substantial 1100mm x 800mm infeed chute, coupled with an infeed throat opening of 230mm x 230mm to enable branches

to be easily and quickly processed. The springtensioned twin hydraulic feed rollers are controlled by the advanced electronic No-Stress system and powerfully crush woody material to give effective throughput management of up to 7 tonnes per hour.

Robert said: "We didn't try any other chippers because we knew the make to be a quality product and it produced the chip we were after.

"All of my eight greenkeeping team are impressed with it and find it very easy to use. Any chippings that we can't use in the boiler are used for mulching round trees. It is very multifunctional."

BUYING CLEARWATER NOW EVEN EASIER

ClearWater is already established as the most competitively priced washpad water recycling system in the UK and now, to help those wishing to invest in a system to beat the ever closer deadline for the EU Water Framework Directive, Highspeed Group have made buying their system even better.

From 1 October 2014 purchasers have been able to take advantage of the latest offer where the system will be supplied at half price now with the balance due in 6 months' time. This means deferring payment of £3244.50 plus VAT.

Joint MD David Mears said: "Legislation is tightening and we know of one or two golf clubs that have been visited and warned about pollution, so compliance is a must. The EU Water Framework Directive is due for full implementation in 2015, so time is running out. We know we have a system that is already competitively priced but have decided to help spread the load of purchase with our pay half now and half in six months on the system. In effect a customer can be up and running paying less than £6000 when ordering. For a genuine recycling system, that will take some beating!"

A ClearWater system comes with a large 5000 litre capacity as standard and with two water guns each powered by individual high pressure



stainless steel pumps. A special clippings barrow is also supplied at no extra charge.

This attractive package (just over £9000 all in) is fast becoming the popular way to purchase ClearWater as many have realised just how easy installation of the system tank is. David added:

"We know that many golf courses and others have competent staff or builder members so this option, not available from some suppliers of recycling equipment, is a sensible cost-saving choice, especially with our new offer.

"To make installation easier, we issue full and very detailed Installation Instructions with photographs and drawings. When installation and washpad build has taken place, we send an engineer to commission the system.

"Further savings are sometimes possible too when an existing washpad is suitable for modification".

ClearWater has been approved as a Water Saving Technology since March 2008 and, as such, qualifies for 100% first year capital allowances under the ECA scheme. This

means that purchasers of ClearWater systems in the UK can write off 100 per cent of the cost of a complete installation against taxable profits in the year of purchase under the ECA Enhanced Capital Allowance (ECA) scheme. Many have reaped the benefits of this as it can bring significant financial savings and reduce your business' impact on the environment.

There's never been a better time to buy and comply - order your ClearWater now, prevent pollution and save thousands of litres of water!

RICHARD OWENS JOINS TILLERS TURF

Richard Owens has joined Tillers Turf as their Specialist Turf Manager. Richard will be responsible for the production of turf for golf courses and of wildflower turf for andscapes and green roofs.

As Course Manager at Boston West GC for the last 20 years Richard has a wealth of experience in presenting perfect playing surfaces. This will be put to good use at Tillers Turf when growing and supplying turf to some of the top golf courses in Europe, including Wentworth, Gleneagles, Turnberry and Muirfield.

A keen environmentalist, Richard won Conservation Greenkeeper of the Year Award in 2014, and was instrumental in helping his club win the "Overall Award" at the Lincolnshire Environmental Awards. His encyclopaedic knowledge of wildflowers will steer the development of new products in the company's expanding range of wildflower turf.

Richard said: "I'm very excited about the opportunities my new role offers. Tillers Turf places a great emphasis on quality, which plays to my strengths".



Gordon's at the double

After a dry September, the weather finally broke during the BIGGA National Championship 2014. Steve Castle was on hand to witness some phenomenal greenkeeping teamwork - and some first-class golf







just one shot.

Championship sponsored by

Charterhouse and Kubota had it all – wonderful golf, heroic greenkeeping efforts, a hole in one and finally a deserved winner retaining his crown by

The next morning, defending greens

y course as over 30mm in total ery served in the clubhouse later morning. The sight of Dan Burn



shine was hugely welcome! With tee downhill a bit after that! But I'm so times remaining the same, Gordon pleased and I'll never forget it." again struck the day's first shot and an exciting day began, with all suming Gordon Sangster from the players in with a shout over 18 Cathkin Braes Golf Club edged out holes of competitive golf, on greens a spirited challenge from Golf at running at a little over 10 on the Goodwood's Andy Brown to retain stimpmeter.

their praise for the course. Kenny capper, played to his impressive Mitchell from St Andrews, who won handicap to record a 68, a single the Scottish Golf Championship shot clear of Andy, despite using a at Renfrew Golf Club, had driven mate's putter! for nine hours to play. He was in contention again until he had the worth of vouchers, he said: "I holed misfortune to hit a marker post on some big par putts on the back the 18th – but despite this blow nine. I fancied a change of putter so

David Wilkinson, Head Green- I owe him a drink after this! keeper at Wrexham Golf Club, hole today!"

tured right), from Southwick Park round with my playing partners Golf Club, hit the second hole in and that helps as well. one of her golfing career on the par by the widow of a member.

quite emotional and my golf went job."

As for the main prize, the unasthe BIGGA National Champion-The players were unanimous in ship. Gordon, a plus two handi-

Clutching the trophy and £500 described the course as "fantastic". borrowed one from a mate. I reckon

"I eagled the par four 8th from summed up the players' thoughts about 90 yards and that gave me a when he said "I really enjoyed it, it's wee lift. The standard of golfers here a great course and the greens are is superb, if you shoot three or four fabulous, really undulating. It's just over you're probably not going to be a shame I couldn't get the ball in the in the prizes, so you need to bring your 'A game' and have some luck A delighted Beverly Blair (pic- too. I had a real laugh on the way

"It was hard on the first day, three third. As well as a bottle of Mother Nature was against us, but champagne this earned her a spe- the course is fantastic, the greens cial trophy from the club donated are unbelievable. Considering the amount of water that's fallen they're She said: "It's my second hole so smooth, fast and undulating. in one but it's so special to hit one The greenkeepers here and the in a BIGGA competition. I was volunteers have done an incredible



Course Manager David Murdoch MG added: "The weather on the first day, and overnight leading into the second day, posed a huge challenge for us but the effort from my team and the volunteers has been incredible.

"Considering the amount of rain that fell on the Monday, and further heavy rain just a few hours before the start on Tuesday, for us to be mowing the greens early on Tuesday shows what a fantastic effort it was from all concerned. It's made me very proud and it's been a privilege working with all of them."

A raffle was held which raised $money for the BIGGA\,Green keepers$ Benevolent Fund, and proceedings closed with BIGGA CEO Jim Croxton thanking all the greenkeepers for their superb efforts in ensuring 18 holes were possible on day two.







Tuesday (am)



BIGGA CHALLENGE TROPHY (Best gross over 36 holes. 1st - £500 vouchers, 2nd - £300 vouchers, 3rd -£250 vouchers) 1 Gordon Sangster, Cathkin Braes Golf Club 68 (-2) 2 Andy Brown, Golf at Goodwood, 69 (-1) 3 Jason Hunt, Addington Palace Golf Club, 71 (+1) BIGGA CHALLENGE CUP (Best nett over 36 holes. 1st - £150 vouchers, 2nd - £100 vouchers, 3rd - £50 vouchers) 1 David Ross, Test Valley Golf Club, 68 (-2) 2 Kenny Mitchell, St Andrews, 69 (-1) 3 John Keenaghan, Chipping Sodbury Golf Club, 72 (+2) BIGGA CHALLENGE PLATE (Stableford, 1st - £75 vouchers) Darryl Jones, Glynneath Golf Club, 38pts

BIGGA CHALLENGE BOWL (Lowest gross, affiliate prize, 1st - £75 vouchers) Gary Ogilvie, Avoncrop Amenity Products, 78

TEAM PRIZE (Best 4 combined nett scores, 4 vouchers for £75 plus medals) 1 South East - Andy Brown (Golf at Goodwood), Jason Hunt (Addington Palace Golf Club), Wayne Sewell (Worplesdon Golf Club), Paul Davy (Porters Park Golf Club), 284

2 South West & South Wales - David Ross (Test Valley Golf Club), Leigh Mordy (Knowle Golf Club), John Keenaghan (Chipping Sodbury Golf Club), Alex Ward (The Kendleshire Golf Club), 286

NEAREST THE PIN (Champagne) 7th - Matt Hutchinson (Hassocks Golf Club). 17th - Paul Hedger (Radley Golf Club)

LONGEST DRIVE (Champagne) 4th - George Morgan (The Mendip Golf Club). 12th - James Dair (Toft House & Golf Club)

SHOT OF THE DAY Hole in one on the 3rd - Beverly Blair (Southwick Park Golf Club)

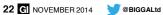
THANK YOU

BIGGA would like to thank David Murdoch MG and his team. They are Dan Burn, Eddy Oliver, Tim Howard, Al MacDonald, Reece Jones & Neil Jones.

Thank you to all the volunteers; Joe Dormer, Dan Dumbrill and Ryan Burton from West Sussex Golf Club: Dougie Spencer and Jackson Ainley from Brokenhurst Manor Golf Club; James Norris, Rich Covey, Lee Blackburn and Elliot Hawkins from Blackmoor Golf Club; Pete Oliver from Hankley Common Golf Club, Derek Cunliffe from Rigby Taylor and John Groombridge, Liphook member. Without your efforts the tournament would not have gone ahead.

Also thank you to the sponsors Charterhouse and Kubota, all who donated raffle prizes and everyone at Liphook Golf Club.







Getting to the root of it

Dr Andy Owen and Henry Bechelet, Technical Managers for Everris Limited, share their experiences talking to greenkeepers about rooting and how to encourage root development

Throughout our careers we have spent a huge amount of time talking about, observing and assessing rooting and making recommendations to encourage root development. Rather than interview just one greenkeeper, we've summarised our collective experiences when talking to a whole host of greenkeepers in recent years. We hope it rings true with you.

AO & HB: So, are you happy with your greens?

Greenkeeper: Yep absolutely, surface performance has been excellent this year and player feedback has been good. Ok, so disease pressure is there but we've got it under control, the surfaces have been good and we are well set for the winter.

AO & HB: Any issues to speak

Greenkeeper: If I am honest I am always a little disappointed with my depth of rooting. I don't know why but it just doesn't seem to improve and I can honestly tell you that I have tried everything!

AO & HB: Why are you disappointed?

Greenkeeper: When I change the hole or take samples from the greens, the rooting seems to be down to about 100mm but never much more. I aerate, topdress, keep my fertiliser and irrigation in check and use soil conditioners but nothing seems to bring about any improvement.

AO & HB: So what's the problem if the surfaces are good?



Henry Bechelet

about the author



Greenkeeper: Everyone says that the development of deep and dense rooting should be something to strive for. It's like a badge of honour. But I do wonder sometimes if it's a bit of a myth.

AO & HB: Why do you think we are all so hung up on deep rooting?

Greenkeeper: Well...correct me if I am wrong, but grasses absorb the majority of the nutrients required for growth from the soil via their roots and the roots also absorb the water that is required for plant functioning. They also play a role in surface stability and wear tolerance. I think the development of a deep, dense and healthy root system has to be a key objective for my maintenance programme.

AO & HB: So, good greens management should be fully focused on achieving deep rooting?

Greenkeeper: In a way, but the whole root development thing seems to be more complex than that, and I am not certain if I know what really controls it. I suppose a range of factors are important but I just can't seem to nail it.

AO & HB: So what are the main factors that you think are important?

Greenkeeper: The height of cut has got to be number one. The leaf area is critical for photosynthesis and the fundamental functioning of the plant. At college we learned that with a very low height of cut the photosynthetic area of the leaf is reduced and so is the level of sugar/ carbohydrate production. I think I am right in saying that in this case the sugars get prioritised for respiration and shoot growth rather die-back.

than being used for root growth. I know that height of cut has a huge influence on root development, which is why I try not to take too many liberties with mine.

AO & HB: So do you think that golf greens with their low heights of cut will always struggle to develop deep rooting?

Greenkeeper: I would say so, but that isn't the only reason for poor rooting. Soil compaction is important, nutrient and water availability, soil aeration and thatch build-up are all major influences and I've not even mentioned biology. I guess even the time you measure the rooting will make a difference. I try to work on all these things but don't seem to be able to provoke a positive response.

AO & HB: Ok, let's break it down a bit and consider the rootzone first. What are we focusing on?

Greenkeeper: Well, roots need space in the rootzone to grow. branch and expand so there will be a physical restriction to growth in compacted soils, or maybe in soils with a fine texture and a poor structure. What was it Jim Arthur used to say? "Roots do not grow in the soil, but in the air spaces between the soil particles".

AO & HB: What else did you sav...aeration?

Greenkeeper: Of course, roots also need oxygen because root respiration is an important plant process and a well aerated rootzone, with good air exchange and surface atmosphere is again critical for root development. Lack of air will just cause the roots to

YOU CAN CATCH HENRY AND ANDY AT CONTINUE TO LEARN 2015 AT THEIR SEMINAR 'DEVELOPING BEST PRACTICE GUIDELINES FOR FERTILISER USE ON FINE' TURF ON TUESDAY 20 JANUARY 9.20am TO RESERVE YOUR SPOT ON THIS FREE SEMINAR PLEASE VISIT WWW.BTME.ORG.UK

AO & HB: Yes, and we know that aeration is affected by soil moisture and thatch as well.

Greenkeeper: Exactly! Soil moisture is something else to think about - not just because grass roots will grow towards moisture and move away from dry soil but rootzone moisture will fundamentally affect the health of the rootzone. Increased soil moisture will mean less pore space for air to occupy and we have just discussed how important air is. Thatch content is in the mix too, a layer of thatch will hold water at the turf base, to reduce air content and restrict deep root development.

AO & HB: What about nutrition, you've not mentioned that yet?

Greenkeeper: Well in my mind you need to look after a healthy plant for it to develop a healthy root system, so getting the macro and micro nutrition right is obviously important. Things get a bit confusing here as well because phosphorus is often mentioned as being critical for rooting but a healthy plant needs a bit of everything, nothing should be too limiting.

AO & HB: What else is important that we touched on? Maybe soil biology?

Greenkeeper: Well plants don't grow in a sterile environment, and they develop complex relationships with soil microbiology. This has to be encouraged and supported, although there is some confusion here too, lots of different stories and very little evidence. Again, in my mind, getting the moisture and aeration right in the rootzone goes a long way to allowing the microbiology to develop naturally. Some feeding of the bugs has got to be useful and I do apply a tonic of seaweed and carbohydrates to help.

AO & HB: So that's a pretty comprehensive grasp of the situation - what now?

Greenkeeper: It would be good to hear your thoughts on what to check off when considering my rooting problem, what have I missed?

AO & HB: Sure, it is worth starting by saying that grass rooting is at its greatest when environmental and management conditions are conducive to root growth, so the primary focus must be on maintaining a healthy plant and good growing environment.

Also, when you evaluate rooting it is difficult to see the fine roots, and actually 100mm of healthy

fine roots, with well-developed root hairs, could be much more efficient at absorbing water and nutrients than a visually deeper. more coarsely structured root system. The roots per unit area of soil might not compare, and this is what is really important.

But if you want us to list a few things, number one would be to appraise your height of cut. Can it be relaxed at all without compromising your surface playing quality to give the plant the maximum photosynthetic opportunity? Secondly, take a good hard look at your rootzone, does it look and smell healthy, is there any layering or compaction? Finally, objectively measure your organic matter content - send off some cores for analysis and assess the impact any thatch layer is having on your rootzone performance.

Greenkeeper: OK, that makes sense and I do most of that

AO & HB: Following this, have a think about your aeration practices, develop that balance of surface and deep aeration to encourage efficient air exchange between the rootzone and the atmosphere and provide the space for the roots to develop. If your

thatch control is in hand then the aeration need not be too disruptive, but as a guide you should be doing something every few weeks. Link the aeration with a frequent topdressing regime to dilute the thatch, improve surface firmness and help to keep the surface open for air exchange.

Greenkeeper: Right, that's all good, topdressing, aeration, height of cut - what about nutrition?

AO & HB: The key here is avoiding nutrient imbalances or deficiencies, remember as you said, the plant will photosynthesize to produce carbohydrates which will be used for root growth only after other plant needs have been met. There is clear evidence that sustained release of nutrients throughout the growing season provides the best environment for the plant to invest in a strong deep rooting system, so consider slow-release feeds.

You definitely want to avoid the excessive lush growth you might get by over-applying N or too much quick release N. In this situation, the plant increases its shoot growth rate utilizing excess carbohydrates, which are diverted away from root development. Not a good approach.

Greenkeeper: So, design a programme of steady nutrient release. Any other tactics to consider?

AO & HB: Water is by far the biggest challenge. Too much water and the soil becomes stifled, too little and the turf becomes stressed and both adversely affect rooting. Essentially, we need to manage the soil to contain enough moisture to sustain healthy growth and encourage the development of a healthy root system, but not too much that leads to the production of a stagnant soil and root die-back.

This means adequate drainage, aeration and good soil profile management during periods of wet weather, then careful control of irrigation inputs during periods of dry weather. We think that we all need to adopt the use of accurate moisture probes and use them properly to direct irrigation to the areas that need it and help sustain the development of a healthy plant and root development. Overwatering is the most common problem in greenkeeping and has a devastating effect on plant and soil health. The only way to keep on top of it is with an accurate moisture probe.

Wetting agents should be employed to maximize the effectiveness of irrigation treatments and help conserve water within the soil. We have also found that certain wetting agent technologies can help stimulate root hair production to greatly enhance the effectiveness of the root system.

Greenkeeper: Great, I need to get up to speed with this. If you don't mind, can you answer me one thing? Is rooting beyond 100mm really necessary?

AO & HB: Being honest with you, if we speak to our researchers who deal with specialist agriculture, they marvel at the rooting we have available in existing turf compared with all other 'crops' and they wonder why we are obsessed with producing more than a reasonable amount. Let's just say that rooting is important and you must always seek to encourage it because if you don't it will go backwards. But if you have a healthy root system extending to a depth of 100mm, and are happy with your playing surfaces then you probably shouldn't be beating yourself up about it.

Greenkeeper: Got it.









In 1987, the Brundtland Commission of the United Nations said: "Sustainable **Development seeks to meet** the needs of the present without compromising the ability of future generations to meet their own needs." There are many other definitions, but this one is my favourite.

Is the awareness of sustainable

in course construction consists of approach? obtaining the best possible results that it is likely to be of a permanent golf course, where the greenkeep-

Possibly, but there is evidence that much stress on the importance of even in golf - the most traditional of finality". Wise words indeed, writsports-sustainability has been proten in 1920 by Dr Alister McKenzie. moted for many years. "Economy An early advocate of a sustainable

Golf courses are certainly at a minimum of cost. The more one responding to the challenges of sees of golf courses, the more one sustainability, but until recently, realises the importance of doing bunkers seemed to have escaped construction work really well, so attention. Unlike other areas of the issues a modern phenomenon? character. It is impossible to lay too er's knowledge of agronomy is critical, the main challenges in bunker construction and maintenance are linked to drainage, soil mechanics and geotechnical matters. Civil engineers like myself should feel comfortable in this territory. On links and more exposed courses, deeper bunkers are needed to retain the sand. Steep banks, often revetted, are ravaged by forces of

This issue got me thinking

about whether a more engineered synthetic solution, even though the approach could pay dividends in aesthetics of the artificial solution the golfindustry. My solution was to were very satisfactory to my eyes. use layers of recycled artificial grass The answer to this question lay to form retaining walls. I knew from in another skill I learned as a civil my work in development that much engineering designer: cost benefit of this material was currently being analysis. disposed of to landfill, a costly and unsustainable approach, so there am a member) is a highly respected was a readily available supply. championship course occupying What I did not know was whether a beautiful natural and exposed the golfing fraternity would accept a site on the South Wales coast.

Southerndown Golf Club (where I





Course Manager Andrew Mannion different countries. Interestingly, motion study proved that the club in the 2014 Seniors Open Qualifywas spending well over £20,000 per ing at Southerndown. year on maintaining and rebuilding Andrew and I arranged to meet.

bunker edges. Despite this, Andrew a great example of a sustainable would freely admit, the bunkers solution to the consequences of and maintenance, whether or not were never in a good condition. bunker edge erosion; instability, neglected appearance, sand con-We compared the cost of install- tamination and resultant drainage ing my synthetic revetted solution issues. There are however many it once! (estimated lifespan of 20 years other bunker challenges that I have - minimum), with the benefits of now turned my attention to, providsignificantly reduced maintenance ing impartial advice to golf clubs and calculated a four year pay- on issues such as bunker drainage back period and 20 year savings and liners. The choice of liners for of nearly £400k. After construct- bunkers is now becoming an intering an initial practice bunker for esting issue, as new products enter member approval, the club has the market, providing more choice, now built over 50 bunkers with my and perhaps some confusion for method, and has recently entered golf clubs. As with my synthetic face into a new contract for the next concept, the final decision on liners phase of works with my company can often be justified by a careful

Unfortunately, the powers of ero- Ecobunker ltd, aiming to complete cost benefit analysis. For example sion there are particularly severe all 84 bunkers within the next some products may appear at and are accelerated by the action year. Following Southerndown's first glance to be expensive, but, if of the many grazing animals. At lead, my construction method has a course has bunkers with steep the same time that I was inventing now been successfully employed sand splashed faces, many club bunker solutions, Southerndown's on over 50 golf courses in eight managers may be disturbed by the true cost of the labour intensive was searching hard for a solu- my newest client Secession GC task of reinstating sand after heavy tion to his bunker face and edge in South Carolina commissioned rain. An appropriate liner which can challenges. Andrew had tried and Ecobunker after their Director of effectively hold sand (but appeared failed with several different bunker Golf Mike Harmon experienced the to be expensive) might actually be design styles. His careful time and system first hand whilst competing in reality a sound financial and hence sustainable investment.

> At my company we will con-Ecobunker is in my opinion sistently promote a sustainable approach to bunker construction that involves the installation of our 'artificial intelligence'. McKenzie believed in finality, so do we, build

Continue to Learn Seminar

Richard will be presenting his views on sustainable bunker construction at three seminars organised by the Golfing Union of Wales at Conwy GC, Machynys GC and Radyr GC in November. He is also presenting a seminar at 9.30am on the Tuesday of BTME 2015. You can also visit Ecobunker's Stand at BTME - Stand C5.



Four Quality Bunker Sands from Roffey Brothers to suit your requirements.



Throop Road Bournemouth BH8 0DF Tel 01202 537777 growing@roffeybrothers.co.uk www.roffeybrothers.co.uk Ltd. are ISO 9001 Direct Contact: Joe Crawley 07714 145 423 accredited compani





H.H. & D.E. Drew









SEE LIGGY'S PRESENTATION AT THE TURF MANAGERS' CONFERENCE - BOOK YOUR PLACE NOW AT WWW.BTME.ORG.UK

Resilience through change

Liggy Webb, a presenter at the Turf Managers' Conference in January. examines the power of resilience when overcoming tough times and outlines ten ways of increasing your resilience in a sometimes unforgiving world

"Our greatest glory is not in never falling, but in rising every time we fall." Confucius

that provides people with the ability changes to positively adapt to stress and adversity. The term "Resilience" is my latest book "Resilience - How nisms to deal with the pain and now commonly used in the work- to cope when everything around heartache.

proactively, to be able to deal with tors of the competency of resilience. second biggest global form of illness some of the challenges and relenthave to deal with in our lives.

tamount to saying "I don't like life". relationship break ups.

There are times when we will have changes, however, we have 100% experiences and simply fall apart. Resilience is that ineffable quality control over our reaction to those

you keeps changing", I interviewed There is certainly a strong over 100 people from a range of physical and mental health, which recognition that individuals and nationalities and backgrounds to is an increasingly concerning teams need to equip themselves, ascertain the behavioural indica- area with depression set to be the

less change that we will inevitably resilient people are able to utilise Health Organization. their skills and strengths to cope

If you lack resilience you may no control whatsoever over those become overwhelmed by these

You may find yourself dwelling on your problems and When I began the research for using unhealthy coping mecha-

This has a huge impact on both My overall observation is that by 2020 according to The World

To give you something tangible Modern living is becoming and recover from the knockbacks to work on to develop your own increasingly challenging and if we and challenges, which could resilience, I have outlined ten key ever hear ourselves saying "I don't include illness, job loss, financial personal strategies that will help like change" then that is really tan- problems, natural disasters or you to tap into your own personal



sonal Resilience

1. Take a journey of self discoverv

Self awareness and self confidence play an essential role in bemuch better equipped to respond helping you to cope with stress to any life crisis you experience. and recover from difficult events. Understanding yourself is the first port of call and then reminding vourself of your strengths and accomplishments is key.

2. See the glass half full

important to maintain a hopeful outlook. Being an optimist does not mean being naive and ignoring the problem. It means understanding that setbacks are transient and that you have the skills and abilities to combat the challenges you face.

3. Take emotional control

react in certain situations will help you to take more self control. It will also help you to be more considerate with regards to how your reaction can affect other people.

4. Change for the better

a really good approach. You may overeating, not exercising, not our own coping mechanisms and not be able to control or change getting enough sleep, drinking too by doing this we can also help circumstances; however, you can much alcohol, not drinking enough others around us.

Ten Top Tips for Building Per- absolutely change your attitude water and driving yourself too hard towards them so you are far more in are all common reactions to a crisis control than you think. Flexibility is an essential part of being able to manage change and, by learning how to be more adaptable, you will

5. Cope well with conflict

Conflict is an inevitable part of life. We all have different personalities and along with those are belief systems, values, perspectives, likes Staying positive during difficult and dislikes. Some conflict can be periods can be difficult and it is difficult and, at times, unsettling especially if you take it personally and are very sensitive.

6. Embrace 'probortunities'

The word 'probortunity' is a hybrid of 'problem' and 'opportunity' and looks at the concept of taking every problem situation and seeking out the opportunity. Being emotionally aware and rec- It works on the premise that even ognising how you can potentially in every crisis situation an opportunity will arise and there will be some benefit.

7. Look after yourself

When you are feeling traumatised, stressed and upset, it can be all too easy to neglect your own Being positive about change is wellbeing. Losing your appetite,

situation.

8. Make connections

Building and sustaining a strong network of supportive friends, family and work colleagues will act as a protective factor during times of crisis. It is important to have people you trust and can confide in.

9. Keep going

Winston Churchill summed this up perfectly - "If you are going through hell, keep going." There is a lot be said for picking yourself up, dusting yourself off and carrying on. Being resilient is about the ability to bounce back and get on with life.

10. Create a vision

In times of crisis or when you are feeling low it is good to hold on to your dream and not lose sight of the fact that you can always have something to look forward to.

Summary

Resilience is about recognising the importance of taking personal responsibility and accepting that we have more control of our circumstances that we may automatically believe. By maintaining a positive and agile mindset we can develop

about the author



Free access to an on line Modern Life Skills Library with over 100 resources

The greatest staging

The Ryder Cup is now proclaimed to be the third biggest sporting event in the world and therefore required high quality preparation and maintenance to live up to this billing. The excellent Glenegales greenkeeping team were assisted by 40 volunteers from around the world to showcase this wonderful spectacle of golf

John McLoughlin, Deputy Head Greenkeeper at Grange Park Golf Club, was just one of the volunteers and he told this to GI...

Cup hosted by the Gleneagles Resort has widely been described in the media as the greatest staging of the iconic matches to date. After the venue was announced some 13 years ago it had always been an ambition of mine to be involved in the course

Having started my greenkeeping

The 40th edition of the Ryder it has been fantastic seeing the commitment from the Hotel and staff preparing the PGA Centenary course so it would be fitting to stage the largest spectacle in world golf. Over the past 13 years and more

intensively, the last five, the course has been developed and invested in heavily so it would all come together for the now famous three days in September. The greenkeeping team led by Scott Fenwick and Steve career at the Resort working from Chappell have carried out an unbe-1999-2000, I was delighted to have lievable amount of hard work getbeen selected as part of the 40 ting the course to where it is today. strong greenkeeper support team. The industry should be extremely Having been a regular visitor proud to have been showcased in since my period in employment, such a fantastic light.

standard possible. The calmness and exemplified the definition of beating of the management team resonated teamwork.

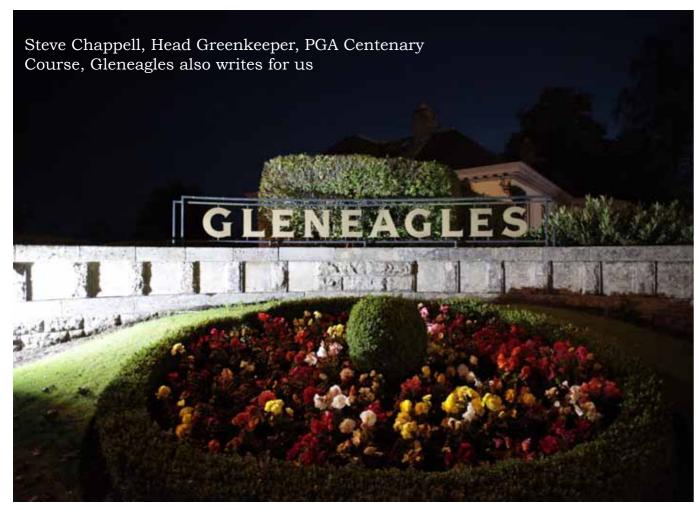
The professionalism of all the staff during the tournament was second to none and I have never the team excel by taking ownership towards the same goal of providing the highest standards achievable.

I am very proud to say it is cer-

through all of the staff allowing No task or job was taken lightly some amazing memories which I everyone to go about their jobs pre- no matter how small and everyone hope will help shape my greenkeepcisely and more importantly with was ready to help each other to work ing career going forward.

I am very proud to say it is cerwitnessed a team which was so of their own task. The camaraderie tainly the highlight of my career to driven to deliver at the highest between all of the staff was fantastic date and it will definitely take some

I will be taking away with me



Well the dust has started to settle, yes we do get dust in Scotland, after the Ryder Cup and I just wanted to take this opportunity to publicly thank the people that not only made the event happen but also made my job, and life a hell of a lot easier during the week of the event.

become.

There has been so much going on with reconstruction works, drainage installation and agronomic improvements over the last three years and they have all shown a high level of commitment, determination and pride in getting the job done.

To the volunteers that came in during the week of the event you were quite simply brilliant, you came together as one with our team and ensured that the golf course performed at her best.

The enthusiasm, passion and pride shown by you guys made me feel so immensely proud of our wonderful profession and for that I could never thank you enough, you were to a man exceptional.

within their teams understood what bases covered. was expected from them through the week.

they offered during our morning I could never thank you enough for Firstly to the greenkeeping and evening briefing meetings was your contribution to the event. team here at Gleneagles who have amazing and made the course set I would also like to thank the folworked so hard over the last few up run so smoothly. John Myles, lowing companies for their support years in developing the PGA Cen- my deputy on the PGA, worked of our team during the week. The

The team leaders, Mikey Doris, ing that everything was in order, Gavin Speedie, Peter Pattenden spending time with the greenkeepand Allan Patterson took on their ing team, myself, the team leaders roles with great energy and under- and officials from the European standing and ensured that the guys Tour to make sure we had all the

You all took my vision for how we would set up the golf course The support and counsel that and made it seem effortless; again

tenary Course into what she has tirelessly during the week ensur- Toro Company, Lely UK, Ransomes





Jacobsen, Greentech Sportsturf seminars, discussion groups, CV Stevens POGO, Craigrossie Sands entertained during the day. & Gravels, Aquatrols, Farmura, their stay with us.

port of BIGGA during the event, other industry bodies. Sami Strutt and John Young were had put together a great mix of association as we move forward.

Ltd, Severn Amenity Services, clinics and quizzes to keep the guys

It was also great to have Jim SGM, Subair & Thorntree Amenity Croxton, Chris Sealey and Les ence the 2010 Ryder Cup at Celtic all helped to ensure that the volun- Howkins with us during the event teers where well looked after during to meet and talk to the guys as well as representing our association It was also great to have the supin meetings with the GCSAA and

These links can only help build

Last but not least I must thank two people.

Firstly Jim McKenzie MBE who gave me the opportunity to experi-Manor which led me on this amazing journey and to Scott Fenwick who gave me the opportunity to come to Gleneagles.

The trust and support you have shown me over the last three years both onsite during the week and the reputation of our profession and has been incredible and for that I will be eternally grateful.



One of the volunteers, James Bledge from Royal Cinque Ports Golf Club, has created a superb video featuring the work of the team throughout the week – you can view it for yourself by typing 'Ryder Cup Greenkeepers' into YouTube.

James said: "When Steve Chappell asked me to take photos at The Ryder Cup I also saw an amazing opportunity to make a short film that would showcase the hard work of the green staff and volunteers. As far back as February, I had a vision of how I wanted the film to flow, and I feel that I kept to

"The first thing I did was choose a song that would reflect the epic sunrises and sheer intensity of the competition. The whole video was arranged around certain parts of the music with the climax of the song matching the climax of the week, which was the 1st tee filling up on the Friday. A GoPro was used on time lapse and video modes, the most interesting footage taken from the 18th grandstand. The key to making a film like this is to try push boundaries, find interesting angles to shoot and use your imagination! I loved making this film, in a place so stunning with such amazing organisation it was easy and an absolute pleasure.'



Without the radical soil amendment that comes with golf green construction the subterranean structure and drainage required to support and maintain year-round playable turf would simply not exist.

You only need to inspect earthworm casts, slightly rain-washed mineral particles (sand, silt and ing root growth and development, on autumn mornings, to see the clay) while the structure of soil access to and uptake of nutrients. glistening grains of sand and describes how these particles fit and the activities of beneficial soil understand what lies beneath the together to create pore spaces of animals and microbes as well as turf. Golfers may curse the silica different sizes. Distribution of pore the severity of pests, diseases and holes surrounding golf greens but space size dictates the dynamics turf weeds. are thankful for the 'bedrock' of of soil and the all-important threesilicon dioxide (silica) otherwise way balance between water holding known as sand supporting and capacity, aeration and drainage. broadly divided into compaction securing professional turf.

in mind, although in practice 30 on soil fertility and turf integrity. to 50 years is par for the course

on, but dynamic soil amendment management programmes catering products may be used to repair, for changing patterns in use, and retrieve and restore the macrostructherefore wear and tear, should ture and microstructure of soils ensure it lasts the course.

Soil texture and structure

In turn, other factors like run-off, and hydrophobic (water hating) Golf greens are constructed with leaching, cation exchange capacity conditions, and the development a lifetime of uninterrupted play and nutrient availability all impact of chemically damaging conditions

before reconstruction beckons. riorates over time under the influ-surface 'black layers'. Three key factors - standard of ence of climate and weather, wear construction, intensity of use and and tear and compaction caused of compression and desiccation quality of routine management by turf management machinery. leading to less available and active and maintenance - determine the This is where the application soil pore space, reduced water moveworking life of a golf feature. It is dif-amendment products used to renoment and holding capacity, poor

a green will be carrying fifty years chemical balance comes into play.

Soil amendment (amelioration) and to rebalance the chemistry (e.g. pH and salinity). These mechanical and chemical factors underpin the Soil texture relates to the size of soil and grass plant biology includ-

Turf problems that benefit from soil amendment products can be like excessive acidity or alkalinity Soil texture and structure dete- or the specific formation of sub

Compaction is largely the result ficult to predict how many rounds vate the physical fabric and restore aeration and the creation of inhos-



pitable conditions for root growth and development.

balance and providing optimal larger pore spaces, increased water soil drainage, aeration, root growth conditions for nutrient availability movement and improved aeration. and uptake and steady grass growth. Marked deviation from the Plus' increase soil permeability and acidic soil status preferred by fine water percolation by repairing the have poor water holding capacity turf grass species leads to reduced structural conditions responsible growth and vitality of the sward, and for standing water, poor drainage, specific problems related to weeds, hardpan and black layer. By getting diseases and worm casting. Black to the core of the soil problem, and layer problems are more specific the root of poor grass growth the lem with peat and other organic and relate to gaseous toxins like conditions for healthy and vigorous materials is a tendency to reduce hydrogen sulphide emitted from turf can be recreated. As its name permeability (water percolation the 'contaminated' sub surface suggests 'Integrate Plus' should be rate) and being short term in effect. layer of soil.

Creating pore space

of maintaining good soil particle size/pore space size profiles and Adding pore space alleviating compaction and its asso-

positively charged clay and organic Severe soil compaction virtually fines, pulling them together to form obliterates non-capillary pore space Soil pH is all about chemical larger particles of soil to create with a severe negative impact on

Spray treatments with Integrate used as part of a wider turf management package including mechanical aeration by spiking, tining or amendment products that can Integrated approaches are the coring immediately before applicabest and most sustainable ways tion and with irrigation afterwards.

ciated effects. Integrate Plus' from soil particles to pore space, with the each with its own pore space. Thus Rigby Taylor is a liquid formula- latter split 50:50 between capillary more pore space is added using tion containing 44% w/w (weight/ pore space and non-capillary pore supplementary mineral matter, weight) of water-soluble polymeric space. Non-capillary pore space is rather than its creation from natupolyelectrolytes. Its powerful negather conduit for water percolation ral soil particles. tive (anionic) charge attracts the and is otherwise filled with air.

and development.

Sandy soils resist compaction, but with little capillary pore space and nutrient retention. Peat is often added to sandy soils to improve water holding capacity and nutrient retention. However, the prob-

There are several customdesigned, inert and porous soil achieve the desired result through becoming part and parcel of soil structure. Instead of modifying existing soil particle structure they 'Half and half' is the ideal ratio of supplement soil with extra particles

'Axis', a granular inorganic soil

granules are made from naturally sive black layer formation. occurring minerals containing totally stable and inert material, resistant to breakdown and becomof the root-zone.

structure boosts percolation and layers using: aeration, helping to avoid and and black layer formation. Poorly rounds anaerobic bacteria drained soils become more permelow cation exchange capacity (CEC)

amendments and this low bulk density material fits the bill. Best ment product practice recommendations are: dressing material; application after areas coring/tining/draining; drag mat/ brushed into holes and watered in; Acid test for turf or used in a 'Drill and Fill' operation.

renovation by rotovating into the pH range of 5.5 - 6.5 and values is a dust-free, micro-granulated top 150 mm of the root-zone prior to outside this range will progressively form of calcium carbonate and re-turfing or seeding. Overall aim is reduce grass growth and vigour. recommended for use with strict for an incorporation level of 10% by Soil pH extending into the alkaline follow-up pH testing. volume in the top 100mm -150mm range (pH 7+) is the most common of the root-zone.

Blocking black layers

Black layer is the result of oxygen deficit in the soil profile to cause tees are created from sand and toxicity to turf from resulting materials that naturally produce anaerobic conditions. The root root-zones of high pH and low in cause of black layer is compaction organic matter. Consequences are resulting in poor permeability and varied including low-retention of waterlogging. However, other fac- water with high nutrient leaching tors are implicated in black layer leading to turf stress, and lockingformation including accumulation up' of nutrients such as copper, of algae and anaerobic bacteria, iron, manganese and zinc. Such and the inappropriate use of iron conditions encourage broad-leaf and sulphur containing products weeds like yarrow, self heal and to give hardpan and toxic layer coarse grasses like Poa annua as formation.

Black layer is located in the sub take-all patch and Fusarium patch. surface and aggravated by environmental conditions above ground nutrient but also keeps soils within including evergreen trees shading the desired acidic pH range. The golfing greens year round to restrict element was once 'delivered free', air movement and the penetration from power stations and factories of sunlight onto the turf.

ally wet turf surface which inhibits the land. However with the 'greengrass growth and encourages algae ingup' of the environment came the to further impede water infiltration 'de-greening' of crops, pastures and through the soil profile. End result sports turf with sulphur deficienis the classic sequence of events cies first showing up in wheat, itself - soil saturation, water logging, a member of the grass family. bacteria, toxic gas production and an essential plant nutrient where

amendment from Headland Ame- restriction on grass growth and required, but more commonly as nity is an example. Its inert porous development - leading to progres- a soil amendment product to lower

bacteria.

Rigby Taylor's 'Blockade LX ing a permanent and integral part (liquid formulation) and Blockade ucts do not use ordinary powdered The extensive internal pore deliver a four-way attack on black or pastilles which are easy to handle

- with its classic rotten egg odour, Volume rather than mass is the agent to assist delivery of the carbon secret of success with granular soil particles into the sub surface layer
 - · a porous ceramic soil amend-
- mixing 50:50 with a suitable top- grass re-colonisation of affected and is fraught with danger because

problem particularly for turf laid down over chalk and limestone soils.

But many golfing greens and well as specific turf diseases like

Sulphur is an essential plant which spewed out finely divided These situations give a perpetu-sulphur as a pollutant evenly over

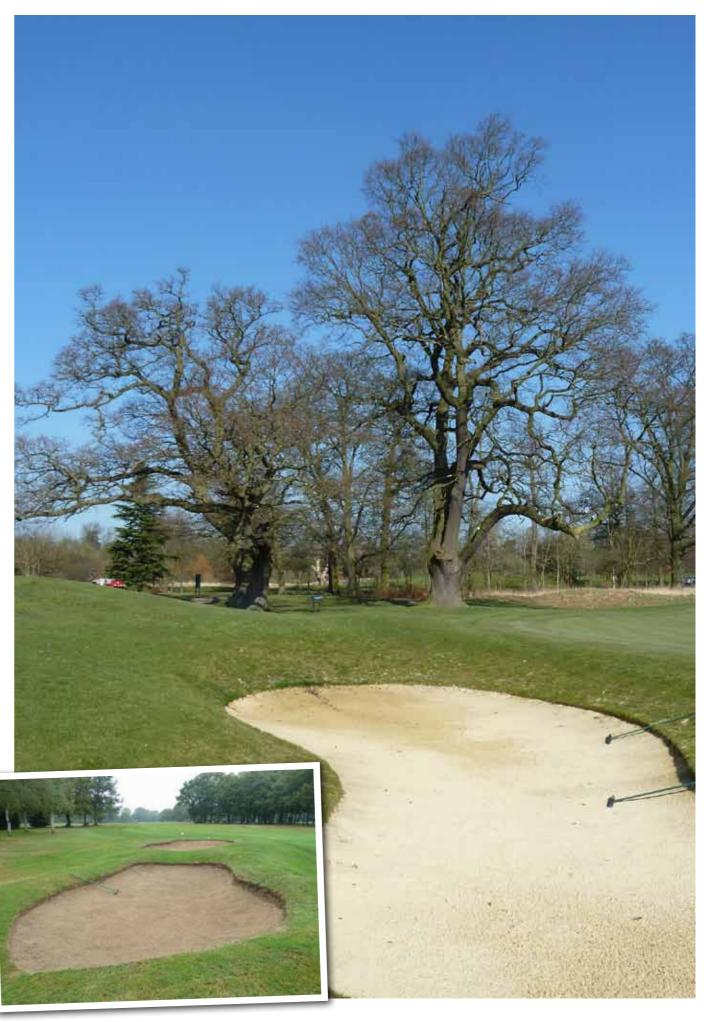
zero oxygen, build up of anaerobic Sulphur is now applied to turf as

pH. Soil bacteria called Thiobacil-The key component of remedies lus break down and solubilise the thousands of microscopic diatoms for black layer problems is finely elemental sulphur to form sulphwhich are hard and sponge-like ground, activated carbon (char- uric acid. This dissociates in the structures providing porosity and coal). With its inherently huge soil water to give negatively charged associated benefits to soil. The physically active adsorptive area sulphate ions (S042+) and posiproduct is 'calcined' (heated to very activated carbon able to tie up water tively charged hydrogen ions (H+), high temperatures) to produce a and toxins produced by anaerobic the latter causing an acid reaction and lowering the pH.

Sulphur soil amendment prod-G2000 (granular formulation) sulphur but custom-designed prills and apply and which present a large • Enzyme systems to degrade the surface area for the slow release of alleviate compaction problems protective slimy covering that sur- sulphur throughout the season. One such example is 'Sulphur 95' • activated carbon to adsorb and a micronized elemental sulphur able, and free draining soils with neutralise hydrogen sulphide gas product from Vitax and marketed as a mini-prill. The formulation will hold more water and nutrients. coupled with a soil penetration flows well and is readily dispersed by soil moisture for slow release of sulphate into the soil.

The need to move soil pH in the other direction (from excessively • a rooting bio-stimulant to assist acid to less acid) is not so common it is easy to 'overshoot' into alkalinity when using crude lime-based materials. However, there are Turf grasses perform best in custom-designed products like Axis can also be used in turf an acid soil environment within a 'Microcal' from Rigby Taylor, which





Headland's 20/20/30 approach to help fend off disease

How you can guard against the onset of Fusarium Patch by taking a long-term, strategic view of the disease

As autumn arrives, the combination of residual summer warmth and late season humidity suggests that are intended to increase the hard- mix was added a source of liquid the onset of Fusarium Patch is never far away.

caused by the fungal pathogen some forms of foliar iron are able to disease, at rates of 20L/Ha (Liquid Michrodochium nivale tends to decrease the pH on the leaf surface Turf Hardener), 20L/Ha (Turfite) be common at around the same and/or reduce moisture levels, and 30L/Ha (Seamac ProTurf) period each season means we can which it is suggested may also hence '20/20/30' mix, has shown and should prepare in advance for discourage fungal development by to be the most beneficial in helping its arrival.

Seven years of research at the ment. STRI show that it is possible to minimise its effect whilst limiting phosphite based products, can the input of pesticides - if we take a trigger the natural defence mecha- focused on helping the plant to preventative, longer term view.

going into and during this autumn growth even in the presence of a period, can have a hugely positive pathogen. effect on reducing the incidence of turf disease

tions of plant elicitors and plant managing Fusarium nivale. hardeners, applied prior to the fungicide applications.

Trials have confirmed that it is fertiliser. possible to significantly reduce protectants and elicitors are under- increase cell wall thickness. taken, most importantly, before the disease has become established.

Foliar plant elicitors such as nism of the plant (SAR or Systemic defend itself more efficiently and A plan to maximise plant health. Acquired Resistance) aiding plant reduce the effects of disease.

Headland Amenity has under-

The most effective combination main disease period rather than found to date, utilises a tank-mix siderable success using the plant relying solely on costly repeated application of three liquid plant surfactant Dewcure, which can be

the effect of Michrodochium nivale Liquid Turf Hardener is a calcium dochium nivale is kept in check, when timely applications of specific based plant hardener that helps

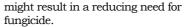
The use of foliar plant protec- hardens cells and creates an acidic tants, containing elements such leaf environment, and Turfite is as Calcium, Potassium and Silicon a phosphite liquid. To this tankness of the plant cell wall, making it potassium Vertex K (0-0-25). The harder for a pathogen to physically combination of these three prod-The very fact that the disease, attack the grass plant. In addition, ucts applied prior to the onset of offering a less favourable environ- to minimise the effects of Microdochium nivale over the autumn/ winter period.

The (20/20/30) approach is

The reduction of dew and surface moisture are also key elements of disease control in fine turf, as taken trials at the STRI at Bingley Microdochium nivale moves in This approach takes a longer each year since 2007 to establish water. Dew formation begins in the term, strategic view of turf manage- which combinations of these early hours so it is not always posment using preventative applica- materials have the best chance of sible to remove it immediately by physical means.

STRI trials have shown conhealth products alongside a liquid effective for up to three weeks in lower temperatures. As with most Of the plant health products, things, timing is the key. If Microand not allowed to proliferate, then a much healthier sward is evident Seamac ProTurf is a citrate going into the new season. Any sigchelated iron formulation that also nificant level of disease reduction





Whiteleaf GC encountered a situation during the winter when the greens were very high in thatch and very susceptible to disease. They were finding the high pressure peri- had to do which is a huge saving ods of disease to be September and in cost and labour. It's only a year October due to the high moisture since we started the programme overall costs can be considerably levels mixed with warm conditions.

They had difficultly getting the plant strong enough and found they had to spray a lot to try and keep the disease at bay. Mike plant to create an environment that Ginger, Head Greenkeeper, went to Iain Richardson from Headland to improve plant health as well as reducing the costs they were spending on fungicides.

"We started to use the 20/20/30programme over 5 years ago," he said, "and have more than halved our fungicide bill. It also means that after the winter months we have superb plant health and minimal susceptibility to disease.

The plant comes out of winter ready and raring to go into summer - it's amazing. Every year it seems to get stronger and stronger. Using 20/20/30 seems to have given the plant its own immune system to fend off the disease."

Mike Gould, Head Greenkeeper at the Copthorne Golf Club in West Sussex is a new convert who only started using 20/20/30 about a

"We seemed to be using excessive result in a complete absence of amounts of fungicide - spraying disease, but rather minimise levels 8 times in 2013," he commented. to those that may be more manage-"With the use of 20/20/30 we have able. already seen a considerable drop in the amount of disease spraying we

'20/20/30' represents a preventative approach, helping the grass nutrients rather than pesticides, can resist disease pressure, rather reduced, whilst turf quality can than offering a curative strategy.

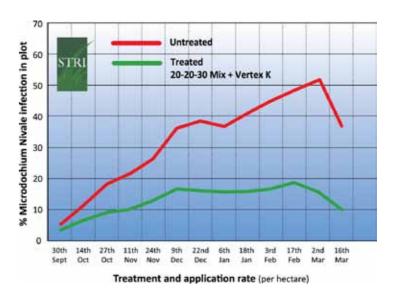
but we're delighted with the results

we're getting.

It is not likely that its use will

Often, fungicide may still be needed where any residual disease

Using this combined approach, lower – up to 50 per cent less than using fungicide alone, and as the products being applied are plant the impact on the environment is more often be enhanced.





Turf machinery constantly adapts to suit the environment are in increasing demand all year and setting in which it works. But can the reverse be true? Well, yes, claims Dale Hand, Course Manager of two golf courses, one of which has been shaped to suit the mowers he manages.

Working with a small greenkeeping team, Dale spends his hours where he met Dale, who has been maintaining Aylesbury Park Golf Geoff's right-hand man ever since, Club in Buckinghamshire and moving to Aylesbury as Deputy Clandon Golf, Surrey.

Fifty miles apart, the two courses have streamlined operations in a novel and effective way to capitalise two days a week, with Jason Dabbe on the equipment and machinery brought in as a second full-timer they manage, limit downtime and in January to replace a part-time rationalise staff training. It's a greenkeeper there as demand rose. model in which other courses may see merit, he believes.

18-hole course can suffer when high." annual ticket holders, who are in over free-draining chalk on Sur-

effect members - and its 18 holes

Dale is not the only common factor in the equation. PGA professional Geoff Legouix co-owns Aylesbury and Clandon Golf and has been involved in several golf course ventures, including Chesfield Downs in Stevenage. This is Head Greenkeeper in 1995.

Dale runs a tight ship at Clandon - full-timer Jez Healey and himself

Dale admitted: "Running a course with two full-time greenkeepers In its 19th year, Aylesbury Park is a challenge, but presentation is runs a pay and play and member everything, and with the resources club. Constructed on clay, the we have, the standard here is pretty

deluges descend. Clandon Golf Golf course architect Peter Jones is pay and play - although it has designed the course, constructed





rey's North Downs, the front nine opening five years ago, the back team. "When we have a big job on nine a vear later.

With the likes of Clandon Regis, although these are private members clubs, Clandon fairs pretty well, Dale confirmed. "We're very busy all year round. Many courses we stay open - their loss is our gain."

same drainage qualities as Clandon Golf, being built on clay as opposed to chalk, so inevitably suffers in very wet conditions.

team of Dale plus three full-time fairway mower for the fairways.

The commitment to delivering challenging holes. quality courses to a tightly controlled budget permeates a manof available resources, exemplified by the turf machinery operating at both sites.

John Deere, in part to allow units to did the trick." be moved seamlessly between sites when needed.

"If Clandon's 2653B or 2500 need servicing, we deliver it to Aylesbury, can play nine or 18 holes at £15where all that's done, then bring one of their machines back with from a wide catchment. us so there's no downtime," Dale explained.

The same's true for the greens at one site or the other that needs Guildford and Wisley nearby, across to ensure the work gets replace.

"As we have Deere kit at both sites, the team knows the machines inside out and can switch from one locally can be closed in winter due site or machine to another when to flooding but our location means needed, adding another dimension Aylesbury does not have the a load of time training people up on we use the 7400, set to its lowest different makes."

The Clandon course, which lies within the Clandon Estate of Lord Onslow, was partly created on the In the growing season, there is site of a former limestone quarry, very vigorous growth, however the later a domestic waste landfill site.

Ten feet of chalk were laid on greenkeepers are able to keep the area that had been created in up with the cutting using a John the past to create the substrate for fit the soil conditions and has the Deere WAM batwing rotary for the the course but other undulations benefit of limiting growth compared semi-rough and a John Deere 7700 of the quarry were moulded into to some other grasses. Perhaps the designs to create interest and

on which to build a golf course but John Deere themselves declare to agement style of making the most the flint that went with it on the site be "extremely unusual" in their could have proved challenging," Geoff remarked.

"To stop flints from coming up Each course 'doubles up' with through the surface of the course, 2500 greens mowers and 2653 util- we pulverised them using a special ity mowers from preferred supplier crushing machine and that really

Presenting an accessible, friendly face for pay and play golfers is crucial to a successful offering. Visitors £25 a round, prices that attract

take the train from Waterloo to reliable - John Deere fits that bill."

Guildford, then bus it to the course entrance, which is conveniently located at the park and ride facility.

"We do winter play very well here and keep our own rainfall records. Two years ago, 1,004.5mm fell here. Last year, just 759.5mm. In January and February alone this year, it was 361.5mm. We have never closed for rain in all that time and we play on the greens in winter, never using temporary ones."

Rotaries are heavily used at both sites, Dale said: "Rotaries were once used just for cutting rough but the quality has come a long way. We use the John Deere 7400 for all Clandon's tees, approaches and around the bunkers.

In fact the contours of the tees were created to cater for the machine and they all have similar angles. It tackles steep banks no problem, while rollers prevent scalping around bunkers and it leaves stripes where required.

"When it needs maintaining, the 7400, like the 2653B, is compact enough to fit on the trailer and we take it to Aylesbury - it's all about weight and width. And the rotary more manpower, we can ferry staff has blades - cheap and simple to

> "If a cylinder had hit a flint, you'd be in trouble. We certainly push the machine to its limits, that's for

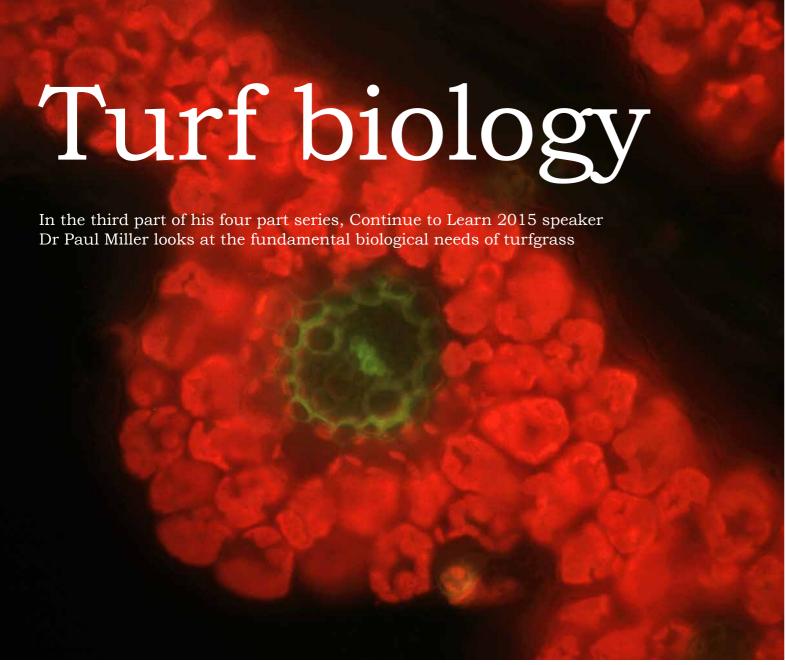
It comes into use at the start of the growing season too. "Different to our levels of efficiency by saving grasses grow at different rates, so height of cut, to mark out the fairways - it's particularly good at taking out the grass stalks at certain times of year, while the rollers leave a quality finish."

Maximising machinery resources doesn't end there though. Fescues were specified across Clandon to that's one reason why Dale prefers to mow the fairways with the 2653B "Chalk is a wonderful substrata utility mower – a practice that even experience.

> However, as Geoff confirmed: "We find that using one machine to cut fairways, tees and approaches works for us.

> Geoff stressed: "It was always our intention to make Clandon maintenance friendly. John Deere's rapid response on parts delivery helps there too.

We want to own/operate the least number of machines possible that give quality results, can do, if pos-Geoff continued: "Some golfers sible, more than one task and are



In the preceding two articles in this series we looked at the natural habitats of the commonly used cool-season turfgrasses, concluding that fescues are at home in a dry, nutrient poor and pH compromised environment, bents are a little more adaptable but still naturally favour less than perfect soils (from an agricultural perspective) whilst Poa annua is indiscriminate, being able to grow and complete its life cycle in a multitude of environments.

In the second article we looked at 6CO2 + 6H2O + Energy how grasses are structured, with their compressed stem meaning that the important components without oxygen, and we described are protected under a height of cut in the last article that plants do not as an evolutionary adaptation to distribute oxygen through a heartgrazing by animals. Both of those and-lung system, so direct access articles mentioned fundamental to oxygen is essential for all parts of biological needs, but didn't expand the plant.

on them. In this piece we will do within the grass plant.

in the presence of oxygen, in the their own energy-rich compounds equation:

Glucose + oxygen Carbon dioxide + Water + Energy C6H12O6 + 6O2

We can see that this can't happen tion:

The next big question has to that, and look at the vital processes be, where does the glucose come from?' As animals we consume our A characteristic of all living things energy-rich compounds as food, is a requirement for energy, which and derive our glucose from the drives all vital processes, repair, breakdown of these compounds growth and reproduction. The in our digestion and metabolism. vast majority of organisms release We know that plants don't eat food energy from the 'burning' of glucose as animals do, but that they make process known as respiration; through the amazing process of respiration is represented by this photosynthesis. This process is the major differentiating factor defining plant life. The plant takes two abundant and simple compounds, carbon dioxide and water, and driven by the energy of sunlight the process converts them into glucose. This is represented by this equa-

> 6CO2 + 6H2O C6H12O6 + 6O2 Carbon Dioxide plus water Glucose plus Oxygen

YOU CAN CATCH PAUL AT CONTINUE TO LEARN 2015. HE'S PRESENTING A MEMBERS' CHOICE WORKSHOP ON SUNDAY 18 & MONDAY 19 JANUARY ON TURFGRASSES, SOILS AND FERTILISERS. TO BOOK VISIT WWW.BTME.ORG.UK



sis only takes place in the green that one reverses the other, which these is not at all good. makes things nice and tidy. But the plant has to make more glucose lism that I feel deserves special the plant cell is stronger than that than it needs to immediately burn attention is that of nutrient uptake. of the soil solution (soil water with in respiration, because there are As we know the plant needs a large nutrients dissolved in it) then water days and times when the plant is number of essential nutrients to will pass through the membrane not able to photosynthesise (night function fully (about 16 in all, each into the plant cell. Once inside it time, low-light days, short days, with a specific job to do; N, P and K is drawn through the plant by the cold days) yet still needs to respire. are the ones to which we give most process of transpiration, exiting as So it has to put some glucose away attention) and that it takes these up vapour though tiny holes in the leaf can't photosynthesise - and grasses and how does the root work? Plant control of the plant, and does not roots, rhizomes and stolons. In anchoring the plant to the ground the fact that non-living membranes addition, the plant uses glucose as whilst (in the right conditions) of the right properties can allow the preliminary building block for growing to explore new areas of osmosis, and by the fact that if the manufacture enough glucose for in the root, and in terms of uptake soil (think spillage of quick-release the plant's immediate needs, but of water and nutrients the three of fertiliser leading to scorch). and to put into storage.

that the manufacture of glucose of a plant root are enclosed by a 'active uptake'. The clue is in the

For the process to take place, through photosynthesis is of sin- membrane (picture a balloon full in addition to water and CO2, we gular importance in the functioning of sugary liquid) and in order to need an appropriate temperature, of the plant, and it should be clear get into the plant cell water and light and chlorophyll (chlorophyll that if we limit the ability of the nutrients have to pass through that is the compound that makes plants plant to photosynthesise then we membrane. Water passes through green, meaning that photosynthe- compromise its capacity to function the membrane by the process of portions of the plant.). If we look damage, and to see itself through in an attempt to equalise the concarefully at the two processes of res- the winter when there is not enough centration of the aqueous (waterpiration and photosynthesis we see light or heat. To compromise any of based) solution on either side.

into storage for those times when it from the soil. How is this achieved, (stomata). Osmosis is not under the store energy-rich compounds in roots are amazing organs, literally require energy, as demonstrated by all its structural components, so soil, absorbing water and taking soil solution strength exceeds that photosynthesis assumes a greater up nutrients. So there are several of the cell contents, then water will importance as it needs to not just important processes taking place move from the cell back into the enough to allow growth and repair greatest significance are osmosis, diffusion and active uptake.

properly, to repair from wear and osmosis, whereby it goes through So if, as normally is the case, the A second area of plant metabo- concentration of the solution within

In contrast to this 'passive' movement of water, the uptake of So from all of this we can judge As with all living cells those nutrients requires the process of



chlorophyll and light, CO2

word 'active', meaning it requires ful, it actually exercises control and porosity at field capacity. We also in the presence of oxygen).

As we have identified with photo- worth paying. tain advantages to the organism.

there is a mechanism to extract the don't work properly. nutrient from the soil, up to a point.
If we try to 'join the dots' from the grass plant, thinking about the

mechanisms to operate was a price where the oxygen is maximised.

living organisms, and is hard won, point-respiration is the burning of of plant physiology, but what I so why would the plant 'spend' glucose in the presence of oxygen. have tried to do here is identify four some of it in taking up nutrients? Plants do not have the oxygen dis- highly significant processes - res-This expenditure must convey cer- tribution system (heart and lungs) piration, photosynthesis, osmosis that animals possess, so the parts and active uptake, and think about When we look at the process of of the plant that need oxygen need their significance to the functioning active uptake we find it does indeed to have direct access, meaning that of the plant. convey certain advantages - the for our roots to function properly plant can take up nutrients against there needs to be sufficient air in shall consider these again and a concentration gradient, meaning the soil, also meaning that if there is try to relate them further to the that even if the soil is running short insufficient air in the soil the roots commonly used management

Secondly, the uptake of nutrients previous articles we will recall that things we can do to get the plant is selective, meaning that the plant fescues and bent grasses are most functioning as nature intended, doesn't just take the nutrients that at home in sandy soils, which can and discussing the implications if are there because they are plentibe as much as 20 - 25% air-filled we don't manage to do that.

the expenditure of energy, and takes the ones it needs. Evolution identified that Poa annua does release of energy in turn requires must have decided at some point better in heavier soils (less air space) respiration (the burning of glucose that spending energy to allow these rooting in the upper levels of the soil

Space doesn't allow a full descripsynthesis, energy is the currency of Let's revisit respiration at this tion and explanation of all aspects

> In the fourth and final article I techniques on the functioning of



THE BRITISH AND INTERNATIONAL GOLF GREENKEEPERS ASSOCIATION **PRESENTS**

THE BIGGEST EVER EDUCATION OFFERING AT CONTINUE TO LEARN



OVER 100 EXHIBITORS FROM ACROSS THE INDUSTRY



PLUS THE TURF MANAGERS CONFERENCE, SPECIAL GUESTS AND MORE

BIGGA TURF MANAGEMENT EXHIBITION

BIGGA PRESENTS BTME 2015 INCORPORATING CONTINUE TO LEARN AT THE HARROGATE INTERNATIONAL CENTRE **CONTINUE TO LEARN** 18-21 JANUARY 2015 **TURF MANAGERS CONFERENCE 19 JANUARY 2015 BTME** 20-22 JANUARY 2015







Talk about a Revolution

Revolution®- A Sustainable Tool For Greenkeepers. How Farmura is leading a 'Revolution' in water usage...



In recent years, there has been a steady progression towards more sustainable management practices in the turfgrass industry. Whether driven by budget restrictions, legislation, or genuine concern for the environment, greenkeepers everywhere are becoming increasingly mindful of the inputs of their golf courses.

tainable" may differ from one golf hinder the movement of water

Though new tools have made it ing, or running off the surface. easier to monitor inputs, sustainable management practices are water, even for otherwise highly often complicated by environmental efficient irrigation systems. variables, such as inconsistencies in the growing environment and structure holds water more unpredictable weather patterns. closely to soil particles than any

surfactant that is proven to sig- caused by water repellency and nificantly reduce watering needs encouraging water to move in a and a reliance on inputs to grow thin, continuous film throughout healthy, resilient turf. Revolution's the soil profile. unique molecular structure sets it apart from all other soil surfactant research has shown that Revoluproducts on the market and leads tion can produce high quality turf to its unparalleled performance in at dramatically reduced rates of the field.

By optimally balancing air, soil, and water in the rootzone, Revolu- Kevin Frank at Michigan State tion lays a strong foundation for University examined Revolution's healthy turf and can help green- performance under a variety of keepers reduce water consumption irrigation regimes. and their reliance on other inputs.

Reduce Watering

Golf courses are often scruti- irrigation. nised for their water use, especially probes have given turf managers ity turf compared to the untreated

significantly more control over the control, never falling below the RIGHT TOP: Without Re amount of water applied to their acceptable turf rating (Figure 1).

irrigation system, other inefficien- and virtually eliminate the need cies take over.

Water repellency and the natural summer months. behavior of water often combine to negate the water savings produced

While the exact definition of "sus-occurring phenomenon that can (below bottom). course to another, a common theme into and through the soil profile. runs through every definition; maxi- Untreated soil water repellency mized efficiency and reduced waste. leads to water puddling, channel-

The end result is plenty of wasted

Revolution's unique molecular That's where Revolution comes in. other surfactant on the market, Revolution is a patented soil overcoming the inefficiencies

> More than a decade's worth of irrigation.

> A 2012 study conducted by Dr.

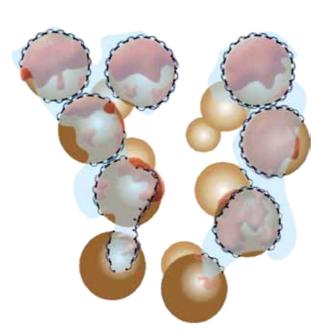
Dr. Frank's results show that Revolution produces consistently higher quality turf under deficit

When turfgrass was watered to during prolonged dry periods. In just 50% of its daily evapotransrecent years, high-efficiency irriga- piration (ET) losses, Revolution tion systems and soil moisture produced significantly higher qual-

This could lead to 20-40% water However, once water leaves the savings over the course of a season for hand-watering during the hot

Revolution's unique, methylby these high-efficiency irrigation capped molecular structure (below top) allows it to attach Water repellency is a naturally more closely to soil particles









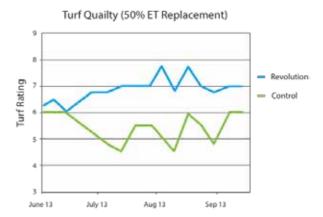


Figure 1 Turf Quality

Improve Nitrogen Efficiency

demand to get the most out of Nitroreduced rates of fertilization. The source of savings for greenkeepers. charts below reflect data from a 2012 study at Rosendaelsche Golf Club in the Netherlands, where nothing if greenkeepers cannot proresearchers studied the effects of duce the optimal playing conditions a monthly Revolution program on Nitrogen efficiency.

plant-available Nitrogen in the sustainability. rootzones of treated and untreated Revolution-treated plots had nearly

from the Revolution-treated plots and fertilisation.

contained, on average, 27% more leaf Nitrogen than the untreated With rising fertiliser costs, the control. On August 15, the Revolution-treated turfgrass showed an gen sources has never been greater. 11% increase in leaf Nitrogen over Research has shown that Revoluthe control. This increased Nitrogen tion increases Nitrogen efficiency efficiency means fewer fertilizer in turfgrass, providing plants applications are needed over the with the energy they need even at course of a season, a significant

Optimise Playing Conditions

A reduction in inputs means that their golfers desire. Revolution has proven that you do not need to Researchers first looked at sacrifice playability in the name of

The photographs below were plots (Figure 2). On average, the taken at Kennemer Golf Club in the Netherlands in 2009 on fairways 30% more plant-available Nitrogen growing under a reduced fertilizaon the first measurement date tion regime. After three aerations, (July 9). On August 15, the Revo- the Revolution-treated fairway lution-treated plots showed a 54% (bottom) produced greener, more increase in plant-available Nitrogen uniform turf while the untreated compared to the untreated control. fairway (top) exhibited widespread In the same study, researchers damage. By getting inputs where also looked at the amount of Nitro- they are needed most, Revolution gen present in leaf blades for both delivers the uniform conditions that the treated and untreated plots golfers and greenkeepers desire, (Figure 3). On July 9, clippings even at reduced rates of irrigation

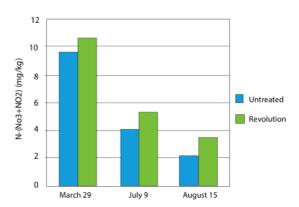


Figure 2 Rosendaelsche Golf Club

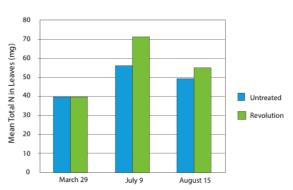


Figure 3 Rosendaelsche Golf Club

All the latest news from your Section, in your new-look notes pages...

Around the green



Contact your Section correspondent with news, events or anything else for Around the green...









SHEFFIELD

googlemail.com tiscali.co.uk

Events coming up

NORTHERN

A new date for the Christmas golf day at Rawdon Golf Club is 17 December, same tee time 10am. As always it's a four-man team Texas scramble over 9 holes followed by festive dinner and beer and prize presentation. All teams receive a prize plus the nearest pin too kindly sponsored by Bob Wild. A few of us will probably wander in to Leeds to finish the day off!

SHEFFIELD

Don't forget our Christmas Competition will be held at Bondhay Golf Club on Thursday December 4.

The October DryJect demonstration at Rotherham Golf Club had to be postponed due to adverse weather but we hope to run this in

Thanks to The Phoenix Sports and Golf Centre for hosting the Regional Conference on 6 November and also to all the companies and speakers involved. Sheffield Section supported this event by paying the entry for all Sheffield Section Greenkeeper members attending the event.

The date for the Dog Racing evening has been posted on Facebook and emailed and texted to those who have supplied an email address and mobile number (Please text your name and mobile numbers to

The Christmas Golf Competition and AGM is being held at Bondhay Golf Club with tee times from 10am, anyone who can help please come along and join the committee so that 2015 can be a bumper year for golf, education and social events. Thank to Bondhay for hosting. Bookings to Andy Unwin or Neil Peters please.

CLEVELAND

On 24 November the Cleveland section will be holding its AGM at Teesside Golf Club 7pm. It would be great to see you

NORTH EAST

Christmas bring a bottle and AGM at Dunstanburgh will be on 3 December tee times from 9.30.

NORTH WALES

Our Christmas tournament and AGM takes place at Wallasey Golf Club on Thursday December 4, please return your entry by 25 November, there will also be a course walk available during the competition for non-players. The course walk is £15 to cover the price of bacon bap on arrival and a 2 course Christmas meal afterwards. Please book early through Carl Crocher or Paul Lowe as there are limited

NORTH WEST

The Annual Christmas Competition and AGM will take place at Wilmslow Golf Club on 11 November. to enter please contact David Weir on 07774 999230 or email daweir@rigbytaylor.com.

News

NORTHERN

Two competitions to report - the first was the invitation day at Dewsbury Golf Club. 1 Kevin Moore/R Evoy 44pts, 2 Rob Gee/I Clark 42, 3 P Danskin/D Pickles 40, 4 Andy Slingsby/ G Abernethy 39!

Autumn comp at Masham: Div 1, 1 Andy Slingsby 40pts! 2 R Harris 38, 3 N Coultash 29, Div 2, 1 N Hutchison 40, 2 S Rothwell 31, 3 P Thompson 27. Trade winner Tito 33. Nearest pin winners Mel Guy & N Coultash.

Finally, congratulations to a great guy at Ilkley Golf Club Matty Bulmer on becoming a dad.

SHEFFIELD

I hope everyone has made use of the weather throughout

October and completed all their course maintenance. The SUGC Greenkeepers Competition was held at Rotherham Golf Club on 18 September. Greenkeepers from 26 clubs enjoyed the course and facilities, the annual event was won by C Johnson and R Hewitt from Chesterfield Golf Club.

CLEVELAND

At Richmond the leaves are turning and starting to fall. I know what I'm going to be doing for the next month! Although early autumn is beautiful time of year to be working on a parkland course, it's not my favourite time of the year - the seemingly endless task of blowing and collecting leaves does start to drain your enthusiasm and it's only just started! I'm sure all you links guys are glad you don't have this problem.

If you have any news call me on 07974458640 or email amcgeough@aol.com alternatively you can post on the Cleveland Facebook page.

NORTH EAST

Congratulations to Jack Friar who at just 19 is Head Greenkeeper at Percy Wood Golf Club! We wish him well. I'm sure Jack will grow into his new role, with the help and advice he takes from other members within our section, proof our section is one big happy family! Northumberland is becoming the nation's capital for young Head Greenkeepers, with Stu Imeson another at Dunstanburgh.

The BIGGA North East Section Autumn Tournament took place on a beautiful sunny October day at Alnmouth Golf Club where Jim Storey and his team had prepared their usual high standard course.

Jim Storey won the Gross Trophy with a score of 76 (Par 71), Jack Friar won the Stableford with 37 Points, Mark Linsley was runner up with 34 Points and Colin Donaldson was third with 33 Points.

NORTH WALES

The autumn tournament was played at Caernarfon golf club on 17 September with only 16 players, we did initially cancel the competition due to it being so under subscribed. Results; 1 T Adamson/E Angel 43 pts, 2 M Hughes/J Corbett 39, 3 A Peel/P Watson 38

We were well represented at the National with Andy Peel, Jez Hughes, Simon Ashford, Andrew Cornes and Dave Wilkinson flying our colours. We are looking for new blood on the committee especially non-golfing members, to apply please come to the AGM. We are making an appeal for courses to hold course walks, if you have anything that may be of interest please contact Paul Lowe as I know he has a great interest in

Jez Hughes has been crowned club champ at Vale of Llangollen Golf Club, well done Jez.

NORTH WEST

The North West Section held a seminar at Myerscough College on 15 October withy presentations fro Mark Hunt of Headland Amenity, Cameron McMillan of Queenwood Golf Club, Neil Adams of Lely UK and Myerscough College. These presentations coupled with outdoor workshops from Bernhards, DryJect, Lely UK, Campey Air2G2 and VGR

Topchanger and the ProFusion complete bunker renovation made for a great day of education.

Thanks are extended to all these people and companies for contributing a great effort and also to Tillers Turf and Whitemoss Eco for donating turf and sand to complete the day. The final attendance was 92 and thanks are extended to all those who took the time to come along. The feedback forms completed are being used to plan a Spring event, probably in early March 2015.

Thanks to Sponsors

Fantastic support from Ian Collett/Rigby Taylor at Dewsbury. Autumn Comp - Special mention to Bolton Abbey Mowers for the sponsorship and the excellent machine presentation. Also a big thank you to David and Jo Snowden from Agronomic Service for their support.

SHEFFIELD

Apologies I didn't mention in last month's report the sponsor for our autumn tournament so a big thank you to Glen Sawyer of Russells Groundcare for his ongoing support to the Sheffield

Thanks to Rigby Taylor for sponsoring the Christmas golf

NORTH EAST

Thanks to all the sponsors for 2014 (Rigby Taylor, Rickerbys, TSL, Lloyds, Shorts of Whitburn), to Alnmouth Golf Club for excellent hospitality and course presentation and to all who

NORTH WEST

The North West Section would like to thank all sponsors for

Thanks to everyone who contributed to the Myerscough seminar plus Tillers Turf and Whitemoss Eco for donating turf and sand to complete the day.

Welcome New Members

Ashley Griffiths, Greenkeeper, Wrexham Golf Club, Richard Barker, Head Greenkeeper, South Leeds Golf Club, Tom Stanley, Assistant Greenkeeper, Grange Park Golf Club, Joe Woodcock, Assistant Greenkeeper, Casterton Golf Club, Niall Bradley, Assistant Greenkeeper, Middlesbrough Golf Club, David Jacques, Assistant Greenkeeper, Hessle Golf Club.



Please send your news and photos in to your section correspondent or Steve Castle (steve.castle@bigga.co.uk) by the 15th of November

Around The Green



Contact your Section correspondent with news, events or anything else for Around the green...











Steve Beverly

Nigel White nigelwhite1553@

Events Coming Up

MID ANGLIA

Our next golfing event is our Turkey Trot/Texas Scramble at Ashridge GC on December 10. Requirements: at least one team member to have played in one of our other events through the season in order to secure a spot for this ever popular event. Cost is £30 for Members and £40 for Guests so please get your teams in early to avoid missing out on our final event of 2014.

MIDLAND

Christmas Golf Tournament at Blackwell Golf Club on 3 December. Draw for partners on the day. Full English breakfast, golf and Christmas dinner to follow with a cost of £27. Please contact Rhys or visit the website www.biggamidlandsection.co.uk and fill in an application form.

News

MIDLAND

Autumn Tournament at Handsworth Golf Club results: 1 Adam Jones 42pts. Congratulations to Adam whose round included 8 birdies in a six under par 64! 2 Clint Woodall 36, 3 Steve Thompson 33, 4 Ian Ashford 33, 5 Dave Gibbons 32, 6 Craig Hartley 31. Nearest the pins won by E Stant x2, A Jones and Roger Butler.

Midland Section AGM followed the golf at Handsworth with the following officers approved. President: John Hammond. Chairman: (12 months maximum to allow smooth transition) Ed Stant. Deputy Chairman: Rhys Thomas. Secretary: Andy Smith. Treasurer: Gary Wadkins. Education: Andy Laing. Handicaps: Steve Thompson. Media: Dave Collins.

The section welcomes Gary Wadkins, Dave Collins and Andy Laing to their new positions on the committee and look forward to their input and fresh ideas. The committee also thank Nigel Tyler and Kev Pugh for their commitment to the Section over the years on committee.

And now for a word of warning, I, 20 years ago ran myself over with a tractor and got away with it, the same thing has happened to someone I know. It's a case of six of one and half a dozen of the of the other. Never try to start a tractor without being sat on the seat, and never leave it in gear.

Thanks to Sponsors

MID ANGLIA

A massive thanks goes to our Sponsors of the section for 2014: ALS, Headland Amenity, Avoncrop Amenity, Farmura, Rigby Taylor Ltd, Amenity Technology, Tuckwells Machinery.

We thank you for your continued support with funds towards the Mid Anglia Section. Banks Amenity also sponsor our Golfer of the Year Trophy again this year so once again your support means a lot and please consider these suppliers for your requirements the coming months and beyond into 2015.

If you feel you may be interested in sponsoring Mid Anglia Section in 2014/15 please contact a committee member for details.

MIDLAND

Many thanks to Campey Turfcare for sponsoring the prize table at the Section Autumn Tournament at Handsworth Golf Club on 9 October. Thanks also to Sherriff Amenity, Headland Amenity and Whitemoss Eco for nearest the pin prizes.

I must firstly apologies to all for the lack of notes over the last months, unbeknown to me a problem with my computer. Furthermore an apology to our very kind sponsors who I hope will forgive me. Such being: September's calendar sponsor's Everris, please Email Emma Kilby on: emma.kilby@everris.co.uk or call: 07748 111 965. October's sponsor: Rigby Taylor Tony Cheese 07778 665 506 or Email t.cheese@rigbytaylor.com. I hope we are up to speed now, so this month's sponsor's: www. farol.co.uk or tel: 01455 638 960.

Welcome New Members

Stuart Donald, Course Manager, Knebworth Golf Club, David Merriman, Greenkeeper, Denham Golf Club, Stephen Lacken, Greenkeeper, Moor Hall Golf Club, Karl Dalgarno, Greenkeeper, Tilsworth Golf Centre, Matthew Denton, Greenkeeper, Manor (Laceby) Golf Club, Scott Ritchie, Greenkeeper, Manor (Laceby) Golf Club, Sean Brady, Assistant Greenkeeper, Welwyn Garden City Golf Club, Lee Blythe, Assistant Greenkeeper, Grove (The), James Cleaver, Assistant Greenkeeper, Stratford Oaks Golf Club.





Contact your Section correspondent with news, events or anything else for Around the green...





KENT



Events Coming Up





Mick Lathrope lil.lathrope@



EAST ANGLIA

Unfortunately, I could not be at Gog Magog on 2 October. However, I have it on good authority that the course was first rate and a good day was had by all.

Results: Captain/Greenkeeper Shield won with 75 points - Tony Thacker/Matt Osling. Trade/Guest: 1 Gavin Merrison, 42pts, 2 Ross Stanard 38.0-9: 1 Chris O'Dowd 37, 2 James Burton 36. 10-18: 1 Tony Thacker 40, 2 Terry Carver 33, 19-28: 1 Oliver Jones, 37, 2 Steve Freestone 36. Nearest The Pin: Tony Thacker, Chris O'Dowd x 2. Longest Drive: Gavin Merrison

ESSEX

News

Autumn Team Trophy at Colchester Golf Club was held on a warm and rain free September day. Course Manager Keith Chinnery and his team had produced and presented the course in a fantastic condition and all the players enjoyed the day and hospitality laid on by the

Team competition results: 1 Banks Amenity - Simon Banks, Sam Young, Stuart Tierney and Antony Kirwan, 117pts. 2 Colchester GC - Keith Chinnery, Sam Cook, Craig Serafin and John Williams. Nearest Pin 8th: Matt Wise. Nearest Pin 16th: Neil Peachey

Thanks to Sponsors

EAST ANGLIA

Thanks to Toro, main sponsor at Gog Magog, Also thanks to all the other sponsors: Tomlinson Groundcare, Rigby Taylor, Ernest Doe, Colin Rushbrook (Atkins), Bartram Mowers, Collier Turf Care.

Welcome New Members

David Greenshields, Affiliate, Barenbrug UK Ltd, Mat Williams, Affiliate, Barenbrug UK Ltd, Andy Rutter, Affiliate, Barenbrug UK Ltd, Paul Johnson, Affiliate, Barenbrug UK Ltd, Samuel Vannia Singham, Affiliate, Golf Mats UK (Barmonset), Danny Dalton, Deputy Course Manager, Wrotham Heath Golf Club, Neil Gearing, Deputy Course Manager, East Sussex National Golf Club, Andrew Norman, First Assistant, East Sussex National Golf Club, Paul Edwards, Greenkeeper, Thorndon Park Golf Club, Martyn Fuller, Greenkeeper, Ealing Golf Club, Max Grantham, Greenkeeper, Royal Mid-Surrey Golf Club, Mike Williams, Greenkeeper, Royal Mid-Surrey Golf Club, Daniel Barnes, Greenkeeper, Wentworth Club (The), Max Robinson, Greenkeeper, London Golf Club (The), Tom Grafen, Groundsman, Arsenal Football Club, Bryn Preece, Head Greenkeeper, Wrotham Heath Golf Club, Mike Emptage, Head Groundsman, Bromstone Primary School, Chris Witchlow, Assistant Greenkeeper, Shooters Hill Golf Club, William Evans, Assistant Greenkeeper, Thorndon Park Golf Club, Ryan Pursey, Assistant Greenkeeper, Silvermere Golf Club, Warren Freer, Assistant Greenkeeper, East Sussex National Golf Club.

Thursday 27 November is the date for everyone to get down to Redlibbets Golf Club for our annual Turkey Trot event. Always great fun and you can be sure the course will be in its usual pristine condition. Email or text invites will be sent to all members but all are welcome. See website or Facebook page for more details. Hope to see

Thank you very much to Hadlow College and, in particular, Sports Turf Assessor Anthony Stockwell, for organising and hosting a series of short evening seminars over the winter months. The seminars are short and sweet with two being staged consecutively on each date on a range of topics. The seminars are being held in the college's Rural Regeneration Centre, two minutes from the campus itself. Details:

- 19 November 4-5pm: Soil Biology with Dr Su Hodgson
- 19 November 5.05-5.30pm: Working in New Zealand with Jack Sims of Chiltern Hills GC
- 9 December 4-5pm: Understanding PPE with John Ross MG
- 9 December 5.05-5.30pm: Go-Pro video usage on the course for benefitting Greenkeepers
- 13 January 2015 4-5pm: Making irrigation more efficient with Adrian Hanbury of Intelligent Watering
- 13 January 5.05-5.30pm: Experiences of being a volunteer at the Ryder Cup with James Bledge of Royal Cinque Ports GC 17 February 4-5pm: Tines, bed-knives and the Extracut brush with
- Richard Japes
- 17 February 5.05-5.30pm: Tournament preparation with Darren Cuddihy of The London Club

For more details or to make a booking to attend any or all of these seminars please contact Anthony Stockwell on 07791 087069 or email Anthony.stockwell@hadlow.ac.uk

More details and news on all events at: kentgreenkeepers.com Facebook/kentgreenkeepers

ESSEX

Our next event is the Regional Conference at Colne Valley Golf Club 12 November 9am, £15 per member. A wide verity of speakers will be

Essex Section AGM and Texas Scramble team event, Orsett Golf Club, Tuesday 2 December. Details of cost and timings www. essexbigga.co.uk

Around The Green

South West & South Wales

Contact your Section correspondent with news, events or anything else for Around the green...







SOUTH COAST -Russell Riley, rriley@countrywide



DEVON &

SOUTH WALES Andrew Hatcher andrewhatcher1@

Events Coming Up

SOUTH WALES

Our Christmas competition is at Glynneath Golf Club on either 5 or 9 December more details will be sent by Email, Facebook or text by Paul Handy closer to the date.

SOUTH WEST

Christmas Tournament and charity raffle will be held on 17 December at Circncester Golf Club. As usual we expect it to be a fantastic day. We had a full house last year so do not miss this opportunity as entries are now open, contact any of the committee members to enter.

After a season of intense competition the final of the Countrywide Knockout is upon us, good luck to Jamie Blake and Dan Taylor from Broadway Golf Club and Leigh Mordly and Mike Sage from Knowle Golf Club who will be battling it out at Bowood on 7 November. May the best men win!

SOUTH COAST

A few dates for the diary, with the regional Seminar at Somerset being slightly subsidised by the Section for anyone wishing to attend, for details contact tracey.harvey@ bigga.co.uk

19 November: Regional Seminar at Somerset Cricket Club. 10 December: Turkey Trot at Barton-on-Sea GC.

Anyone wishing to attend any of these events you contact al.magee77@googlemail.com or visit our website biggasouthcoast@hotmail.co.uk

Congratulations to Steve Chappell and all the team for setting up the Centenary Course in superb condition for the Ryder Cup. Also congratulations to the support staff which included our very own Big D and Ian Kinley - a huge honour and lasting memories for them both.

Recently Celtic Manor played host for the Wales Open, the course looked in excellent condition well done Jim Mackenzie and his team.

A very informative evening was had by all who attended at the Millennium Stadium with Craig Campbell showing us

the new pitch and the Desso system installing the rolls into the soil.

After 17 years at Burghill Valley GC our chairman Steve Lloyd is moving to take up the position of Course Manager at the Worcestershire Golf Club. Congratulations and good luck in your new position.

Huw Morgan's experience as a rep has come to an end and is starting a new job as Course & Club Manager at Pennard Golf Club. Congratulation Huw and good luck in your new challenge. Well done to Darryl Jones who won the BIGGA Challenge Plate at the National Tournament.

SOUTH WEST

Both basic and refresher excavator training is still available through section training, please contact Paul Worster (paulw@mgcnew.co.uk) for

We have also had calls for training in specialist areas particularly a PA2 upgrade from apprenticeship qualifications, again please express your interest promptly to either Paul, Tracey Harvey (tracey.harvey@ bigga.co.uk) or myself. As usual if there is any other training that is required drop any of us a line and we will do our best to help you.

All of our Section events are open to members of other sections, please feel free to contact us and attend as everyone is welcome.

We are currently looking for section members who may be interested in taking up a role on the section committee, get in touch with Chris Sealey, Tracey Harvey or myself if this is of interest. If anyone on your team is not receiving Section emails please ask them to contact me to supply their addresses (j.goodchild@bowood.org).

SOUTH COAST

Our Autumn Tournament was held at Blackmoor GC recently, the course was in terrific condition for late October with everyone enjoying the golf and the meal afterwards, so a big thank you to all at Blackmoor.

Results: Div 1, 1 Matt Burton from Rushmore, 2 Rob J Mabb from Weymouth GC. Div 2, 1 Mike Littlecott, 2 Louis Stephenson. Longest Drive: Simon Justice from Wellow GC, I believe this was due to the fact no one else hit the fairway. The prize for the lowest score of the day went to Phil Mason and best vegetarian to Matt Burton.

I can also add that two members of the section had success at the National held at Liphook, with Dave Ross from Test Valley winning the Nett and Beverly Blair from Southwick Park bagging a hole in one, which resulted in a big bar bill I am told. Congratulations to you both and to David Murdoch and his team for the course they produced in testing weather.

Whilst talking about Southwick Park, I believe our very own Tracey Harvey planned a visit there recently, trusting her Sat Nav to take her straight into darkest Hampshire and onto Southwick. All I can say is in a narrow lane she attempted a three point turn and ended up in a ditch. Thanks though to Beverly from Southwick and Darren "White knight" Hatcher from Baroness for rescuing our damsel in distress.

Thanks to Sponsors

SOUTH WEST

Many thanks to our South West Section 2014 Patrons: Sportsmark, Greensman, Irritech, Headland Amenity, Countrywide, Farmura, Ecosolve, TH White and Indigrow for their invaluable support of South West Section events and training.

Welcome New Members

Vic Robinson, Affiliate, Devon Garden Machinery (DGM), Tony Lafrate, Deputy Course Manager, Cardiff Golf Club, Simon Morgan, Greenkeeper, Morlais Castle Golf Club, David McCormick, Greenkeeper, Pyle & Kenfig Golf Club, Paul Champion, Head Groundsman, Bicton College, Robert Kingsley Mabb, Assistant Greenkeeper, Weymouth Golf Club.

Welcome New International Member

Rodney Crouse, International Member, St James Plantation (USA).



Contact your Section correspondent with news, events or anything else for Around the green...











grassman351@

Dale Robertson & Stuart Taylor
Robert Patterson stuart.taylor@

Events Coming Up

WEST

The annual dinner will take place at the end of November venue and date tbc, it was very successful last year so I would envisage a good turnout, for more information check the blog.

EAST

Annual Xmas Soiree in December, venue tbc.

News

CENTRAL

Commiserations to Richard Jenkinson who damaged ligaments in his leg just before the Ryder Cup.

That meant not only did he miss out assisting at the tournament but he and his partner Kevin Brunton had to concede their semi-final in this year's Pairs final.

Speaking of the Ryder Cup, congratulations to the Gleneagles team for such a memorable event played on a course which both teams commented extremely favourably on.

Then a couple of weeks later the Alfred Dunhill Links Championship highlighted three other great courses in the Section at Carnoustie, Kingsbarns and St Andrews which were equally well presented despite the weather being less than ideal on occasions. Earlier in the month the Dukes Course hosted the European Amateur Stroke Play championship so we've had a feast of great golf providing worldwide publicity in the area recently.

Congratulation to Crieff Course Manager Charlie MacDonald who scored a hole in one on his home course last month. Charlie used a three wood to ace the 143 yard 6th hole.

He doesn't hit it as far as he used to.

Brian Lawrie is also retiring from Golf House Club, Elie having worked there for 50 years - read more in the newsdesk section of

The first Pairs final was halves on the old course at St Andrews. so a second match was held at Kingsbarns. Scott Robertson (Strathmore GC) and Stuart Griffiths (Blair Atholl GC) won 2&1 v Paul Armour (St Andrews links) and Kevin Webster (Lochgelly GC)

WEST

By the time you read this the AGM will be done and dusted, I will report next month on what happened and any feedback. Sorry for not including some more articles over the last few months but I have had a fairly torrid time with a variety of different things happening.

The joint outing held at Gourock GC between the West Section and the Ayrshire section has had mixed reviews and feedback some thought it went well others were a bit confused especially when it came to the prizes. I will not report on this fully at this point but will include for next month's issue by then a full discussion will have taken place.

Sadly I have to mention the recent death of Danny Samson of Nairn Brown who passed away on the 3 October at Torrance Hotel, East Kilbride. Danny worked with Nairn Brown for 15 years and prior to that with Power shift, and way back Milngavie mowers, he was in the industry a long time and a great friend to many. He was extremely knowledgeable about machinery having started his career as a mechanic on MGB motors, he then moved into grass machinery and progressed through to sales. Danny had a collection of classic cars which included an MGB GT, and a Reliant Simitar if some of you can remember that car. He retired in January through ill health and didn't get a chance to enjoy his time taking things easily, sadly a good person is no longer with us and he will be missed, but always remembered by a lot of people.

As I would not want to leave my article on a sad note I should mention the retirement of Norman Bartlett of Nairn Brown who has decided to hang up the boots after I don't know how long but he seems to have been around for a long time and not aged at all.

Brian Hillan (Drumpellier GC) got married on 3 October, I would like to wish him and his new wife all the best for the future. Gerry Broadley of Glasgow GC celebrated the birth of his second child Olly on the 3 October, so we wish his wife and baby all the

Please remember to get in touch with any information of births, deaths, marriages etc. on 0141 9425554, or 077908 23914, or e-mail stuart.taylor@glasgowgolfclub.com

EAST

The section recently held our Autumn Stableford tournament at Monktonhall GC, the day was a great success with great weather on the day and a fantastic course presented to the section also, well done to all.

The winners on the day were: Scratch score Brian Heggie (Eyemouth), 1st class Jamie Martin (Gifford), 2nd class Keith Craig (Eyemouth), 3rd class Martin Stewart (Muirfield), trade prize Bob McDougal (Souters), Longest drive Craig Hempseed (Mortonhall) and nearest the pin Bob McDougal (Souters). Well done to all involved and thanks go to Graeme O'Connor (Farmura) for a very informative educational talk on organic fertilisers.

By the time you read this Jamie Martin will have taken over as Chairman of your section, the section wishes Jamie all the best in his role and we are sure that he will be a fantastic chairman.

Anyone wishing to have news added or are willing to write for the Greenkeeper International please get in touch. Again a reminder that if your contact details have changed please feedback asap.

Welcome New Members

Scott Eddington, Affiliate, Magdalene Fields Golf Club, Ryan Day, Greenkeeper, Balmore Golf Club, Scott Higgins, Greenkeeper, Winterfield Golf Club, Matthew Gallagher, Greenkeeper, Loch Lomond Golf Club, Steven Surgeon, Student, SRUC (Elmwood), Scott Macfarlane, Assistant Greenkeeper, Lamlash Golf Club, Ryan Armstrong, Assistant Greenkeeper, Lamlash Golf Club, Keith Craig, Assistant Greenkeeper, Eyemouth Golf Club.

BUYERS' GUIDE

To advertise contact **James** on **01347 833 832** or email james@bigga.co.uk

CATEGORIES... AERATION / AGRONOMY / ALL WEATHER SURFACES / ANTI SLIP / BUNKER / CONSTRUCTION / CLOTHING FOOTWEAR / COMPACT TRACTORS / CONSTRUCTION / DRAINAGE / HEDGES/TREES / IRRIGATION / IRRIGATION CONSULTANTS / LAKE CONSTRUCTION LINERS / MACHINERY WANTED / RUBBER CRUMB / SOIL FOOD WEB / TOP DRESSING / TREE MOVING / TREE CLEARANCE / TURF USED MACHINERY / VERTIDRAINING / **WASTE / WASHWATER TREATMENT**

NORTH STAFFS **IRRIGATION LTD**



We are North Staffs Irrigation Ltd - with 40 years' experience and a founder member of the BTLIA we remain a family run business specializing in the design and installation of irrigation and drainage systems.

Working with leading consultants and irrigation manufacturers North Staffs Irrigation delivers bespoke, efficient systems to fine turf projects and have fulfilled a large variety of contracts throughout the United Kingdom and France. We recently successfully completed a major installation utilizing the latest Toro GDC & Lynx control system at Ramsdale Park Golf Club (part of the Burhill Group) under the guidance of Irritech Ltd.

We endeavour to give sound advice and practical solutions to any given problem and offer an after sales service which is second to none. If you need any advice on your irrigation or drainage requirements please feel free to contact us.

NORTH STAFFS IRRIGATION LTD Ivy Mill, Longton Road, Stone, Staffordshire, ST15 8TB Telephone: 01785 812706 Email: NSIrrigation@aol.com

AGRONOMY

The Tines Shop for good value, high quality Tines & Bedknives

Find a broad range of Tines and Bedknives online from The Grass Group Delivered to your door

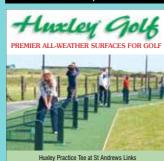
www.tines-shop.co.uk Tel: 01638 720123

ALL WEATHER SURFACE





Tel: 01254 831666 Fax: 01254 831066 www.verdesports.com



op quality practice tees, golf course tees, putting



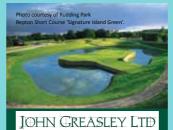
UNKER CONSTRUCTION

blinder



01344 621654 www.theblinder.com

CONSTRUCTION



MJABBOTT

■ Golf course construction Remodelling & renovation Grow in & maintenance Artificial surfaces

Call 01722 716361 www.mjabbott.co.uk

M.Downes **Earthworks**

- Golf Course Construction Services
- Green and Tee Reconstruction
- Lakes and Reservoirs Cart Paths
- Bunker Remodelling Drainage Lakes and Reservoirs

07753 856510 01829 781767 mdownesgolf@live.co.uk

DRAINAGE

Traditional drainage and Lytag banding

of greens and fairways

North Staffs **IRRIGATION**



Tel: 01785 812706 E: NSIrrigation@aol.com www.northstaffsirrigation.co.uk

DRAINAGE

Turfdry

Golf Course Drainage

Survey / Design / Installation / Greens Fairways / Bunkers / Complete Courses Plastic Pipe / Turfdry Drainage System or fast and friendly Nationwide Service

Contact Melvyn Taylor: 01283 551417 07836 259133 / melvyn@turfdry.com www.turfdrv.com



- Design & installation Primary pipe systems
- Sand slitting Gravel banding

Call 01722 716361 www.mjabbott.co.uk



or visit flags.co.uk

rritech limited

IRRIGATION

Specialising in:-Existing system evaluation

 System design & upgrade Project management

01823 690216



■ Design & installation Online shop for spares Water storage reservoirs

Call 01722 716361 www.mjabbott.co.uk

IRRIGATION

Design Installation Service Irrigation supplies

North Staffs **IRRIGATION**

Tel: 01785 812706 E: NSImigation@aol.com

www.northstaffsirrigation.co.uk

MACHINERY WANTED

Invicta Groundcare

We buy used golf

course machinery

Email: invictagroundcare@live.com

TOP DRESSINGS

Banks Amenity Troducts Ltd.

FOR ALL YOUR BULK SUPPLIES

NATIONWIDE DELIVERIES

01858 464346 / 433003

www.banksamenity.co.uk

GUMRRY & CONCRETE PRODUCTS

Producers of quality Top dressings, Specialist sands, Rootzone soils, Grit, Gravel and Pathway materials

for Golf Courses, Playing Fields and Sports Pitches

Cowbog, New Pitsligo, Fraserburgh, Aberdeenshire, AB43 6PR

www.lovie.co.uk

Pioneering the development and

production of high quality

Fibresand

Fibrelastic*

Contact Sharon Morris on

07932342044 or email

Sharon.morris@mansfield-sand.co.uk

www.mansfield-sand.co.uk

and-based products for over 150 years

Tel: 01771 653777

LOVIE

Equipment Ltd

Tel No: 01474 874 120

BENBURGESS 01603 628251

TREE MOVING

Tree Spade &

Telehandler Hire



Specialist Growers of Turf for Golf Courses

Rootzone Turf for Greens Grown on USGA rootzone. top-dressed throughout the year and mown at 6mm. Predominantly bent sward

Turf for Tees, Surrounds, Approaches and Fairways Various mixtures including rvegrass/fescue, 100% fescue and bent/fescue grown on sandy loam topsoil.

Bunker revetting turf 40mm thick

Small or big roll Free loan of big roll laying frame

Tel: 01652 678 000 www.tillersturf.co.uk

USED MACHINERY



BIOLOGICAL VEHICLE & EQUIPMENT WASH-OFF SYSTEMS

ESD Waste2Water Europe Ltd. Tel: 01782 373 878 E-mail: info@waste2water.com

Web:www.waste2water.com

@BIGGALtd NOVEMBER 2014 GI 59



Greenkeepers Training Committee

David Golding invited Swan Golf Designs (SGD) to share why seminars and workshops for greenkeepers and employers are so important to the philosophy of sharing best practice.

Howard Swan has, for many years, presented at numerous seminars, workshops and conferences both at home and abroad. Whilst best known as a Golf Course Architect he has a passion to share his vast knowledge and experience of golf course design and renovation projects which he has been involved in globally.

In more recent years, his son William has become the third generation of Swans in the architectural profession and is continuing the tradition of sharing best practice with all who attend GTC workshops which are focused on employers -Owners, Officers, Club and Course Managers/Head Greenkeepers and have proved very popular.

The GTC will again be hosting workshops during BTME 2015 where Swan Golf Designs will again feature with plans also afoot to host more workshops regionally before January and into spring 2015.

Howard takes up the story of SGD being involved in quality education of greenkeepers and employers with the offer to assist any Quality Assured Centre or BIGGA Region or Section.

He said: "We have long held the belief that if anyone is to learn anything about anything in life then it must come from three things -Education...or ICE'.

"That essential learning process comes from taking information, no matter at what level it may be project manage it throughout its imparted by others, and absorbing it into your memory for the future. Having a good system of communication helps greatly to facilitate greenkeeping team.

"In our own field of golf course design and development, or more realistically in these days of the indifferent state of the golf course market redesign and redevelopment, we work with a large number of individuals in any one project and the success of that project is essentially reliant upon that team performing as well as it can. Each individual contributes their bit.

"We often say the best projects



are those which are not led by the golf course architect as we might get carried away and run away with the excitement of what might be conceived on the golf course.

"In most projects the team needs to consist of the client - a golf club chairman, chairman of green, a green committee, a golf club manager - who has a vision of what it wants from the project in five or ten years' time and an intent to achieve it in sensible, realisable Information, Communication and steps – and who may lead the team. They should be supported by the technical input and expertise of the golf course architect, who may various stages, by those who might specialise in irrigation technology, in agronomy and of course the

"The relationships between each of the team members is vitally important to the success of that project and the understanding which is developed between them can yield the outcome everybody wishes for.

"Those relationships are only developed by sharing information, by communicating clearly and well, by understanding each other's position in taking the information by that communication and using it to maximum effect. Essentially, therefore, becoming the education process from which we all learn.

> "The best projects in our experience over 45 years of working in the industry have come where all of those are realised. All members of the team rely upon each other, learn from each other, and maximise their efforts with a singular purpose to succeed.

"There is, without doubt, a universal requirement to adopt the GTC's philosophy of allowing all levels of greenkeepers AND employers access to both formal and informal education and training. On the job training and online learning has given many an opportunity to further their knowledge without having to leave their workplace. This is one option we see as having great benefits to individuals and the business as a whole.

"It's this philosophy we have been pleased to bring to the GTC in conceiving and contributing to their workshop programme with our fellow QA training providers.

"BTME 2015 now beckons with two further workshops focusing on bunkering and the safety of golf courses, and we look forward to those taking opportunities to put the ICE' theory into practice."





The GTC is funded by









York YO61 1UF

www.the-gtc.co.uk www.greenkeepertra



LIFT BTME AD p49

Recruitment

Advertise your recruitment here ... and online for one month at www.bigga.org.uk/careers from £595+vat for an 1/8 advert Contact Jill Rodham on 01347 833 812



Kippie Lodge, Sports & Country Club HEAD GREEN KEEPER

Kippie Lodge Sports and Country Club is a prestigious private members club on the outskirts of Aberdeen. The Club has in excess of 3000 members and is currently looking for a Head Green Keeper to manage its 9-hole golf course, driving range and grounds.

Reporting to the Club Director, the applicants should be self motivated, committed and hardworking as well as having the necessary experience and ability to lead a team in raising and maintaining the standards required at the Club. Preferably, the candidate should:

- Be qualified to SVQ Level III in green keeping or have relevant experience in line with this management role.
- Spraying certificates PA1, 2 & 6a and chainsaw certificate. Strong supervisory and communication skills.
- Have a good working knowledge of greens machinery and irrigation equipment · Have experience of Health & Safety regulations and safety documentation.
- Be capable of preparing and working to budget and dealing with suppliers. IT proficient.

Hours of work are on a rota basis 6.00 am to 2.00 pm, 5 days out of 7 (includes weekend work). Normal working hours are 40 hours per week; however, hours may be flexible to meet seasonal demands. For further information on why you should work with our team at Kippie Lodge, please visit our website at http://

kippielodge.com/club-info/working-with-us/ We offer an excellent remuneration package. Salary is negotiable according to ability experience and qualifications of the successful applicant

Applicants should send their CV by email to h.sutherland@kippielodge.co.uk or alternatively write to: Helen Sutherland, HR Manager, Kippie Lodge, Sports & Country Club, North Deeside Road, Milltimber, Aberdeen, AB13 0AB. Telephone: 01224734747.

Swinley Forest Golf Club, Ascot, Berkshire Assistant Greenkeeper

Swinley Forest is a private members Golf Club situated on the Berkshire/Surrey border. The course is sand based with pine and heather surrounds and was laid out by Harry Colt in 1909. The Club has a worldwide reputation and a high standard of excellence is expected.

We are seeking an Assistant Greenkeeper who wants to further their career and is committed to high quality maintenance.

Applicants must have a sound knowledge of all aspects of golf greenkeeping and health and safety procedures. An NVQ Level 2 in Sports Turf Management, PA1, PA2, PA6 spraying certificates and a chainsaw certificate are an advantage but not essential, further training will be available for the successful candidate

No accommodation is provided. In return, Swinley Forest offers a competitive package to include annual bonus and pension scheme. Salary range £20,000+ depending on experience and qualifications.

Applicants should apply with CV to: The Secretary, Swinley Forest Golf Club Ltd, Coronation Road, Ascot, Berks SL5 9LE or office@swinleyfgc.co.uk

Advertise your recruitment here ... and online

for one month at www.bigga.org.uk/careers from £595+vat for an 1/8 advert Contact Jill Rodham on 01347 833 812



A new challenge is waiting for you at Germany's no. 1 golf course. The Hamburger Golf Club-Falkenstein in Hamburg is looking for a

Head Greenkeeper/Course Manager

The successful applicant will possess:

High Qualifications, Team Leadership, Motivational Skills, Good Communication Skills, an understanding of Nature and it's Environment, a knowledge of the game of Golf. Able to speak German

> Please send your full applications before the 15th December 2014 to The Manager, Berthold Apel Hamburger Golf-Club e.V. In de Bargen 59, D-22587 Hamburg Email: apel@golfclub-falkenstein.de

ASSISTANT GREEN KEEPER ROMFORD GOLF CLUB

Romford Golf Club is a private members club founded in 1894

We are looking for an assistant green keeper with preferably

1 to 2 years' golf club course experience who wants to further their skills and training.

Applicants will be working within a small dedicated team to present the course to the highest possible standard. Work on the course will involve a variety of duties so the position requires an individual who is able to be flexible in their approach and willing to learn new skills in course maintenance

Early starts and a willingness to work alternate weekend mornings are essential.

A competitive salary is offered with the opportunity of overtime.

Please forward your C.V. and importantly a covering letter

stating why you would be a suitable candidate to: BICHARD HALL Secretary / Manager

Romford Golf Club, Heath Drive, Romford, RM2 6PU

Or e-mail to : richard.hall@romfordgolfclub.co.uk



Are seeking applicants to fill the following position;

Technical Sales Manager South/Mid Wales

The successful applicant will have experience in the Turf and Amenity industry. A passion for sound management practices and the ability to maintain and enhance our extensive customer base.

This is an excellent opportunity for a highly motivated individual with great communication skills who wishes to develop their career as part of an established and respected team.

BASIS or FACTS qualifications would be an advantage but not essential, as full training will be given.

An excellent remuneration package subject to qualifications and expertise along with a company vehicle is offered.

> Please apply in writing including your CV to; Mr R E Feltham Managing Director Avoncrop Amenity Products Ltd 2 Millside Park, Crouch Lane Winkfield, Berkshire SL4 4PX







Turf & Amenity Technical Area Sales Managers (x2) North West England & South of England

Due to the continued growth of our business, we are looking for two high-calibre individuals to join our expanding turf and amenity team in these exciting new roles that cover the North West and South of England. With exemplary technical and sales skills and a proven background within our industry, the ideal candidates will relish the opportunity to deliver first-class technical and sales support to end-users and distributors of our range of fertilisers, plant protection products and grass seeds. Each individual will be highly-motivated and able to hit the ground running, developing the customer base in your area and driving new initiatives. You will also be IT literate and have excellent interpersonal skills, engaging confidently and professionally with people

Detailed knowledge of turf management practices and an industry-recognised qualification, such as BASIS/ FACTS and/or a HND/BSc in a relevant discipline, is essential, as is a comprehensive understanding of the marketplace in your designated area.

There will be a requirement for flexible working and spending time away from home on occasion.

You will know our brands, but you might not realise the strength of the business behind them. Everris® is an ICL Specialty Fertilizers Company, part of the ICL group that employs more than 12,000 people globally. We are world-leaders in the ornamental horticulture, turf and amenity, and specialty agricultural

Our market-leading brands - including Sierrablen, Greenmaster, SierraformGT and Sportsmaster are used and trusted by turf professionals around the world.

Our team is passionate about optimising plant and turf performance. We are a customer-orientated organisation and take great pride in the integrity and precision of our world-class product portfolios, and our commitment to research and development has resulted in the development of unique technologies which have transformed the way turf is managed.





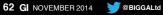
If you're the person we're looking for:

- Competitive salary plus bonus

To apply, please send a résumé and covering

Manager – UK & Ireland, Everris Limited,

Closing date is 30th November 2014



Recruitment Recruitment

HEAD GREENKEEPER - SOUTH FDINBURGH

For a private Standard Scratch 71 golf course set in woodland just south of Edinburgh, with excellent new equipment and machinery. Own transport essential and ideally will live within commuting distance of Midlothian. We are seeking to appoint a Working as a vocation: will ideally have extensive greenkeeping knowledge; be competent, prepared to work physically, schedule work needed and will possess the following qualities:

- Education level of NVQ/SVQ3
- Knowledge of maintaining courses to the
- nighest standards
- •PA1, PA2 and PA6
- · Chainsaw and spraying experience Good knowledge of pesticides/fertilisers/
- A high level of competence with modern greenkeeping equipment

- Good team/motivational skills • A keen eye for presentation and attention to detail
- · Hard working, resourceful and conscientious · Good leadership / management skills

The successful candidate may also possess the following:

- · Good machinery / workshop skills
- Mechanical interest and knowledgeKnowledge of irrigation systems

You would expect to earn at least £30,000 £35,000, dependent on experience, based on a 39 hour week involving annualised hours Overtime will include some weekend and occasional weekday overtime

Applicants should email their CV with a covering letter to greenkeeping 123@gmail com. References will be required.

Advertise your recruitment here ... and online

for one month at www.bigga.org.uk/careers from £595+vat for an 1/8 advert Contact **Jill Rodham** on 01347 833 812



ROYAL BIRKDALE GOLF CLUB **DEPUTY COURSE MANAGER**

Royal Birkdale Golf Club wish to recruit a Deputy Course Manager who will report to and assist the Course Manager in the maintenance, management and development of the links.

Applicants should be ambitious, highly motivated, committed and hardworking, as well as having the necessary experience and ability to lead a team to achieve the world class standards required at the Club. The successful candidate will have the following attributes:

> Minimum 5 years Links experience NVQ Level 3 or equivalent PA1, PA2, PA6 spraying certificates Fully conversant with current Health & Safety regulations Ability to lead and motivate the greenkeeping team An understanding of computerised irrigation systems A good working knowledge of course maintenance machinery A keen interest in golf Full UK driving licence

Applications in writing or by email, including a full CV to: Course Manager, Royal Birkdale Golf Club, Waterloo Road, Southport, PR8

coursemanager@royalbirkdale.com

Closing date for application is Monday 1st December 2014



Golf Course Equipment Manager

The London Golf Club

Delivering excellent playing surfaces is our aim across both championship courses - The Heritage and The International. Designed by Jack Nicklaus and Golden Bear Design, both courses have hosted professional tournaments including The European Open twice, The London Seniors Masters four times and now the Volvo World Match Play. In June, for the fifth year in succession. The club hosted Regional Qualifying for the 2014 Open Championship.

plans firmly in place to build a 5 star hotel, a new high quality 9 hole course designed by European Golf Design and extensive new practice

INVESTORS | Gold

excellent reputation in the industry and something we are keen to build

Key skills and attributes for the role:

Contributes to new ideas along with a willingness to undergo

Ability to work to high standards with attention to detail.

Works well in a large team atmosphere.

Positive attitude with good communication skills.

IT skills are essential along with good record keeping abilities.

Understanding of how job and equipment performance affects the playing conditions of the golf course.

We are keen to meet career minded individuals with the drive and enthusiasm to contribute to our team's reputation for delivering

Please apply with your CV and salary expectations, together with a covering letter outlining your reasons for applying, to:-Janet Smith, Human Resources Manager

www.londongolf.co.uk

COURSE MANAGER

West Lancashire Golf Club, Liverpool

The West Lancashire Golf Club wishes to recruit a Course Manager to undertake the maintenance and development of the course.

Applicants should be self motivated, committed and hardworking as well as having the necessary experience and ability to lead a team in maintaining and raising the standards required at the Club.

The candidate should have:

Minimum of 5 years' Links experience

 Qualified to NVQ 3 or equivalent • Spraying certificates PA1, 2 & 6

· Strong, management, supervisory and communication skills

· An understanding of computerised irrigation systems

Ability to lead and motivate the greenkeeping team

Please apply in writing or email with full CV and covering letter stating your salary expectations to: Odri Crewe, Business Manager, West Lancashire Golf Club, Hall Road West, Blundellsands, Liverpool. L23 8SZ.

By email to golf@westlancashiregolf.co.uk Closing date for Applications 1st December, 2014 www.westlancashiregolf.co.uk

Advertise your recruitment here ... and online

for one month at www.bigga.org.uk/careers from £595+vat for an 1/8 advert Contact **Jill Rodham** on 01347 833 812

Basingstoke Golf Club Ltd Deputy-Head Greenkeeper

Basingstoke Golf Club is an established and classic James Braid designed park-land course. Reporting to and assisting the Head-Greenkeeper, the successful candidate should be pro-active with the ability to organise work programmes and motivate staff, overseeing a team of 5 other green-keepers. This role is an excellent opportunity for the right person to work under an experienced Head Greenkeeper, lead a team and further their career.

We are seeking a passionate and driven individual with initiative, preferably with at least 5-years experience and knowledge of all modern green-keeping methods.

The successful candidate will also require the following attributes -

> Previous management experience in a similar role desirable but not essential ▶NVQ level 3

> PA1, PA2 and PA6a certification required. Chainsaw qualification but not essential

- ➤ Proven history of producing work to a high standard
- > A positive team leader with a desire to oversee and inspire
- > Remuneration is negotiable dependant on experience

Golf de Morfontaine **DEPUTY COURSE MANAGER**

Golf de Morfontaine, France is regarded as one of Europe's finest heathland course's and consistently ranked among the top 100 courses in the World. Situated to the north of Paris, this private exclusive members club was established in 1913 and consists of 27 holes designed by renowned architect Tom Simpson.

We are seeking to appoint a Deputy Course Manager who will report to and assist the Course Manager in the maintenance, management and continued development of the course. Salary is negotiable dependant on experience.

Please apply in writing or email with full CV and covering letter, including salary

Jonathan White, Course Manager, Golf de Morfontaine, Mortefontaine, 60128,

By email to golfdemorfontaine@gmail.com Closing date for applications 19th of November

USA



FAST TRACK TO THE FUTURE!

TRAIN ON A TOP 100 GOLF COURSE IN THE USA! BE PART OF THE CREW FOR A US PGA TOUR EVENT! **IMPROVE YOUR LONG TERM CAREER PROSPECTS!** GAIN VALUABLE EXPERIENCE & KNOWLEDGE FROM THE **BEST SUPERINTENDENTS IN AMERICA!**

GUARANTEED TO GET YOU AHEAD OF THE COMPETITION

REQUIREMENTS: CLEAN DRIVING / DRUG RECORD MUST BE ENTHUSIASTIC AND MOTIVATED MUST HAVE AT LEAST NVQ 2 OR ONE YEAR OF FULL TIME TURFGRASS EDUCATION

PROGRAMS FROM 6 TO 18 MONTHS HELP WITH VISAS, TRAVEL PLANS AND INSURANCE PLACEMENT AND ACCOMMODATION ARRANGED **AVERAGE WAGE \$2,200.00 PER MONTH OPTIONAL ONLINE TURF CLASSES AVAILABLE**

FOR MORE DETAILS CONTACT:

Mike O'Keeffe, The Ohio Program Telephone: 001-614-688-5653

E-mail CV to: okeeffe.1@osu.edu www.ohioprogram.org/applynow/IA.php

Field Sales and Technical Specialist -London, Surrey, Buckinghamshire

Field Sales and Technical Specialist - Manchester, North of England Do you want to be part of a successful, innovative and market leading manufacturing company? For over 40 years Farmura has grown its business and portfolio to provide a specialist range of Organic, Water Management and Nutritional products suitable for fine turf within the UK, Ireland and Europe. These products include market leaders such as Porthcawl, Revolution and Ferrosol.

As part of our planned growth we are now seeking two individuals to develop our business in London and the North of England.

The successful applicants will need to be highly motivated, well organised and have good interpersonal skills. You will be part of a small team headquartered out of Kent whose main goals are the continued growth of the company and delivering the highest possible customer service and satisfaction for our clients. Salary is negotiable depending upon experience and will be reviewed after a successful qualifying period. Experience of working in the industry would be an advantage but not essential.

Interested candidates should email their CV in confidence, which should include current salary to info@farmura.com - If you would like an informal discussion prior to applying please contact David Binks on $07802321370\,$ concerning the London position or Gerald Orme on 07739 800 916 regarding the North of England position, for further product information please visit our website www.farmura.com.

> CLOSING DATE: 14th November 2014 Contact Details: Info@farmura.com Tel: 01233 633 267

FarmuraEnviornmental, Unit 8, New Street Farm, Chilmington Green Road, Great Chart, Ashford Kent, TN23 3DL



@BIGGALtd

A new page featuring the best Tweets and pics from the industry - don't forget to tag @BIGGALtd to give yourself a chance of being featured!

Quality on Demand



LM Series

Our favourite tweets this month...

@essexbigga

@BIGGALtd @ColchesterGC well Amenity winning at Colchester golf club today! Course was in fantastic

@tomofreemo

BIGGALtd & @TheToroCompany for a great experience well done @ kevodale76 a worthy winner & great

@CentenaryHGK

Final sand levels being established this week. @Gleneagleshotel @ rydercup @BIGGALtd

@sandra4bigganor

@BIGGALtd Peter Larter had a and enjoyed a Lancaster and red

@My Apprentice

Great picture of @BIGGALtd TORO Student Greenkeeper of the year finalist @MyerscoughColl Thomas Freeman @KingsdownGC

@AnthonyStockwel

Great to catch up with many of the especially @cliveosgood

@lanReevo

1st green gravel carpet down, 2nd green on its way, 1st tees nearly inished. #golf #construction @

@wesleni87

massive congratulation to Kevin oneill worthy winner! Great guy!!

@the_iog

@BIGGALtd CEO does the #IceBucketChallenge #welldone













LIGHTWEIGHT FAIRWAY MOWER



INTRODUCING THE BARONESS LM2400.....

Low centre of gravity

The finest reel and bedknife produced in the industry

Light weight (less than 1300kg) combined with outstanding cutting power

Low ground pressure/high traction four-wheel drive

Kyoeisha UK Ltd. a subsidiary of Kyoeisha Co. Ltd. of Japan

Tel: 01256 461591 (€



www.baronessuk.com



When it comes to turf, beauty isn't just skin-deep; it starts down at the roots. That's why Toro has developed a full series of aeration products to make your job easier and more productive.

Regular aeration relieves soil compaction, increases drainage and promotes deeper root growth for a vigorous, healthy course. Years of research, customer input, testing and attention to detail have gone into making the Toro ProCore aerator series the most productive and efficient on the market, setting new standards for aerator innovation and performance. So whether you need a walk-behind or tractor mounted aerator, the ProCore Series from Toro helps ensure you maintain a perfect finish.

Full details at www.toro.com
For a free onsite demonstration, call Lely on 01480 226800







PROCORE SR54-S



PROCORE SR72









Lely not only brings you Toro. Talk to us, too, about TYM compact tractors and Otterbine water management systems.







