

GREENKEEPER INTERNATIONAL

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SCOTTISH LINKS SPECIAL

RENAISSANCE

CLUB

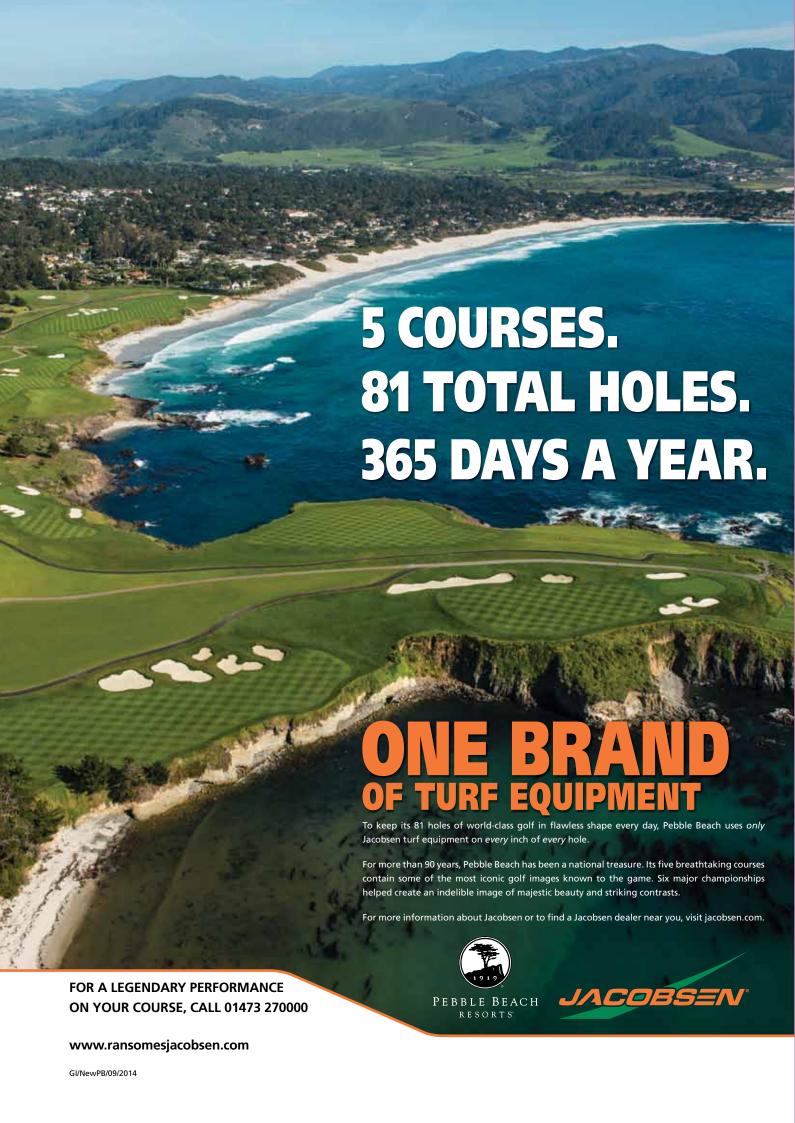
A rising star in East Lothian

Close Links



Environmental and community benefits at Dundonald Links





WELCOME FROM BIGGA

BIGGA



GREENKEEPER INTERNATIONAL





Editorial









Reacting to changes

Just before this edition went to print news reached us that the Institute of Groundsmanship (IOG) intend to make major changes to their annual exhibition, **IOG Saltex.**

Having occupied an early September date outdoors at Windsor racecourse for 20 years, for 2015 they propose moving to an indoor show held at Birmingham's NEC in early November. less than three months before BTME's traditional January date. The announcement immediately prompted much speculation on social media and discussions on the impact this would have on Saltex itself and perhaps BTME.

By coincidence registration for BTME 2015 opened at the beginning of September during Saltex. We are confident that with the combination of a world class education experience, the unique environment that Harrogate provides and the support of our valued exhibitors the 2015 event will be an outstanding success and continue the upward curve of recent years.

This success has been based on a commitment to provide all the stakeholders in the event - exhibitors, visitors and industry partners - with the platform to achieve their goals. We consult widely with all parties and this will continue. It will be interesting to see how the IOG's decision is received by their members and exhibitors. Change is inevitable and we will always react to it so as to provide our members with the exhibition and conference they need. I am confident BTME will remain an important date in the calendar for all turf managers and retain its position as the premier turf care exhibition in Europe.

The eyes of the sporting world will turn to Gleneagles later this month as 24 of the world's finest players, including the best of them all currently, Rory McIlroy, put aside the pursuit of prize money and

world ranking points and compete for the

Rarely is a greenkeeping team's performance under such intense scrutiny and I know the Gleneagles team have worked tirelessly and skillfully to ensure the PGA Centenary Course is immaculate. We wish all the team plus the volunteers the best of luck not least with the fickle autumn Perthshire weather.

All at BIGGA were shocked to hear of the tragic passing of Antony Wainwright, a former greenkeeper and recently Ecologist at the STRI, last month.

Antony had an incredible passion for the ecological side of greenkeeping and was an important contributor to BIGGA's environmental advisory panel and to the STRI Golf Environment Awards. I know that many BIGGA members have been profoundly affected by Antony's passing and intend to dedicate ecological activity at their course to him.

We wish his wife and children and all that knew him our sincerest condolences. Coincidentally but appropriately in this month's edition we feature the current holders of Environmental Golf Course of the Year, Dundonald Links.

Enjoy the read.



Jim Croxton, BIGGA CEO

GI

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British and International Golf Greenkeepers Association Limited



Chairman's Word

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

Help is at hand from BIGGA

The Board of Management has spent many hours recently concentrating on the important task of reviewing the constitution and governance of BIGGA and I think now is a good time to reiterate what the Association stands for.

Simply put, it exists to raise the standards, profile and appreciation of greenkeeping and greenkeepers. Its work serves to benefit all of its members and the industry as a whole - and everyone involved and employed by BIGGA is well aware of that. Furthermore it is the only organisation with the interests of greenkeepers at its heart.

Another message I want to get across is; help is out there. In my last couple of columns I've been proud to reflect on some of the many positives in our industry from volunteering at The Open and Wentworth to various educational events. But I'm realistic enough to admit this can be a very tough industry. Budget constraints, unpredictable weather and limited resources are always at the forefront of my mind at Chippenham and I know it's the same for the majority of BIGGA members.

What this industry does have is support. If you have a problem, not only can BIGGA help, but in most cases neighbouring clubs can help too. There can't be many industries where so-called competitors will give each other advice, lend machinery or other support and I urge you to take advantage of this.

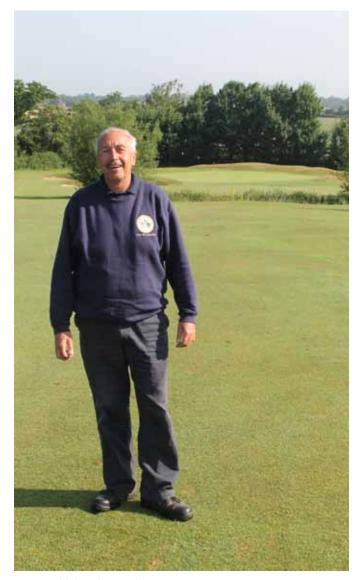
September will of course be dominated by the Ryder Cup. I was chatting with Jim McKenzie MBE recently which reminded me of the incredible greenkeeping effort required to ensure the 2010 tournament at Celtic Manor took place at all in the face of shocking weather. Here's hoping for far better conditions at Gleneagles and I'd like to wish Scott Fenwick, Steve Chappell, all the greenkeeping team there and all the many volunteers a successful week – not to mention a European win.

I'd also like to congratulate the six finalists for the Toro Student Greenkeeper of the Year competition. I'm on the interview panel for the final and seeing the enthusiasm and knowledge shown by the candidates first-hand is one of my highlights of the year – thank you to Toro for their continued support.

Last month saw a very productive Regional Board meeting at the excellent venue of Somerset County Cricket Club in Taunton, thanks to all who attended. Remember this is also the venue for the South West & South Wales Regional Conference on 19 November.

Just before that we're hosting a Campey Turf Day at Chippenham on 29 October, a chance for you to see the latest Campey equipment, and after lunch our Vice-Chairman Les Howkins MG will be presenting a seminar on 'Budgeting for the Modern Golf Course'. This is open to all sections – contact Paul Worster, Adam Matthews or Tracey Harvey for more information.

At Chippenham we largely welcomed the recent rain although I'm well aware some areas had far too much intense rain causing some localised flooding. Our fairways had begun to burn off a little so the water helped us. There's a spot of anthracnose on some of the



greens which we're monitoring but generally they're looking good, the newly constructed greens are still full of fescue. After we remodelled parts of the course we now have a couple of redundant tees and greens, so we've some landscaping work planned over the autumn and winter to turn these areas into mounds.

Chris

Contact details...

Email Chris at coursemanager. chippenhamgolf@btconnect.com or contact him direct on 07817 294632

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



























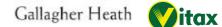




























GI

NEWSDESK

The latest news from around the globe

SENIOR OPEN VOLUNTEERS AT ROYAL PORTHCAWL



A team of BIGGA members headed to South Wales recently to help out Ian Kinley and his greenkeeping team as Royal Porthcawl Golf Club hosted the Seniors Open.

The legendary Bernhard
Langer won a superb wire-towire victory – and the volunteers
ensured the tournament ran
smoothly as they completed a
range of tasks at all hours of
the day, alongside the home
greenkeeping team.

The first shift was from 4.30am – 8.30am and the guys helped Ian and his team cut and roll greens, cut tees and aprons, rake bunkers, cut fairways and change holes.

They then returned in the evening to work from around 5.30pm – 10pm cutting, rolling and hand watering greens,

divoting fairways, tidying the practice area and collecting moisture meter readings.

Just some of the BIGGA members who helped out were Emyr Nickels (Mond Valley Golf Club), Darryl Jones (Glynneath Golf Club), Tony Horne (St Athan Golf Club) plus affiliate members Peter Lacey and Peter Holmstrom.

Emyr, Head Greenkeeper at Mond Valley, said: "The atmosphere was very relaxed and the weather was kind.

"The main issue was ensuring there was enough moisture in the greens.

"The Royal Porthcawl team and the volunteers worked fantastically well together."

Also joining the team were two former Toro Student Greenkeepers of the Year – Matt



Perks from Sunningdale and Rhys Norville from Newport Golf Club

BIGGA's South West & Wales Regional Administrator Tracey Harvey joined the team and said: "Ian hugely appreciated the volunteers' work and it was great to see BIGGA members coming together."

NOMINATE FOR SCOTTISH **PATRONS AWARD**



The Scottish Region provides you with the opportunity to nominate yourself, an employee or a colleague for the prestigious Patrons Award 2014.

This award recognises the member's continuing attempt to improve their knowledge and skills in greenkeeping by participating in education, training and networking events

An award ceremony will be held at Stirling Golf Club on Wednesday 10 December 2014 with all of the Scottish Region's Patrons invited to attend as a thanks for their continued support to our members.

A nomination form can be found in the 'Members Area' of the BIGGA website. Click on 'Member Resources' and 'Patrons Award Nomination Form'.

If you would like any further information on the award or for further clarification on the criteria then please contact John Young on 07776 242120 or by emailing johnyoung@ bigga.co.uk



GREENKEEPERS AT RYDER CUP

Good luck to Scott Fenwick, Steve Chappell and all the Gleneagles greenkeepers for this months Ryder Cup Matches taking place over the PGA Centenary Course.

A 40-strong team of volunteers, many of whom have strong links to Gleneagles and the PGA Centenary Course in particular whilst others have been involved with previous Ryder Cups, will join the Gleneagles team of 54 staff for the duration of the event.

Commenting last month, Steve Chappell was delighted with how preparations had gone and was looking forward to general play on the course ceasing at the end of August which will give the crew a solid three weeks to really concentrate particularly on the 'inside the ropes' areas.

We wish them all the very best of luck, particularly with the weather, watch out for a full review of the greenkeeping element of the event in this magazine.



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NEWSDESK



The Golf Management Trophy sponsored by Everris is underway as teams from all five BIGGA Regions compete to reach October's final at Frilford Heath.

The first event took place at Cardiff Golf Club and was a great success with the home team emerging victorious. The top two teams qualify - and the second place team were Cradoc Golf Club, congratulations to both teams.

The Midland qualifier was held at Buckingham Golf Club, with Ian Lacy and Michael Fance in attendance as representatives. All teams enjoyed a fabulous day in terms of weather and the wonderful course prepared by Course Manager Brian Piggott and his team. Thanks are extended to all at the Club for making the day very enjoyable and successful.

Rothley Park Golf Club (right) won the event with a score of 85 points and Tidbury Green Golf Club finished runners up with 82 points. Both teams will progress to the National Final. The Midland Region of BIGGA thanks Buckingham Golf Club for hosting the event and Everris for their sponsorship.

The tournament then headed to Worksop Golf Club for the Northern event, with Lewis Blois in attendance as representative. All teams enjoyed a great day on a wonderful course prepared

by Head Greenkeeper Rob Acheson and his staff. Thanks are extended to all at the Club for making the day enjoyable and successful. Market Harborough Golf Club (above) won the event with a score of 83 points and Worksop Golf Club finished runners up with 79 points. The Northern Region of BIGGA thanks Worksop Golf Club for hosting the event and Everris for their sponsorship.

At the time of going to press two events remained - the South West qualifier at Chipping Sodbury Golf Club on 20 August and the South Coast event at Parkstone Golf Club on 11 September. Results from these qualifiers will feature in the next GI.

Thanks to all the venues, entrants and to the sponsors Everris for all their efforts in ensuring this new competition has been a success.





BIGGA WELCOME ROGER

BIGGA are delighted to announce the appointment of Roger Butler who joins the team as the new Regional Administrator for the Midland

Roger has a wealth of experience in the golf industry having worked for the PGA for 13 years and subsequently for a technology business linked to golf and leisure. A married dadof-three and single handicap golfer, he is based in Sutton

Coldfield near Birmingham. He said: "I'm very excited to be joining BIGGA and am particularly looking forward to getting to know members across the Midland Region at educational events, golf days and during my travels across

"I'm hugely passionate about get started." BIGGA CEO Jim Croxton

added: "The Association recognised the need to appoint a fifth Regional Administrator to support and liaise with our many members in the Midland Region. This vital additional resource reinforces our commitment to meeting our

full-time position allows Sandra Raper, who has been covering a huge area of England in her role, to concentrate solely on the Northern Region. Everyone at BIGGA warmly welcomes Roger to the team.

LETHAL INJECTION FOR OPM

There is universal agreement that oak processionary moth (Thaumetopoea processionae) must be strictly controlled. However, it is becoming increasingly clear that spraying of insecticide especially from the air is running into strong environmental criticisms. This could stall any progress in the management of this important pest of oak trees with its additional risk to human and animal health.

Requirement is for highly targeted treatments using application methods that essentially operate under a 'closed system' whereby the insecticide does not enter the wider environment. Systemically acting insecticide is introduced directly into the tree's xylem (water conducting) tissue for transportation in the xylem stream and up into the foliage to kill the larvae as they eat the leaves.

Syngenta may have the answer with their pioneering technique of tree micro-injection which appears ideal for use on amenity and landscape oak trees found in large numbers across the country's golf courses.

Syngenta say results of independently monitored micro-injection trials now in their third year and undertaken in London and the South East by Bartlett Tree Experts Research Laboratory in Reading have shown no viable OPM nests remaining in treated trees. Application trials have reported no negative impact on tree health.

Tree micro-injection (TMI) has the advantage of eliminating exposure of the public, operators, the environment or nontarget insects and wildlife to any droplet drift that may otherwise occur when using insecticide spray treatments.

The insecticide used is emamectin benzoate, an avermectin class of



insecticides which are derived from the natural fermentation products of Streptomyces bacteria. Larvae stop feeding within hours of ingesting insecticidecontaining leaves and subsequently die within a few days.

Following successful completion of the trials and associated ecological assessments the Syngenta TreeCare solution has now been submitted to the UK regulatory authorities.

Loss of palm trees to the feeding activities of Red Palm Weevil is having a dramatic effect on the attractive architectural elegance and lifestyle of tourist destinations and urban environments of cities along the Mediterranean coastline.

Palms play an invaluable role by providing shade and regulating the

temperature in city streets and piazzas, while mitigating the effects of pollution and enhancing the quality of life. These serious attacks on palm trees along the Mediterranean coastline might seem outside of the UK's 'zone of interest' but with current climate warming predictions who knows.

Emamectin benzoate is used in the United States and Canada by tree injection to control the emerald ash borer (Agrilus planipennis). This beetle pest is closely related to our own oak jewel beetle (Agrilus biguttatus) which is strongly implicated in acute oak decline (AOD). AOD is causing the death of large numbers of mature English oak trees across England from East Anglia and into Wales.

Dr Terry Mabbett

25 YEARS FOR JASON AT HENDON GOLF CLUB

Jason Shepherd started at Hendon Golf Club in 1989 as an Assistant Greenkeeper. He worked his way through the ranks to become Course Manager in 2008 and this year he celebrated 25 years at Hendon.

To mark the event Jason and the greenkeeping team were invited to play with the Club Captain in the weekly roll-up and a barbecue was then held in his honour. Nearly 100 members turned out to support Jason's evening and a sizeable collection was done such is the esteem he is held in.

Gareth Murcutt, Chair of Greens at Hendon, said: "Jason copes with the challenges that all greenkeeping teams face (too many demands and not enough resources) with a smile and some cutting observations and humour.

"All Club Captains at Hendon are remembered and teased by having a caricature of them hung on the walls of the clubhouse. The only other people to get this honour are the three professionals in our history and one Head Greenkeeper from the 1950s. It seemed very fitting that someone who has given so much to the club be honoured in the same way and so to this list we now proudly add our Course Manager Jason Shepherd."



NEWSDESK



ANTONY WAINWRIGHT

The industry was shocked and saddened to hear of the death of Antony Wainwright, STRI Ecologist. He was hugely well-respected and admired by many BIGGA members. Here Bob Taylor, STRI Senior Consultant, pays tribute to Antony, who passed away on 3 August leaving his wife and two children.

Antony was born in Bolton, Lancashire and throughout his school life was devoted to developing his skills in bird identification and ecology which later led him to complete a university degree in Ecology and Ecology Management. He then took a job as a greenkeeper at Turton Golf Club.

Antony entered the STRI Golf Environment Awards in 2011 and won the Conservation Greenkeeper of the Year Award. Part of his prize was a trip to see a range of sustainable managed golf clubs in southern Portugal, and we were accompanied by Darran Marshall, Assistant Greenkeeper at Loch Lomond, whose club won the Outstanding Golf Club of the Year Award 2011. We arrived at our hotel in Portugal at around 10pm, and when we met for a drink Antony reeled off a number of birds he had already seen, including spoonbill and common crane. Both Darran and I were sceptical and impressed at the same time.

Antony's findings were confirmed and he went on to identify many foreign birds by their call alone. He made me realise just how lucky we all are working in an industry that is built around and within the environment, working with individuals and organisations that are working towards that common goal of conserving landscapes which are such an integral part of the golf courses we play.

I realised very quickly that Antony's skills were rather special and this was one of the reasons STRI employed him in January 2014. He was with us only a short time, but what an impact he made. His passion,

enthusiasm and professionalism shone through and this coupled with honesty, humility and integrity resulted in him making a strong impression on all those he met. Antony would have gone on to achieve so much in the conservation of our diminishing habitats and species within golf.

Thank you to you all for your kind words and I just wish Antony could have shared more of his passion to a much wider greenkeeping audience. He will be missed and this is a tragedy for all those around him, including his family, close friends and colleagues within the industry. Here are just a few of the kind comments we have received:

Words cannot explain how I feel at the news of Antony's passing. His passion for wildlife was second to none and expertise was amazing. I will cherish our time spent together in Portugal and on his visits to Loch Lomond both professional and personal.

Darran Marshall - Senior Greenkeeper at Loch Lomond Golf Club

Message for a lost friend - I found you to be a gentle, caring man whose humble approach put everyone instantly at ease. Without your passion and knowledge, our industry has become a sadder place.

Amanda Dorans - Greenkeeper at Dundonald Links

A true ambassador for golf and the environment and a gentleman I have the highest respect for. We as a group must continue to drive Antony's passion onto all those outside and within the industry as a mark of respect. I will certainly be marking his departure in the form of an environment/ ecology project this winter.

Dan McGrath MG - Course Manager at North Foreland Golf Club

FROM WIGAN **GOLF CLUB TO KILIMANJARO**

Paul Walker, Head Greenkeeper at Wigan Golf Club, is climbing Kilimanjaro in memory of his father who died following a stroke.

Paul and four of his pals have successfully completed several walks across the UK recently, but are now taking on the highest mountain in Africa!

It's all in aid of the Stroke Association. Paul explained: "My dad had a stroke a few years ago which eventually led to his death, so it's a cause very close to my heart.

"We must be mad but we're going to give it a go! I think the toughest thing will be the altitude, none of us have ever experienced anything like it before."

This tough challenge takes place between 18-28 September. To donate to this extremely worthy cause please visit https:// mydonate.bt.com/fundraisers/ kilimanjarochallenge2014

NICK PARK MEMORIAL TOURNAMENT

The Nick Park Memorial Tournament will be held at Temple Golf Club on Monday 29 September.

It will be played with specially manufactured 'Kingbo' restricted distance golf balls in line with 'The Campaign for Real Golf' ethos, which Nick was so passionate about.

To enter the tournament, and for much more on The Campaign for Real Golf, please visit http://www. realgolfcampaign.org/bulletin/ the-nick-park-memorialtournament-restricted-ball

NEWSDESK

The latest news from around the globe

Contact Steve Castle on 01347 833829 or email steve.castle@ bigga.co.uk

NEWSDESK



NORTH WALES CRICKET TRIUMPH

The Annual Bathgate Inter Section cricket match between North Wales and North West was a great spectacle to behold.

North Wales batted first and set, what some might say, was a very gettable total of 97.

Unfortunately, with North West all out for 61, the victory went to North Wales.

Notable performance of the match would

have to be that catch taken by our Ashley!

Sincere thanks must go to Bathgate Silica Sand for sponsoring the event, to Ashley Cricket Club for hosting the match and providing superb catering and refreshments and to all who took part and enjoyed a wonderful evening in glorious sunshine.

Sandra Raper



YOUNGEST **GI READER?**

Could this be GI's youngest reader? Pictured here is Erin. 16-month-old daughter of Paul Armour. Paul, Course Supervisor at the New & Jubilee Courses at St Andrews, featured in last month's magazine as he raked for the final group on the Sunday of The Open.

Paul joked: "Erin doesn't get her tea until she's read GI – I'm a strict dad!"



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Membership News - the section which updates you on the countless benefits of being a BIGGA member. We're on hand to help.

You can contact BIGGA House, our Regional Offices, our Personal Accident Helpline, Legal Assistance and our Lifestyle Counselling Helpline.

You can also save money with our BIGGA Xtra Benefits scheme. More information can be found in the Members' Area of the BIGGA website.





PRE REGISTER NOW FOR BTME 2015!

It's that time of year already! We're encouraging visitors to save time on the doors of the Harrogate International Centre in January, avoid the queues and pre-register now for BTME 2015.

BTME 2015 dates Continue to Learn: 18-22 January 2015

BIGGA Turf Management Exhibition: 20-22 January 2015

It's easy to pre-register, simply visit our dedicated BTME site: www.btme.org.uk

Check out our two videos from last year focusing on the exhibition itself and our thriving Continue to Learn programme.

This website also contains a list of exhibitors, travel and accomodation information, plus much more.

However, don't forget that BTME is not just for BIGGA members - which was shown by the huge range of visitors last year.

Greenkeepers mingled and networked with turf managers from almost every sport plus owners and other decision makers from the industry.

Local visitors joined others from various European nations, America and across the globe as Harrogate becomes the turf industry's hub during the third week in January.

If you have any questions about BTME, please do not hesitate to contact a member of the BIGGA team.

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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.















Seb Cavilla, Deputy Head Greenkeeper at Chippenham Golf Club, recently passed his Foundation Degree in Golf Course Management/ Sportsturf. Here he explains what the course involves and how he completed it despite a busy home life

I began studying for the qualification in October 2008, attending Cannington College, which ran the course via **Bournemouth University, for** two years.

This involved travelling down to Cannington once a week during term time. It was a fantastic learning experience, with access to a wealth of materials in the libraries, plus one tutor had managed courses such as London Golf Club, Paris International and grow-ins of two courses in New Zealand. I have to mention Will Bowden and Nick Rigden who were inspirational tutors.

The two years left me with a Certificate of Higher Education (CHE) in Golf Course Management. I intended to complete another two years at Cannington to achieve the Foundation Degree, but due to the recession affecting the number of golf clubs willing to commit students to the course and higher education cuts from Government. the course became unavailable.

So, to complete the qualification, I enrolled with Myerscough College who run the course via the University of Lancashire and began to study online in October 2010.

This meant a big increase of willpower as all studying had to

be carried out in my own time via online tutorials, web seminars and hundreds of pages of notes that were available to download from the college's interactive learning

I took a year out when I became a dad in order to enjoy my time with my daughter and decided to slow the pace of learning down a little when I restarted. Four children at home and a new job as a Deputy meant life was somewhat busy to say the least!

The course involved a combination of assignments and exams, with my final year including a year-long research project. I based this on the golf course here at Chippenham and it was an interesting and rewarding project.

In July this year I received the long awaited news that I had passed the course successfully. I experienced a sense of joy that I had achieved what I had set out to do. All those missed family days out and holidays from work spent at the laptop suddenly seemed worth it! I was also relieved I had completed the course, with no more revision and hours spent writing essays.

I am sure this qualification will help me in the future. It will show potential employers that I have the ability to concentrate on long-term projects, and shows a desire to further myself and my understanding of greenkeeping.

The business based module also gave me a good insight into the commercial side of a golf club, whilst the in depth turf based modules have greatly increased my depth of knowledge and understanding of agronomy.

I have already noticed the benefit in my daily working life, with different ideas and theories popping up in my head as a result of what I have learnt through my studies.

I was fortunate enough to receive the BIGGA Higher Education scholarship supported by Jacobsen which helped enormously with buying textbooks that can be very expensive. Therefore my thanks go out to BIGGA and Ransomes Jacobsen for their generosity. The BIGGA lending library also proved to be an invaluable source of textbooks.

I would like to thank Chippenham Golf Club for their financial support which enabled me to complete the course.

Also my family, and most importantly my partner Elizabeth I spent locked away writing essays





























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, Jaev Goodchild, Michael Beaton, David Barker, Greg Evans









for putting up with all the weekends and weeks off work that



and revising for exams - without her support and encouragement I'm not sure what I would have done!

I would recommend the course to anyone that has a strong interest in the industry - it is a fantastic opportunity to improve your knowledge and understanding of greenkeeping. But be warned, it's not easy!

Here are the modules which I completed in my time studying. As you can see they cover almost every imaginable aspect of turf management:

Construction, Drainage & Irrigation Management

Golf Course Design & Management **Business Planning**

Management of Sportsturf Machinery

Turfgrass Growth & Development

Pests, Diseases and Weeds Work Project Cultural Practices in Sportsturf

Work Skills Development Applied Soil Technology Essential Plant Biology Essential Soil Science

Plant Cell Biology Principles of Mechanisation

Ecology Cons & Sportsturf Management



SCHOLARSHIP FOR STUART ADAMS

Congratulations to Stuart Adams, Assistant Greenkeeper at Tenby Golf Club, who becomes the latest recipient of a Ransomes Jacobsen Scholarship. Stuart will be studying his HNC in Turf Management at Elmwood College.

Don't forget that BIGGA offer a range of scholarships including the Level 3 Scholarship supported by Baroness, the Higher Education Scholarship supported by Jacobsen (which Stuart has been awarded) plus the Refund of Fees scheme. Supported by the Learning and Development Fund, this enables Full BIGGA members to claim 80% (up to a maximum of £350) of education and training course costs.

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



MASTER GREENKEEPE

The Master Greenkeeper Certificate is awarded to those greenkeeper members of BIGGA who have reached the highest standards of greenkeeping and golf course management.

It is a prestigious industry award gained by

- · Experience as a greenkeeper
- · Through formal and informal training
- · Golf course management assessment
- · A rigorous, two-part examination

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INDUSTRY UPDATE

The latest turf industry news from around the globe



A TOUCH OF GLASS WITH HEADLAND

Brokenhurst Manor Golf Club is recognised as one of the best in the beautiful New Forest area. The course consists of three loops of six holes in a mixture of woodland and heath with a stream featuring on nine of the holes.

Wildlife is abundant with a magnificent herd of Red deer stags, shy Roe deer and successive generations of "White Buck" on the course.

Bird life also abounds with a buzzard's nest in the central woodlands and egrets in the stream.

Kevan Glass (above), Course Manager since April 2009, has been at the club for ten years across two spells and is supported by a six-strong greenkeeping team.

"We have a few holes with pine and heather," he said, "and a lot of holes with typical parkland trees which we are working to develop with a woodland management programme to get more light onto the course. We have a very heavy clay soil base which floods very easily in the winter and cracks up in the heat.'

When Kevan rejoined the club they were receiving complaints about the course and it seemed they had a number of issues to resolve. He took a long hard look at the products and the maintenance practices and decided there was room for improvement. For example, they never used to apply wetting agents on the fairways so they didn't survive the dry spells.

Industry experts were called in and eventually a whole new approach was developed using Headland Amenity products. Kevan explained: "It was a tough decision for me. I really needed to try new things to improve its condition. I put all my trust in Headland - I could have stayed with the status quo, which would have been safe, but the results weren't giving us what we needed."

In return the committee put their trust in Kevan and everything he tried turned out exactly how he said it would. Completely changing the nutrition and feeding programme with Headland products improved the course, and with a more competitive cost than before.

He added: "I got a lot of positive feedback on the course that first year but that is reducing now because the expectation level is much higher as the course has looked so good for the last few years."

For the club's Pro Am in June the greenkeeping team gave the greens another cut in the afternoon of the day before. This, he feels, is the best type of cut because the clipping rate is better as there's no dew and the grass "just seems to cut better." He chose to avoid irrigation in case this caused problems with the bunkers, but applied TriCure AD wetting agent tablets and gave the greens a 'misting' via the hose-end applicator.

This treatment, he commented, doesn't take anything away from the firmness or the pace on the greens but gives just a little bit of stress release after the event, that the Pro Am causes. TriCure AD is used widely to counter problems with drying out of the indigenous clay soil.

Kevan has become pretty used to Headland products and support, just making a few small tweaks to his programmes each year and being a regular user of their WeatherCheck service.

ERNEST DOE

Alan Ernest Doe, chairman of Ernest Doe & Sons Ltd the Ulting, Maldon, Essex based groundcare, agricultural and construction



machinery dealership, died suddenly and peacefully at the

Alan was grandson of the company's founder Ernest Doe and still attended the company's offices five days a week.

The company has its roots firmly in the agricultural machinery world, but under Alan's leadership diversified in the 1950s and 60s into groundcare and construction machinery. Ernest Doe and Sons has had a business relationship with Ransomes for virtually all its trading life. Ernest Doe founded his business in 1898.

Initially the business sold Ransomes agricultural implements. In the 1960s Alan developed the relationship on the groundcare side which has seen the company become RJ's largest European dealer. Further developments in the 1970s saw Alan developing the garden machinery side of Ernest Doe & Sons into a major retailer of global brands.

In February 1960, the first Doe Show was held with Alan putting in place all the foundations of the show which is now an annual event

Under his leadership, and latterly with his son Colin, Ernest Doe & Sons have further increased the company's branch network. The company now employs over 500 people, trades from 19 locations across the whole of East Anglia, Kent, Surrey and Sussex and has a turnover of £115m.

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Community Links

Steve Castle visited Ayrshire to discover how a relatively new course has already made such a positive impression on golfers, the local community – and the environment





It's tempting to visit **Dundonald Links and rave** about a true links course with its long wispy rough, the constantly challenging layout, the potentially card-wrecking bunkers...but there's so much more to this facility than meets the eye.

On our way back from the Scottish Golf Championship, the BIGGA team of myself, Tracey Maddison and Elaine Jones from Membership, and Scottish Regional Administrator John Young, were warmly greeted by Golf Course Superintendent Frank Clarkson and Assistant Greenkeeper Amanda Dorans. The morning quickly turned into an enlightening look at what the team has been working on at this progressive venue.

Dundonald has around 14,000 visitor rounds a year, with a membership of 200 plus the many Loch Lomond members who head south to play. There are just under 30 hectares of managed turf.

Burnley-born Frank began his greenkeeping career at Loch Lomond as a seasonal greenkeeper in 1996. His next career move was in 2003 when he accepted the chance to play a major role in the development of Dundonald Links. The course gets between 1200-1400mm of rain a year - significant, but for the notoriously wet West of Scotland it's far from disastrous!

The course was known as Dundonald Golf Club in the 1930s, but was then renamed Southern Gailes. Just over a decade ago Loch Lomond Golf Club acquired the land which is close to the legendary town of Troon. The course was redesigned by Kyle Phillips and was renamed Dundonald Links, with the goal of providing the Loch Lomond members with an authentic and challenging alternative links.

Frank recalled: "I joined Dundonald during quite an unusual period here. We took ownership in March 2003 and it hadn't fully developed. The holes were mainly in place but there were tees missing, it wasn't complete. We were closed during the first two winters because there was a lot of drainage work to do with the high water table.

"Six or seven holes had issues - we get a considerable amount of rain and it's a low-lying course. We put a pumping system in - in fact, apart from the 10th and the 11th, there is no positive drainage on the course, everything else is pumped.

"We've come a long way since then and the course has, in its short history, hosted a number of Professional and amateur events including European Tour qualifying and Senior Open qualifying. This year we also hosted the British Boys Championship.'

Amanda's route into greenkeeping began by working at the clubhouse even before the course officially opened.

She said: "I studied Business Management and then came here. I worked in pretty much every department, then Frank asked me to look after waste management and recycling.

"This led to me looking at monitoring our energy use, and then eventually I started doing some hours with the greenkeeping team and in 2007 I joined them full-time, and passed my Level 3."

As well as general greenkeeping duties, Amanda has had a huge influence on the environmental and biodiversity side of the course - something she is clearly hugely passionate about. She penned the club's environmental management plan, which evolves every five years. It looks at every aspect from turfgrass to waste management and water usage, with each member of the greenkeeping team looking after a particular aspect of the plan and feeding information back.

The club's environmental success stories are numerous. For example, they've helped reintroduce the Small Blue Butterfly which had died out in Ayrshire in 1982.

The Scottish Wildlife Trust and Butterfly Conservation Scotland collected 30 butterflies from a monitored site on the Moray coast, and they were then transported 225 miles to the trust's Gailes Marsh Wildlife Reserve and Dundonald Links. The club has kept a close eye on their progress and they are beginning to flourish.

They've used inert soil to create a sandbank for nesting Sand Martin birds adjacent to a fairway - allowing members and visitors alike to enjoy a round on what is practically a nature reserve. They've also constructed beehives and have been known to enjoy a spot of 'Dunny Honey' as a result!

This work has not gone unnoticed. During BTME 2014, the club was presented with the STRI's Environmental Golf Course of the Year', they've been awarded the GEO certified ecolabel and became the UK's first course to achieve zero waste to landfill. But how?

Amanda explained: "It was the zero waste that caught everyone's interest. I knew there was new waste legislation being introduced







in Scotland and basically I wanted to reduce what was just being thrown in the bin.

"I knew it would cut our costs, and it has, by 50%, but it wasn't just about that. It was about reducing our environmental impact, we recycle everything we possibly can whether it's paper, wood, cardboard, packaging or metals. Even our information boards out on the course are made from recycled wood.

"A key part in this was staff training sessions which helped keep everyone on board, and we share our success stories with all the team through progress updates on our intranet and notice boards.

"We've got nine greenkeepers

and the team has been the same for eight years, which shows it's a great place to work, and the awards have been a reward for everyone's hard work.

"We also get a lot of support from Loch Lomond. Although they're 60 miles away, the ethos is the same. Frank is on the senior management team for both clubs which ensures we work together."

The club has excellent relationships with all manner of companies and organisations. For example, they won the Best Environmental Performance Award at the Ayrshire Business Awards in 2011.

This was sponsored by Nestle Girvan, and a chat between Amanda and Emma Gilchrist from

Sandbank for nesting Sand Martins close to a fairway



the firm led to the two organisations sharing ideas on biodiversity and waste management.

"They showed us how achievable it was, we shared ideas, visited each other's sites and discussed how to overcome problems. It shows how golf clubs can work closely with other industries."

The team also regularly work with the Scottish Wildlife Trust, the Scottish Golf Environment Group, the RSPB and Scottish Natural Heritage as well as the R&A, STRI and sponsors including Syngenta, Wiedenmann and Germinal Seeds

Amanda said: "It doesn't need to be expensive. People are dying to do surveys for you because they're interested to come along and see what work you've done.

"We measure and monitor everything which I would advise everyone to do, then you can look back and see whether you've gone backwards, stood still or if you're improving.'

Frank added: "We've been through financial hardships like everyone else. 2008 to 2010 was a difficult time, but we still managed to get a lot of environmental work done during that period."

So what agronomic challenges have the team faced?

Frank explained: "It's a new, immature site. We're surrounded by great golf courses which have been around for over a century, and we'll be judged against them so you have to catch up pretty quick!

"As every greenkeeper knows, Mother Nature is very unpredictable. We cut greens pretty much every ten days over the wet and mild winter we've just had. Yet in 2011 and 2012 we were frost-bound for two months.'

They've also not been afraid to reach out into the local community, and have involved local schoolchildren in activities such as tree planting and nature trails. Amanda says having kids around the club gives it a "buzz", and she's proved this is not all talk by already signing her three-year-old son up to take golf lessons.

She concluded: "We've achieved a lot, but we've got loads still do to. It's not going to happen overnight, but over the coming years we will keep evolving, always taking stock of what we're doing. If we can realise our agronomic objectives and do all the other things as well, we'll know we're moving in the right direction."

ABOVE: BIGGA General Manager, Tracey Maddison gets to grips with one of the intimidating bunkers!













Sam Evans, Deputy Head Greenkeeper at Oakland Park Golf Club, joined the BIGGA Open Support Team for the first time. If you're unsure of whether to apply next year, or don't know what the week involves, read on

Six years ago, when I was being shown how to rake a bunker as a young apprentice, I never thought I would ever be raking for world-class golfers in front of packed grandstands and millions watching on TV.

I applied to be part of the Open Support team after Sam Bethell, greenkeeper at The Richmond, told me about the fantastic experience he had at Muirfield last year. I never thought I would get selected but I was delighted when I found out I was in, and Oakland's Head Greenkeeper Graham Down allowed me to have the time away.

As The Open approached, the more anxious I became, would something go wrong? Would I trip

turned out to be nowhere near as daunting as I imagined.

I travelled up on the Wednesday before the tournament and arrived at our accommodation at about 1pm. It was good to meet new faces, find out their thoughts about the week and chat to them about their courses. Our duties were then explained and we were split into

Everyone then travelled from the accommodation to Royal Liverpool for a briefing from the Links Manager Craig Gilholm and the R&A's Director of Rules Grant Moir. I was just blown away by the course.

The home greenkeeping team were rolling the approaches as we

over in front of everyone?! But it watched Craig demonstrate how he would like us to rake the bunkers. It surprised me how Craig was so calm and relaxed. It made me realise that no matter how much pressure is on, stressing does not help anything. We took photos on the green and just admired the links.

After a nerve settling beer on the Wednesday evening I set my alarm for 4am. It felt like Christmas Eve! In the morning I put the purple polo shirt on we'd been provided with and headed for the 5am bus.

I was drawn to rake for DA Points, YE Yang and Brendan Steele at 11.59. All morning I was talking to team members who had done this before, trying to get an insight into



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what to do and more importantly what not to do! But it all just came naturally.

I headed to the BIGGA cabin where Sandra Raper and Tracey Harvey passed me my bunker card to note how many I raked during the round. I picked up my rake and then went to meet the scorer and scoreboard carrier.

At the first tee the golfers introduced themselves and hit their first shot. My legs went to jelly walking behind them up the first, taking in as much of the course as possible.

The long rough areas were elegant next to immaculate short areas.

I particularly liked the rivetted bunker faces as this gave each bunker its own character, each requiring different types of shots to exit.

Coming up the 18th, I'd enjoyed it so much I wanted to do another 18! On the walk back to the clubhouse, Steele and Points each gave me a signed ball. It had been hard work especially as it was very hot, but so worthwhile.

With round one over, I reported back to the cabin and headed back to the BIGGA marquee. All the guys were talking and sharing stories and views on the course.

Our bus (which was 'yellow', they're all given colours so you know which one you're on) then headed back to base camp. A shower, dinner, a drink and a laugh with guys from across the country who all share a passion for greenkeeping made for a relaxing evening.

Next morning I was again excited for my round which this time was at 13.14 - Stewart Cink, Patrick Reed and Thomas Bjorn. This time I was not so nervous, more raring to get going.

At one point I was asked to hold my rake up in the middle of a hedge so the match referee and Reed could drop his ball on the line it went in. The golfers did not interact much with us, which is understandable as they were extremely focused.

On the 18th Bjorn found a greenside bunker, and I thought 'Yes!' because I wanted to rake in front of the huge grandstand. I'm glad I didn't show how happy I was he found the sand - he would not have been pleased!

I raked the bunker and waited for the players to putt before I followed them off. Bjorn had visited a few bunkers, so at the end he shook hands with the other players and caddies, looked up at me and threw me his ball, and gave me a thankful nod in front of the grandstand, I felt so proud. Cink also sent a signed





TOP: Before Friday's round ABOVE: The BIGGA marguet

ball around to the BIGGA tent.

Due to the forecast of heavy rain and thunderstorms on Saturday afternoon, the R&A decided on a two-tee start to get all the golfers round before the bad weather set in. Therefore only 24 bunker rakers were required, and I had been drawn out as number 28 in the random draw.

So, I watched some golf, cheered on some other rakers and generally soaked in The Open experience. It turned out the R&A were right as there was a torrential downpour just after the last group had finished.

The final day saw me rake for Ryan Moore and Marc Warren. I

was very excited as these two had played well all week and were only seven or eight groups from the last pair, so I knew the stands would be packed. These two players were totally in the zone'.

During a quick chat with the scoreboard carrier halfway round, I admitted I would love to rake on the 18th in front of packed stands - and I got my wish as a ball trickled in the same greenside bunker Bjorn visited during round one.

As we approached the green and the players were applauded the atmosphere was incredible and the hairs stood up on the back of my neck. Because of the way the grandstand surrounded the green



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Renaissance period



The Renaissance Club in East Lothian is a new links course located in a unique position on Scotland's 'golf coast'. Laurence Pithie visited the club to find out how this rising star was built and how Course Manager Paul Seago meets the high expectations



Few locations can boast the quality of golf courses situated within a short distance along a coastline steeped in the history of the game.

Golf has been played on East Lothian's coastal links for well over 200 years, where at least nine courses were in existence prior to 1900. The Renaissance Club, the newest addition, is located within the Duke of Hamilton's Archerfield Estate adjacent to Muirfield, where numerous Open Championships have been held since 1892. Dirleton golf course, designed in part by Ben Sayers, existed on the site but like so many courses of this era was abandoned after WW2.

However golf has returned to this area first with the formation of the Archerfield Links, followed by the 18-hole Renaissance Club which was formed by a group of American investors, led by Jerry Sarvadi and his family.

Tom Doak was appointed as course architect to design a worldclass venue largely due to his expertise in utilising the existing land, and to give the appearance that the course has been there for many years. The 300-acre site was previously a mix of undulating pine and deciduous woodland, bordering onto natural dunes set above the beaches bordering the Firth of Forth.

With free draining sandy soil, it was an ideal site for a golf course and it opened for play in 2008. Land closer to the sea was acquired a few years later and Doak returned to redesign the course and create four new holes, three of which are set 60 feet or so above the shoreline and offer spectacular views towards the Fife Coast.

The revised layout came into play last year, with the original first three holes now used as part of the practice area academy. The Renaissance is no ordinary club but it has already achieved much acclaim for the quality of golf course, clubhouse, accommodation and membership service. An early impression of the course is that the putting green and 1st tee are 'one', this being a rare quality that very few courses can match and leads to great expectations.

Construction

Initial site clearing involved removing 8500 tons of timber to form the course, with various borrow pits used to bury tree stumps and other debris. The main course shaping was completed by Doak's own dedicated team of shapers together with plant con-















MAIN ABOVE: Shaping underway on holes 8, 12 & 13 ABOVE LEFT: 10th hole prior to

tractor John Dewar, continued with finishing work and seeding undertaken by Edinburgh Landscapes. A Rainbird irrigation system to greens, tees, fairways and some walkways was installed by MJ Abbott, with a borehole providing an adequate supply of water.

A number of consultants were used to ensure tree felling, woodland management and other environmental work was completed to the standard required, since much of the site is classified as SSSI.

Shortly before construction work began, Paul Seago was appointed Course Manager in 2006, having previously worked for 13 years in a similar position at nearby Gullane.

With links experience at renowned courses such as Royal Cromer, Hunstanton and Royal West Norfolk, it was important to recruit an experienced greenkeeper who was qualified to both grow-in and manage the site. Paul takes up the story.

"Planning approval required that no material left the site and rootzones were formed by mixing and screening the indigenous soil and sand, having been laboratory tested for suitability; this being somewhat of a rarity in course construction.

"The seeding specification was a mix of different fescues with only a small amount of Bent included for greens, tees and fairways."

Seeding was completed via a combination of drilling, broadcasting and hydroseeding, depending on individual areas and requirements. Since much of the site is exposed and the depth of soil limited, it was a delicate task.

"To help me project manage the site, Gary Eunson was appointed as Deputy along with David Livingstone as mechanic to help coordinate work schedules with contractors and ensure that Construction, Design and Management regulations and safety measures were put in place and adhered to."

Grow-in & Establishment

On any exposed links site, the key challenge is to bring the course from seed to play as quickly and efficiently as possible and hope that Mother Nature plays ball! Paul explained:

"Wash-outs and wind blow along with a seven month growing season have been the main challenges to overcome.

"Rainfall in this area is often less than 20 inches a year with barely six days of rain per month. Good for golf but there is a real need to rely on irrigation to ensure a successful grow-in.

"Once the grasses established, the priority was little and often with regards to nutrition, water and topdressing along with regular overseeding to any areas where grass cover was weak. The objective was and has always been to maintain a links sward. Mowing heights were kept high to start with; walk mowers were used on greens, tees and collars throughout the first vear."

Resources

We have 16 full time staff including myself, a deputy, mechanic and 13 greens staff plus an apprentice. Teamwork and attention to detail is paramount - they make the difference and provide the quality of playing surfaces that our members enjoy. Training is ongoing, largely in-house and with regular feedback we can focus on what our members require.

The maintenance building was designed internally via planners after visits to other greenkeeper compounds and one that we all take pride in. Our range of equipment is extensive for an 18-hole course and is largely John Deere."

Maintenance

Paul continued: "Now that the four new holes are in play, we have 21 holes and a practice area to maintain. With construction work complete, this is the first full year when we can focus on maintenance and playing surface performance. We have 118 bunkers, all of which are hand raked daily which takes three staff two and a half hours to complete.

"Greens are at least 600m2 in size, contoured and mown with either triplex or walk mowers set at 5mm HOC. With regular turf ironing, we achieve green speeds in excess of nine feet. They are very firm, with volumetric moisture content (VMC) at around 12% which favours fescue. Nitrogen input is about 45kgs/Ha per annum and composed mainly of cold processed seaweed and sulphates of Ammonia and Iron.

"Topdressing is carried out monthly, again little and often along with regular needle and microtining. With our borehole water supply being high in calcium carbonate, we are now using the Quadrop system to help reduce the content.

"We have excellent root depth and apart from a very small amount of invasive Poa annua, the greens remain true and firm. Greens surrounds are cut at 7mm, the same as the tees in order to encourage the 'running' game with some great contouring to challenge all levels of golfer.

These are topdressed twice per vear, occasionally adding some organic content to the mix. Fairways are treated likewise but mown at 12mm and given a couple of light feeds to stimulate growth and recovery from wear."

Environmental Work

This involves grassland and woodland management as well as controlling the spread of sea buckthorn. Paul added: "We have planted a considerable amount of marram grass on the coastal and other dune areas in order to prevent erosion and to help stabilise the more exposed banks.

"All 'eco-rough' is cut at four inches once per year and collected in order to retain the fine fescue content. This helps to speed up play while still presenting a sufficient hazard. It also gives natural flair to the course while providing a suitable habitat for flora and fauna."

Summary

It is no mean task to create a world-class golf course within an area of such historical importance. The Renaissance Club is a modern links course which is diverse in appearance and natural habitat. For pure turf quality composed of firm, fine fescue turf, this course has few equals.

With stunning views and areas of dune, grassland and woodland, it has something for everyone along with a clubhouse and standard of service to match. Golfers can enjoy the pleasure of playing true links golf where the Doak design of each individual hole encourages golfers to play the 'running game' which is the true essence of links golf. The fun and the challenge is to master

With so much emphasis placed on the golf industry to be more environmentally sensitive, the course is superbly maintained with minimal inputs of nutrients, chemicals and water. The club richly deserves credit for taking this sustainable route while offering its members unique playing quality and a marvellous experience in the cradle of golf.









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...an ecological overview

Bob Taylor, Senior Consultant at STRI, lifts the lid on the ecological side of The Open that few of the thousands of spectators and millions of TV viewers are aware of

The Open is without doubt the world's largest golfing event and it seems that year on year the amount of infrastructure increases, as does the need for wider spectator routing allowing optimum vantage points while ensuring safety.

The R&A engage STRI as the official ecologists to represent and deal with these interests and our work is ongoing to identify the ecological 'hot spots' at each course.

At Royal Liverpool Golf Club, the principal interests relate to the

internationally protected natterjack toad which successfully breeds annually through the outlying red rocks which are a Site of Special Scientific Interest (SSSI). Several birds of European conservation concern also breed on different areas of the course such as skylark, meadow pipit, linnet, whitethroat and the sedge warbler.

STRI ecologists were on site in early March this year to discuss the placement of the different spectator areas and the main routings. These areas were cut back to 75mm

above ground level and all litter was collected. These same areas were then cut on a weekly or fortnightly basis through to The Open, the aim here being to simply create a high degree of disturbance through the vortex of the mowers rather than specifically cutting grass. This is necessary to dissuade ground nesting birds from nesting close to or within the vicinity of the spectator areas.

At the same time, the more sensitive areas of grassland where cordons would be placed were iden-





about the author





tified. An application for consent was submitted to Natural England to enable all this work to be carried out through the championship 11th to 15th holes which run along the coastline.

Consent was also required for a license to handle the natteriack toad, an initial submission was made in December 2013 and license was finally approved by May. The license is fundamental as it does allow me, acting as the main agent, to appoint two nominated accredited agents who could act under the terms of the license handle and deal with any natterjack toad issues.

Links Manager Craig Gilholm and Grant Smith, R&A Construction Officer, were appointed and were given induction training to enable the safe handling of these important amphibians. They were both informed of likely scenarios where toads may be encountered which included within piles of stored sand, in pits excavated to accommodate scaffolding and in any areas of broken or disturbed ground where bare sand was evident

The R&A were also advised to ensure all infrastructure including notice boards, scoreboards, and grandstands be screened to attempt to prevent nesting birds, particularly swallows, arriving from the continent and nesting within the structure.

On two occasions leading up to The Open, the R&A asked me to

return to Royal Liverpool to undertake botanical assessments within localised pockets of grassland. Then, during tournament week, further checks were carried out to ensure that no wildlife would be unduly impacted by the extent of infrastructure and the increasing numbers of spectators between practice and the first round on the Thursday. These checks allowed for fine tuning as and where deemed necessary.

All of the pre-Open work clearly paid off, because when the event began only two areas were found to support nests that potentially could have been impacted. These included a tract of gorse to the left of the championship 5th hole which supported nesting whitethroat, plus the likelihood of nesting linnet and dunnock. Further cordoning was provided around the gorse to reduce spectator impact.

The second area was left of the 11th, the low lying scrub here supported sedge warbler and whitethroat whilst the adjacent grassland supported meadow pipit all thought to be nesting.

The cordoning was providing a very good buffer between the 11th tee and carry and the likely areas of nesting so it was concluded that these birds would not be impacted.

There are different ways in which we can use bird activity to determine nesting, one of the main ways during The Open was agitated behaviour which will indicate that a nest is likely to be close by.

Birds carrying food would be a confirmed record of bird nesting. Male and female birds flying and calling, but not showing agitated behaviour may simply be displaying territorial boundaries. These and other techniques are used in the field to determine breeding bird status.

No natterjack toads were encountered through the period of The Open and after the tournament, as we moved through to the demolition phases through to restoring areas of weaknesses, teams led by Grant Smith were briefed to maintain their focus on ecology.

People are always surprised to learn just how much effort goes into protecting the wildlife on our Open Championship venues. I was lucky to have the eyes and ears not only of the Links Manager and R&A contract teams, but also the eyes of STRI's agronomists who were out each day at first light and again at dusk undertaking their performance measurements on the

Finally you may have seen the footage of the toad being encouraged from the 1st tee by Ernie Els! It turned out to be a common toad rather than a natterjack toad, and does not enjoy the same level of protection.

It does demonstrate that we must always remain vigilant regarding wildlife on golf courses.

The key is to work towards minimising ecological impacts wherever and how they may arise.



TORO.

A panel of judges from Toro and BIGGA have interviewed some of the Association's brightest greenkeeping prospects, and after much deliberation has narrowed the shortlist down to six

It's up for grabs now

This year's successful candidate will follow in the footsteps of last year's winner Luke Turner and head to America for an all-expenses paid trip early next year courtesy of Toro.

This will last for eight weeks and include a six-week study course at the University of Massachusetts. They will also visit the Golf Industry Show in Texas and explore Toro's Californian base.

Two runners-up will receive a paid trip to the Continue to Learn programme at BTME 2015.

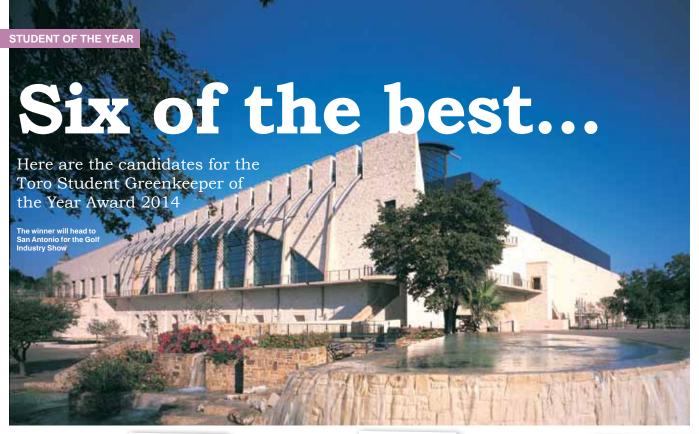
Thank you to all greenkeepers who attended interviews - commiserations at not making the final shortlist but there's nothing to stop you entering again next

There will be extensive coverage of the final – and the 25th anniversary celebrations - in October's Greenkeeper International.

This year's interviewing panel were Stuart Green, BIGGA L&D Executive (Technical), Gerald Bruce, Course Manager at Berkhamsted GC, David Langheim MG, Course Manager at Wimbledon Park GC, Archie Dunn, Course Manager at Auchterarder GC, Rob Hogarth, Course Manager at Remedy Oak GC, Rob Welford, Course Manager at Cleethorpes GC and Gwynn Davies, Course Manager at The Mere.

MAIN IMAGE: Last year's winne Luke Turner NSET: Last year's finalists





AARON BOWEN

Age: 24

Club: Ipswich Golf Club (Purdis Heath) Role: Assistant Greenkeeper College: Easton Otley

Nominated by: Steve Race

Aaron's career started at Fynn Valley Golf Club as an apprentice greenkeeper and he was promoted to Deputy Head Greenkeeper in 2012 before joining his current club, where he's playing a key role in their ambition to restore the course to a natural heathland facility.

He is currently studying for his Level 3 Diploma. He is a talented golfer, was Under 16 County Champion and his handicap is currently 2.

ANDY FOULDS

Age: 42

Club: Wimbledon Park Golf Club Role: Assistant Greenkeeper College: Merrist Wood

Nominated by: Philip Mayes

Andy came into greenkeeping aged 32 and joined Wimbledon Park in 2004. He then worked as a greenkeeper at Wimbledon Common then Roehampton Golf Club where he was heavily involved in a bunker rebuild plus the grow-in of new tees and greens

In 2012 he returned to Wimbledon Park where he's been involved in another major rebuild. He also helps cut the pitch and divots with the turf management team at Arsenal FC on matchdays and has a handicap of 11. He's currently working towards his Level 3 Diploma.

TOM FREEMAN

Age: 31

Club: Kingsdown Golf Club

Greenkeeper College:

Myerscough

Role: First Assistant Nominated by: Nick Lush Tom's first greenkeeping position was at

Bowood Golf & Country Club in 2000, then, keen to gain experience in warm season grasses, he headed to work at New South Wales Golf Club in Australia. After a brief period at Castle Combe Golf Club he joined the Ohio State University Programme, was placed at Pinehurst and extended his placement there to join the irrigation crew.

In 2007 he returned to Bowood before joining Kingsdown. He is currently studying for his Level 3 Diploma, was part of the BIGGA Open Support Team at Royal Liverpool and has recently taken up golf.

DAIRE HIGGINS

Age: 21

Club: St Andrews Links

Role: Seasonal Greenkeeper College: SRUC Elmwood

Nominated by: Alan Clark

Irishman Daire began his greenkeeping journey with work experience at Claremorris Golf Club before being taken on for a year at the parkland course which is in County Mayo.

During his college studies he was offered the chance to work at St Andrews which he eagerly accepted, and is to take his HNC in Golf Course Management. He enjoys golf and has a 14 handicap.

WESLEY LENIHAN

Age: 26

Club: Ealing Golf

Club

Role: Assistant Greenkeeper College: Plumpton

Nominated by: Stuart Franks



Wesley has been in greenkeeping for four years, starting out at East Sussex National where he was involved in the preparation for a EuroPro Tour event as well as helping carry out an extensive bunker renovation project.

He then joined East Brighton Golf Club and was a delegate at the first ever FTMI which he credits as helping him progress to Deputy Head Greenkeeper at East Brighton.

He recently joined Ealing Golf Club and is studying his Level 3 Diploma, and his handicap is 6.

KEVIN O'NEILL

Age: 37

Club: Muswell Hill

Golf Club Role: Deputy Head Greenkeeper

College: Oaklands Nominated by:

Andy Wight



Kevin started out at Gleneagles and worked on several PGA events before changing sports to work as a football groundsman but six years ago he rediscovered his desire for greenkeeping, joining Muswell Hill.

He is currently secretary of the BIGGA London Section and will be working at the Ryder Cup as one of the many volunteers. He is currently working towards his Level 3 Diploma and has a golf handicap of 21.

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A winner's tale

Matt Perks explains how winning Toro Student Greenkeeper of the Year in 2011 provided the ideal foundation for him to land his dream job at Sunningdale Golf Club

When I first read the advert on the BIGGA website last October for an Assistant Head Greenkeeper on the Old Course at Sunningdale I just knew I had to apply. Chances to work at such prestigious venues rarely come up so I prepared my CV and covering letter and hoped it would be enough to get an interview.

Thankfully my hopes were fulfilled - and after a successful first interview which lasted an hour and a half I was invited back for a second interview. This lasted nearly half a day and included some very tough technical questions.

I honestly think I would have struggled to answer them had I not studied the Winter Turf Science Programme at the University of Massachusetts, which was part of my prize for winning the Toro Student Greenkeeper of the Year two years ago.

The days that followed were spent anxiously awaiting news - then on Christmas Eve, Sunningdale's Secretary Stephen Toon rang to offer me the position. I accepted the job in a heartbeat! Stephen told me that working at Sunningdale would be one of the most challenging and rewarding experiences of my life...and after working here for six months I can say that it has been every bit of that.

I've been asked by many people to describe what working at Sunningdale is like compared to other clubs I've worked at, and my answer is that you can't compare it. It is truly world class in every respect, and it's this statement "Truly World Class" which is the Sunningdale mantra. It runs through everything every employee does and it shows when you enter the gates and walk up to the famous clubhouse which overlooks the New and Old Golf Courses, as well as the famous old oak tree which is our emblem.

The ethos behind the maintenance program for preparing the golf courses is to set them up for the best low handicap amateur and professional golfers, this means smooth, well-paced, consistent playing surfaces across the entire site.

This is achieved through the use of a comprehensive balanced liquid nutrient program, regular topdressings and sustainable heights of cut to provide the perfect environment for the finer desirable grasses to thrive.

All of this is augmented with a high attention to detail, course definition and presentation to provide the very best experience for golfers.

This brings me on to another example of how highly thought of both courses are. In late spring, completely out of the blue, the



club was asked by the R&A to stage a Final Qualifying Event for The Open as the venue which was due to host the event had been damaged by the exceptionally harsh winter.

So, with little more than eight weeks notice, the New Course was brought to its absolute best and two rounds of golf were played over one day by the 72 competitors.

The eventual qualifiers - Matthew Southgate, Byeong Hun An and Christopher Rodgers – recorded scores of four under, three under and one over respectively, showing just how tough the course played.

A mention must be given to the training policy and attitude towards giving members of the greenkeeping team as many opportunities as possible to better themselves and further their careers. Sunningdale are big believers that having

the best team and keeping them up to date on industry legislation and qualifications not only benefits them but also the club.

This has paid dividends over the years as both courses consistently rank very close to the top of any league table they are included in.

The club have also attained a Silver Award from Investors in People and are currently in the process of being assessed for the Gold Award, an accolade which is normally reserved for large multinational companies with thousands of employees.

That just leaves me to say that winning the Toro Student Greenkeeper of the Year award has not only given me the chance to hugely expand my technical knowledge but to also land the job of my dreams. Good luck to this year's candidates - you never know where your success in the competition will lead!





Getting to grips with grass

In the first in a series of articles on turfgrass, Dr Paul Miller, Lecturer in Golf Course Management, explores 'cool season' turfgrasses from a historical perspective and provides definitions for the stalwart species



"Today more than ever our future depends on the efficient cultivation and use of grasses".

So stated the back cover of C. E. Hubbard's 'Grasses', originally published in 1954, and whilst Hubbard was no doubt referring to grasses in an agricultural context, I can find no better expression of the challenge we all face now in the second decade of the 21st century. This was brought home to me in July when I was fortunate to visit The Open Championship at Royal Liverpool, looking at the immense travelling circus that is professional golf, and thinking it all depends on our management of a few species of grass. Quite a challenge - expectations around quality standards are not diminishing, yet as an industry we are expected to produce these with less money and smaller teams, and environmental concerns mean that some of the methods we accept as 'conventional' will be under increased scrutiny or no longer available to us. So it strikes me that to meet this challenge we really need to get to grips with and understand our grass plant like never before - its range of adaptation and tolerances, its structure and functions of component parts, the processes that need to take place for it to function efficiently, and the impact of maintenance practices on its sustained healthy function. I hope this series of articles will help.

A principle I'd like to establish early is that each and every living organism has its own range of adaptation in which it holds a competitive advantage - its ecological 'niche' - and I'm going to reason that turfgrasses grown in or close to their niche will experience less stress and produce quality turf in a more sustainable manner than a grass grown in an environment to which it is not adapted. Indeed, I suggest this is the foundation of sustainable turf management -'square pegs for square holes' might be a way to express it.

Something else we need to ask is from where we have derived our understanding of what makes good quality turf, and I have to admit to finding it difficult to think about this without taking a historical perspective. Golf as a sport was originally developed on land with poor agricultural value on the east coast of Scotland, land known as 'links'. As it developed during the second half of the 19th century it came onto new landscapes in new parts of the UK and elsewhere, then into the United States, and in all these 'new' places efforts were made



to replicate the conditions found on the links. So our ideas of turf quality for golf can be directly traced back to its earliest places, where we find firm, dry, fine textured and smooth conditions; conditions over which a small ball can be struck cleanly, and bounce, release and roll upon landing. And it was the grasses growing in these places that provided this quality of turf.

So what do we know about the grasses that have the potential to do a job for us in fine turf, and what is their natural range of adaptation? To extend the metaphor, what is the right-shaped 'hole' for the grasses that we want to be growing? One very straightforward adaptation is that of 'warm-season' and 'cool season' grasses, the distinction being the physiological way in which these two major groups deal with heat and intense light, meaning that we don't grow Bermudagrass in Fife! However there are also differences between the cool-season grasses which most of us are more familiar with, and I'd like to think about the range of adaptation of these, turning again to Hubbard, and offer you the following descriptions of the natural ranges of adaptation for our stalwart cool-season turf species.

Festuca rubra subsp. commutata (Chewings Fescue)

"A densely tufted perennial, without rhizomes...occurring naturally on well-drained chalky, gravelly, or sandy soils."

Festuca rubra subsp. rubra (Strong Creeping Red Fescue)

"Perennial, with relatively long

creeping rhizomes...widespread in the British Isles...native and abundant in short grassland, on dunes, moors and mountain slopes, in mixed woodland, hedgerows and wasteland."

Agrostis tenuis (Browntop Bent)

"A tufted perennial, spreading by short rhizomes...particularly on poorer soils, on hills and mountains... which are dominated by this grass."

Agrostis stolonifera (Creeping Bent)

"A tufted perennial, spreading by leafy stolons and forming a close turf...an extremely variable grass, frequent to very common in the British Isles, in a wide range of situations; in lowland and hill grassland, salt marshes, inland and coastal sands."

Poa pratensis (Smooth Stalked Meadow Grass)

"A very variable perennial, with slender creeping rhizomes...widespread in the British Isles... mainly on well drained sandy, gravelly, and loamy soils."

Poa annua (Annual Meadow Grass)

"A loosely to compacted annual or short-lived perennial... distributed in a great variety of situations, on a wide range of soil types, from sands to clays; from near sea-level to high elevations on mountains."

Lolium perenne (Perennial Ryegrass)



Poa annua



Festuca Rubra



olium Perenne



"A loosely to densely tufted perennial...especially on rich heavy soils of the lowlands, also on roadsides and wasteland".

So what can we take from this? Something that most of us already know and understand, I suspect, but worth stating in any case, which is that fescues tend to have a narrow range of adaptation on the agriculturally poorer soils, requiring free-draining and pH-compromised soils. The bents and Poa pratensis are a little more adaptable, but still with an





about the author



You can catch Paul at his twoday workshop as part of the Continue to Learn Eductaion Programme at BTME 2015!

Turfgrasses, Soils and Fertilisers' will be the focus on Sunday 18 and Monday 19 January 2015

emphasis on soils in which there is some sort of deficiency (pH, nutrient levels, dry, salty) if considered from an agricultural perspective, and Poa annua is widely adapted, found in almost every environment. This explains what we know about the links and the grasses that grow there - fescues and bents are in their natural environment (which is one of sandy soils with high air content, low water content, low nutrient status, often acid or alkaline, and often salty) and whilst it might be stretching things to say that they thrive in these locations, which are harsh for all species, they are sufficiently well evolved and adapted to hold the competitive advantage. Poa annua is sufficiently adaptable to be present and able to complete its life cycle in these places, and can become more prevalent if we squeeze the air out of the soil (eg compaction). Thinking about the perennial ryegrass, which is essentially a pasture grass, it can be present in many situations but doesn't thrive on impoverished soils, preferring instead to be on richer ground where it performs better.

So if we're thinking about square pegs in square holes, then trying to get fescue to grow and be competitive in the finest turf, unless it is a very sandy and free-draining situation, is unlikely to be successful; bents with their wider range of adaptation are likely to be more competitive in more situations, particularly if we can find soils with

a significant limitation (eg acid or dry or nutrient poor); Poa annua, because of its wide range of adaptation (and its highly opportunistic nature) is almost always going to find a way to be part of our fine turf sward.

I further suggest that this reflects the history of the game and its early locations - the grasses that produced turf on which golf was invented and developed are found naturally in sandy, free draining, nutrient poor and often pH compromised soils eg the links and heathlands. As the game developed attempts were made, and continue to be made around the world, to produce fine turf in less 'golf-suitable' locations and soils - we tried to put square pegs in round holes, as it were. With modern cultivars of both cool and warm-season grasses some fantastic results are achieved, yet despite this we still rely on a handful of species and their special adaptations, and work hard to get them to perform all around the globe.

So that's one way to look at the grasses and where we can expect to find them in nature, and I believe this knowledge could set up our expectations of how the different grasses are likely to perform in different locations.

We haven't yet thought about how the grasses are structured and how they function and respond to maintenance, but those considerations will form the basis of our following articles.

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Iron out turf problems

Dr Terry Mabbett investigates the role of iron in turf and how its application can provide a tonic for turfgrass as autumn arrives

Iron is a universally essential plant nutrient but its role goes deeper and wider in turf. Iron in both its Ferrous (Fe2+ - divalent) and Ferric (Fe3+ - trivalent) oxidation states plays a vital role in photosynthesis, the sequence of biochemical reactions generating chemical energy and underpinning the existence of all green plants. Iron in this role is closely associated with sulphur.

Sulphate of iron (ferrous sulphate) is used as a soil amendment product to lower pH (increase acidity) for a range of benefits including greenkeepers to maintain the qualsuppression of worm casting on

the turf surface. Equally useful are the 'herbicidal' properties of green crystalline ferrous sulphate in traditional lawn sand mixtures. Ferrous sulphate kills bryophytes (mosses and liverworts), 'burns off' some broad leaf weeds and promotes growth of fine turf grass species at the expense of coarse grass species.

There is an additional hardening and colouring up response for established turf grass swards. This long established benefit is related to the integrated activity of iron as a nutrient and soil amendment product and is widely harnessed by ity of turf in autumn and winter.

Iron as a nutrient

Iron is not a structural part of the chlorophyll molecule but is involved in the manufacture of chlorophyll, the mixture of pigments which confers the rich green colour to healthy turf. Iron acts as a co-factor in a range of enzyme controlled reactions with key roles in energy transfer and nitrogen utilisation, both vital for healthy growth and development of turf grasses.

Sustainable grass growth requires a balanced mixture of nutrients including iron, magnesium, phosphorous, potassium and nitrogen. Iron as an integral part of conventional broad-based

fertilisers both liquid and granular is deployed during the main growing season for steady solid growth.

Liberal nitrogen stimulates the soft fast growth not desirable with the onset of autumn and winter seasons and an enhanced risk of disease including fusarium patch and anthracnose, as well as frost damage. Iron is nutrient for all seasons but autumn and winter is when it comes into its own. It is applied at higher dosages, often as dedicated iron-based products, to simultaneously to toughen-up and colour-up the turf. The iron boosts and bolsters chlorophyll content and photosynthetic capacity while making the sward more resilient to frost and disease at the same time.

And it works! Application of iron starting in the autumn and extending through winter until early spring provides a much-needed tonic to fortify turf grass. Iron was once actually used to suppress autumn turf diseases encouraged by high humidity and reduced grass resilience.

Nowadays, greenkeepers have a wide range of fungicides to protect turfand eradicate established infections. However, it is worth recalling that ferrous sulphate sprays were recommended for suppression of Fusarium patch at particular times of the year when humidity was high and turf resistance low. Typical recommendations for sprays of ferrous sulphate were 6-8 gram in 2.2 litre (0.5 gal) water per square metre of turf.

These vintage uses have been harnessed by modern formulation technology to develop granular and liquid iron-focussed products as 'green up' and 'tough up' turf tonics especially for use in autumn and

Originally green crystalline ferrous sulphate powder as a dry application or dissolved in water and applied as a spray would have been used but neither formulation (delivery system) was satisfactory. Wind blew the powder away from target and either treatment could make the grass go black even with slight overdosing.

Granules and chelates

Granular fertilizers containing iron as one of many nutrient components are now used alongside water soluble chelated iron (liquid iron) products. Granules are easy to handle and apply. They flow easily, spread evenly and are used in a range of sizes depending on the fineness of turf, playing status and cutting height. The other big advance in granule technology is manipulation of the nutrient release profile. By using slow release technology, the nutrient availability profile can be closely matched with turf requirements over a set period of time.

Chelated iron or iron chelates have provided the big step forward in liquid iron formulation technology. Chelates are not new technology, having been used in chemistry for hundreds of years, but their introduction into plant fertiliser technology and especially turf is relatively new.

Chelates are large organic molecules named after the Greek word 'chela' meaning claw. These 'claw-shaped' organic molecules hold onto and bind nutrients like iron as electrically charged particles called ions. Chelates convey Fe2+ through the soil and into the root zone, thus protecting these potentially unstable positively charged ions from reacting with other substances and therefore becoming unavailable during passage through the soil.

Chelates additionally increase the solubility of nutrients making them more immediately available to the root system. Once the chelate is on the root surface the electrically charged ion is absorbed by the root hair and is transported into the grass plant for use in the repair and production of cells. Commercially used iron chelate agents include EDDHA which is considered to be one of the most stable over the widest range of pH (acidity-alkalinity).

Iron extra as sulphate

Ferrous sulphate has a role in moss and liverwort control, broad leaf weed-burn off and worm cast suppression. Some benefits such as worm cast suppression are derived from chemical activity at the sulphate end of the molecule.

Electrically neutral ferrous sulphate molecules dissolve in moisture on the turf surface and in the soil to subsequently ionize into water-soluble Fe2+ and S042-. Negatively charged sulphate ions (S042-) subsequently combine with hydrogen ions (H+) from water to form sulphuric acid. The increased acidity (decreased pH) thus prevailing at the soil surface deters earthworm casting, albeit superficially and for only a short time (about two

Ferrous sulphate's mode of action as 'herbicide' against mosses and liverworts and broad leaf weeds is less clear. It acts by burning off the foliage which in the case of mosses and liverworts means death because they do not have a true root system. All water and nutrients are absorbed directly through the leaves. Broad leaf weed control is temporary because perennial weeds have efficient regenerative growth mechanisms such as rootstocks, rhizomes, stolons, and shoots from tap roots.

That said when ferrous sulphate is combined with ammonium sulphate in a fine sand or fine compost base as a traditional lawn sand mixture there is a wider range of benefits. Fine particles of the powder-like formulation cling to the wider and coarser foliage of broad leaf weeds and mosses, but slide off the narrower and smoother leaves of fine turf grasses. This allows the ferrous sulphate component to scorch and burn off mosses, liverworts, and some broad-leaf weed leaves, which turn black and die. Without a dedicated root system (only rhizoids for anchorage) there is no prospect of regrowth for moss or liverwort.

The acidification action of the ammonium sulphate fraction together with the tonic effect of the iron boosts fine grass growth to cover gaps left by dead moss patches and clumps of weeds like daisies 'setback' by burn off. Traditional lawn sand contains 3 parts of ammonium sulphate and 1 part of ferrous sulphate in 20 parts of fine sand or compost. Typical application rate is between 140-210 g/m2 to provide an iron content of 6-9 g/ m2.

Iron as a moss control agent and a turf tonic with the added benefits of actual broad leaf weed control is obtained by using so-called 'weed and feed' mixtures. These typically contain iron and major nutrients like nitrogen and potassium with at least one selective herbicide for broad leaf weed control.

Perhaps the most interesting aspect of iron (as ferrous sulphate) is its ability to encourage fine turf grasses such as fescues and bents at the expense of coarser species like annual meadow grass (Poa annua) and perennial ryegrass (Lolium perenne).

This is probably achieved by a combination of effects. Applications of ferrous sulphate are known to lock up' the soil phosphate supply and make this major nutrient unavailable, which is particularly useful if annual meadow grass is dominant and needs to be reduced.

All that said continued application of ferrous sulphate over an extended period and/or overdos-



drained turf is killed by applications alongside broadleaved weeds Ferrous sulphate may burn the foliage off of broadleaved weeds but this is invariably a temporary The increased acidity generated by ferrous sulphate deters surface casting earthworms





ing may produce a thin, open turf with low drought resistance and reduced capacity to withstand wear. The soil will become dry and crumbly particularly during summer, making the grass struggle to grow. It is easy to scorch turf with ferrous sulphate by over-use and particularly if it is not watered in sufficiently. 'Dry patch' is the name given to this condition.

Iron for all seasons

Iron in various forms is the most versatile and wide reaching of the chemicals applied to turf, with nutrient, weed control and worm cast suppression benefits. Colouring up and toughening up of turf in autumn, with its higher disease risk from falling temperatures and higher humidity, are the welcome additional benefits of iron.















Royal Liverpool Golf Club was the focus of the world for this year's Open Championship. As the second-oldest seaside links golf course in England, it's used to tradition and championship conditions.

Despite all the attention, Links Manager Craig Gilholm's focus remains firmly on the course and ensuring the competition's aftermath doesn't interfere with the daily maintenance and recovery regime.

Catching up with him on the course last week, he was in the middle of trialling a new aeration machine - the VGR Top Changer from Campey Turf Care Systems.

I asked him why he was interested in the equipment when the course is obviously in peak condi-

He replied: "It's important to look at all new developments. Royal Liverpool comes under scrutiny from the toughest critics and I am careful to avoid change for change's sake. But to be the best you have to be aware of what's out there.

"The Top Changer is new, but the concepts are sound - so in my mind it's definitely worth a closer look."

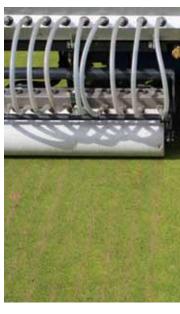
The VGR Top Changer from Campey is the latest aerator for golf greens. It was developed by Dutch Machinery manufacturer, VGR Groep to tackle aeration problems on greens, without interference with play for more than one hour.

There are already many options for the greenkeeper including vertical aeration, hollow coring and spiking, each of these processes needing time for the green to recover before play can be resumed.

VGR wanted to design a machine which would do several jobs in one $without \, disturbing \, the \, performance \,$ of the green. It was about vastly improving aeration and delivering nutrients, wetting agents, liquids and other soil improvers directly to the root zone at the same time.

The claims of the VGR Top Changer are pretty impressive;

- · Perfect aeration by injecting pressurised water into golf greens at regular spacings to a depth of eight inches, breaking through the compacted layers to create a pathway to the rootzone.
- · The holes are instantly filled with kiln dried sand, preserving the pathways and providing a free-





BELOW: VGR Topchanger





Gwynn Davies Course Manager Mere Golf & Spa looks at the results of the VGR

flowing natural drainage system between the interconnecting layers of soil. This is an excellent system for simultaneously delivering other essential additives

- · A smooth, undisturbed surface leaving minimum amounts of sand on the top which is easily dispersed with a simple quick brushing.
- A combination of aeration and sand application which delivers a well-perforated top layer for roots to develop quickly and healthily.
- · Play can be resumed within an hour due to the total lack of disturbance of the soil underneath the turf.

Craig added: "I'm very impressed with what I have seen so far. The finish is excellent. There is no disturbance to the surface save a visual effect which soon disappears. It will be interesting to see how the greens fare in the next few weeks."

Gwynn's Challenges

The following day I headed to The Mere Golf Resort and Spa near Knutsford in Cheshire to meet up with Course Manager Gwynn Davies. He has been at The Mere for

six years and manages 80 hectares of land, with a team of 11, including the 18-hole golf course, hotel landscaping and two lakes which are Sites of Special Scientific Interest (SSSIs) and are carefully monitored by the Environment Agency.

So with this further complication you have to hand it to Gwynn when he declared that he has set aside three days to trial the VGR top Changer, with the intention of treating all 18 greens.

Gwynn explained: "It took a bit of persuasion of the club owner. We have such an incredibly busy schedule that the only way we can conduct these maintenance processes is to close the greens for these three days and pray the weather is kind."

Why then risk using a new procedure?

"I had seen demonstrations of the VGR before and discussed the logistics in great detail with Simon Gumbrill, the Campey Sales Director and Arwin Verschoor who developed the machine.

"If clubs like The Mere aren't prepared to invest their time and experience in trialling new ideas,

it is impossible to get the relevant back-up data to support the manufacturer's own claims.

"It's in the interest of our profession to collate information so others can compare and evaluate new techniques more effectively.

"We will be monitoring these greens very closely over the next few weeks, taking core samples, measuring organic matter present in the soil and working with organisations such as the STRI to give us a full picture of what is going on underneath as well as on top of the soil.'

Simon Gumbrill happily provided all the relevant information on how long the process would take and amount of sand required and is delighted that Gwynn is willing to take a leap of faith.

He said: "It's all very well for those of us with a vested interest to shout about the benefits and advantages of a new technique. What we need are individual reports from those at the sharp end."

Hurlston Hall Trials

Next stop was Hurlston Hall Golf Club where Chris Ball, Head Greenkeeper and assistant to Tony Smith, the Estate Manager, were undergoing trials of a different kind. They were putting the GT Air2G2 air injector through its paces.

Chris said: "We have a history of trying out new techniques and I recall Martin Twist, Head Greenkeeper at Hillside Golf Club in Southport, saying to me 'Compost tea, Chris, compost tea!'The use of teas is a topic that's been debated many times in this industry but having worked with Martin for 17 years I respect his judgement and we now use biology-based products as part of our normal programme."

"Our interest has been in the developing the principle of 'Air being everything to anything that lives' to improve the aeration and drainage on our greens. In recent years the extremes in weather has created more flooded greens followed by periods of dryness. This coupled with a significant upturn in membership and play means we have greater pressure to keep the greens open all year round.

"To alleviate the problem we have installed secondary drainage on nine of our greens with the other nine pending, but we also needed to find a way of improving aeration to allow water to link up with the drainage schemes - in other words, to relieve the compaction just below the surface.

"We first discovered the effectiveness of the Imants Shockwave de-compactor in 2012 and have used it many times on our greens to improve general aeration and deep-seated compaction. But with the dry summers and extremely wet winters we needed some form of localised treatment which would create maximum fracturing below the surface with minimum surface disruption."

Paul Benson of Growing Solutions in Leyland recommended a machine being used on a Premier League ground for injecting air with a Campeys sticker on the side, and Chris was offered a demo of the Air2G2.

The GT Inject Air2G2 is designed to aerate deep into the soil by injecting air up to a depth of 10 to 12 inches, fracturing the ground horizontally and forcing the air upward to de-compact the soil around the root zone.

The Air 2G2 is extremely effective at doing this. More importantly it is an excellent form of total aeration for golf greens and other fine turf areas especially during the summer months, as there is no disruption to the playing surface whatsoever.

Essentially, the action of forcing

air through the soil structure creates a network of fissures. This in turn produces the conditions for healthy roots to develop and grow deep while encouraging excellent microbial activity and increasing the presence of bacteria in the soil the Air2G2 literally breathes new life into the soil.

Chris added: "It took five minutes to see how good the Air2 was."

The point here is yet another professional greenkeeper is willing to embrace new ideas and incorporate them into existing practises.

Strictly speaking, Hurlston Hall is already committed to the Air2G2, but, as Chris pointed out: "Turf maintenance techniques are constantly changing. What is new today will be accepted practice tomorrow - the important lesson is to be open-minded."









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Fusarium resistance

Careful bentgrass selection could maximise Fusarium resistance this autumn. Richard Brown from Germinal Seeds explains how

Recent trials carried out by STRI on behalf of Germinal Seeds suggest that overseeding golf greens with browntop bentgrass cultivars such as AberRegal might offer improved resistance against microdochium patch disease, better known as Fusarium patch disease.

"Fusarium is a soil borne disease which regularly damages golf greens during the autumn renovation season," Richard Brown of Germinal Seeds explained.

"It affects most cool season grasses, with the most susceptible species being Poa annua, and can be a particular threat to the quality and consistency of turf cover."

Like any fungal disease, Fusarium does not thrive in bright, sunny conditions when ultraviolet light can bring an end to the disease if it has not yet reached an advanced

prevalent during damp, cool conditions, as characterised by a typical British autumn. The weeks from late August to early November which make up the usual period for turf renovation – are therefore the time when greens are most susceptible to an outbreak of the disease.

"Fusarium begins as small brown or yellow coloured spots which, if left unchecked, will join together to form larger infected patches with a dark red perimeter," Richard continued.

"These patches not only make golf greens unsightly and uneven, but also allow Poa annua to fill the voids when the disease subsides. This leaves the green increasingly susceptible to the disease the following autumn."

A recent trial – carried out by STRI on behalf of Germinal Seeds - suggests that overseeding golf greens with certain browntop bentgrasses might offer improved disease The disease is therefore most resistance, with cultivars such as

AberRegal showing above average scores for Fusarium resistance.

Richard explained: "We had noticed in our breeding trials at the Institute of Biological, Environmental and Rural Sciences (IBERS) in Aberystwyth, that AberRegal showed above average resistance to Fusarium.

Knowing the importance of this to greenkeepers, we were naturally keen to investigate further to determine to what extent the resistance could be quantified."

The aim of the STRI trial was to examine the susceptibility and resistance of eight browntop bentgrass cultivars to Fusarium under a close mowing regime.

Despite STRI's best efforts to encourage microdochium to infect the trial plots, the incidence of the disease on the eight treatments was low. As such, only a limited amount of significant data was gathered, but this data did however indicate that differences in resistance and

susceptibility to microdochium existed amongst the cultivars on

"Whilst the results of the trial should be treated with caution due to the limited amount of data collected, there was evidence to suggest that AberRegal had above average resistance to Fusarium infection," Richard claimed.

"Overseeding with a Fusarium resistant bentgrass can therefore increase the effectiveness of and/ or reduce the requirement for a full programme of fungicide applica-

One of the benefits of having a good percentage of bentgrasses in greens is that these cultivars act as a firebreak between areas of Poa annua, thereby preventing patches of infection from joining together. AberRegal will also provide improved visual turf quality throughout the winter months thanks to its winter greenness score of 6.9.

"Over-seeding with a bentgrass or combination of bentgrasses will therefore create a more visually appealing and better playing green.

"However, if ideal conditions for Fusarium do prevail, bentgrasses may still become infected.

"Whilst no strain of bentgrass is totally resistant to Fusarium, cultivars such as those highlighted in the STRI trial will buy the greenkeeper vital extra time to combat the disease's onset."

Richard also suggested that there is more that can be done to prevent Fusarium in the run up to the autumn. "A typical defence against Fusarium is to use a combination of preventative (Strobulin) and/ or curative (Iprodione) proprietary fungicide products," he explained.

"The average costs associated with this course of treatment will typically be between £750 and £1,000 per application across 18 greens, with most greenkeepers electing to budget for a four-application-per-year programme.

"The timing of fungicide applications is critical as preventative products are systemic and therefore have a limited lifespan. The grass on greens is also being cut on a regular basis which removes the protected growth and leaves the remaining grass cover unprotected."

This emphasises the value of good turf management - paying particular attention to ensuring the turf is thoroughly aerated - and of a suitable nutrition programme to ensure grass plants are in optimum condition, not unduly stressed, and therefore most able to resist and withstand a Fusarium outbreak.



"This approach can be substantially aided by the use of a specialist seaweed feed such as Vitanica RZ which contains Ba R6-CDX, a highly effective strain of the Bacillus amyloliquefaciens rhizosphere bacterium. It delivers a two-fold benefit by promoting strong plant and root growth, and inhibiting pathogens.

Ba R6-CDX is particularly effective as it coats the entire root structure to form a barrier through which soil borne fungi cannot penetrate. At the same time it produces antifungal substances which give an antibiotic effect that further deters pathogens.

"Other Bacillus strains are less effective as they tend to remain near the soil surface and therefore don't protect deeper root structures. That leaves large parts of the root susceptible to disease attack."

Vitanica RZ can cost as little as £200 to treat 18 greens and is a small price to pay for a treatment which could prevent the need for one or more costly fungicide appli-

"For the sake of including an additional, seaweed-based feed with a balanced 5.0.5 analysis as part of the normal August/September fertiliser application, the use of Vitanica RZ is well worth considering," Richard suggested.

'Most golf courses will apply a light feed to their greens in the late summer or early autumn and will buy fresh seed as part of their autumn renovation programme. At no extra cost they can add a resistant bentgrass to the seed mixture for added Fusarium resistance, and, for a minimal outlay, include a rhizophere bacterium treatment for even greater protection."

AberRegal is available to purchase direct from Germinal Seeds as AberMajesty, a recently launched blend of two British-bred bentgrasses - AberRegal and Aber-Royal. Vitanica RZ can also be sourced via Germinal Seeds.

For more information contact Germinal Seeds on 01522 868 714 or go to www.germinalamenity.com

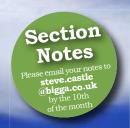


MAIN TOP: Overseeding green with a bentgrass and treating with a rhizobacterium soil conditioner can assist in the fight against Fusarium

ABOVE: Inhibition effect of Bacillus amyloliquefaciens Strain R6-CDX to Fusarium

BELOW: Fusarium infected greens will become patchy, unsightly and difficult to play on





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...



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Jim Paton jimp54@btinternet.



Scott Corrigan scottcorrigan4@ aol.com



Dale Robertson & Robert Patterson daleturnberry@ btinternet.com / grassman351@ aol.com



Stuart Taylor glasgowgolfclub.

Events Coming Up

CENTRAL

Here's hoping for a good day at Dunfermline GC for our outing on 9 September. By keeping the cost down to £20 and relaxing the dress code we're hoping for a large attendance and it would be great to see a lot of new faces, particularly those members who have recently joined and welcome them to the Section.

EAST

Autumn Meeting at Monktonhall in September, I am sure Tom Shepherd and his team will have the course in a great condition for our event and we hope to get a good turnout on the day.

AGM at Old Mussleburgh in October, we are currently looking for a speaker to present a history of the game or our profession on the day, any one who can help then please get in touch.

Annual Xmas Soiree in December - venue to be confirmed.

News

CENTRAL

We've held a couple of events in the past couple of months which despite being arranged hastily have had good attendances. Sometimes opportunities of getting a speaker such as Thomas Nikolai from Michigan State Uni or the chance to visit Trump International in Aberdeen only come up at short notice and it would be a shame to let these things go.

While we would love to give people more advance warning, this isn't always possible. Please make sure we have your up to date email address so you are on our database or join us as a friend on the BIGGA Central Section on Facebook.

Congratulations to Derek Robson, Jon Methven and the team at the Dukes on hosting a very successful European Amateur Championship, one of the premier amateur strokeplay events on the European calendar.

As well as taking care of their own course, a number of the staff from the Dukes have been away gaining experience volunteering at European Tour events. Stephen Lawler and John Reid were in Germany for the BMW, Jon Methven and Max Combes went to the French Open while Pawel Wasalski helped at the Italian Open.

Different congratulations are due to Gavin Jones, a Greenkeeper on the Old Course who gets married on 6 September.

Also congratulations to Kevin Webster of Lochgelly GC and Kevin Muir of the Eden Course who both have been busy raising money for different charities recently.

Kevin Webster and friends cycled to every golf course in Fife to raise money for Leukaemia and Lymphoma research and so far have raised over £7,000. Kevin Muir and a group of family and friends did a walk from St Andrews to Ceres, via Cupar in memory of Kevin's partner Ang who passed away last December. They raised over £1500 to buy two commemorative benches with the rest going to Breast Cancer Research.

Best wishes from everyone in the Section to Scott Fenwick and Steve Chappell for what we all hope will be a memorable Ryder Cup at Gleneagles in September (for all the right reasons!).

EAST

Excellent news to hear that the Scottish Open will be in our Section by gracing the coast of East Lothian when the event pitches up at Gullane in 2015, all the best to Stuart Duff and his team when the event arrives.

Good to see Grant Frogley will be part of the Ryder Cup greenkeeping team in September. Good to see the Ladies Scottish Open taking place again at Archerfield over their Fidra course, well done to all involved for a great tournament.

The section would like to wish Stuart Greenwood and his team a successful tournament when they host the Senior Home International Match at North Berwick West Links this month.

Welcome New Member

Steven Elliot, Greenkeeper, Gullane Golf Club.





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











gmail.com



NORTH WALES Pete Maybury petemayb66@

Glen Baxter

e.ainsworth@ ymail.com **Events Coming Up**

CLEVELAND

Ian Pemberton has organise a look round the newly created 18 holes at Ramside Golf Club on Wednesday 10 September. There will be refreshments on offer care of Brendon Brown. If you are interested please contact Pembo or myself at amcgeough@aol.com

NORTHERN

Northern Regional Conference is 6 November at the Phoenix Club in Rotherham. Great speakers, easy venue to get to and a good day out.

Before this is our autumn gig at Masham on 16 September tee off 1pm. Please support these events if possible, I know how hard it is with work commitments but these are important days for us especially Masham with our AGM. We desperately need help on the committee so if you have any ideas on how the section should be run please get involved and make a difference.

NORTH WEST

The annual BIGGA/Rigby Taylor Whitelaw Bowl tournament will take place at Penrith Golf Club on Thursday 11 September. Tee will be reserved from 1pm until 2pm. Please contact Phil Dewhurst for tee times on 07768 180604.

The North West Section Autumn tournament will be held at Ringway Golf Club on 18 September, please contact David Weir to book your places on 07914 673550.

Myerscough College will be hosting the BIGGA North West Section education day on 15 October.

SHEFFIELD

The next competition will be held at Hallamshire on 9 September. Christmas competition and AGM will be held at Bondhay Golf Club on December 4.

News

NORTH EAST

Spoke with the North East members David Wilkinson, Jack Hetherington, Stu Imeson and David Thompson who were on the support team at The Open. All agreed it is a brilliant experience and recommend anyone to take the opportunity should it arise - put your name forward give yourself a chance!

The whole experience is summed up in Jack's Blog: www.pontelandgc. info/ordinary-people-doing-extraordinary-things-2/

The Section committee still has a place for anyone wishing to put themselves forward, please contact S Olver.

CLEVELAND

Some Cleveland members were lucky enough to have been selected to help out at The Open. Opportunities like this are invaluable experience here is a small insight from Martin Woods of Bedlington Golf Club.

It was quite tough with long working days and early starts with quite a bit of pressure for a first timer. The camaraderie with the rest of the team is great. Getting to meet and make friends with green keepers from around the country is a real bonus. As a golfer, getting to walk alongside the likes of Tom Watson up the 18th fairway with the crowds cheering makes the hairs stand up on the back of your neck and is unforgettable. All in all a great experience and I would encourage anyone to apply.

NORTHERN

Apologies to Phil Haigh, Course Manager at Crosland Heath, for getting your surname wrong last month!

Unfortunately the match with our Sheffield pals had to be called off, thanks to everyone who put themselves forward for us especially Ben Jackson from Scarborough.

You will have no doubt seen the pictures from The Open and admired the colourful polo shirts we were given! It was a great honour to represent the section, myself and John Watts met some fantastic people and both agreed the whole experience was truly amazing.

Finally, good luck to Joe Walsh (deputy at Wetherby) who is getting married at the end of August.

NORTH WEST

Tuesday 29 July I attended the John Deere Golf Roadshow held at Gathurst Golf Club. This was a great opportunity for all greenkeepers to the latest machinery John Deere have to offer.

We would like to wish Lee Burton the very best of luck in his future as he leaves his position at Mere Golf & Country Club to join the greenkeeping team at Fairhaven Golf Club.

The annual cricket match between the North West and North Wales sections was held on 24 July and North Wales were victorious, well done to all that participated and thanks to Nick Grey for organising the event.

The Summer tournament was held at Hurlston Hall Golf Club. 1st was Trevor Davies. Guest prize went to John Mooney, nearest the pin was won by Brian Turner and Longest Drive was won by Darren Rimmer.

SHEFFIELD

Had a fantastic Presidents Day at Stocksbridge Golf Club. Great course, sunny conditions, just a perfect day, and a big thank you to Jamie and his staff for looking after us. The winner was Dave Brownlow with 67 nett - well done pal. The next 3 places went to the lads from Stocksbridge. Thank you for everyone who attended.

Thanks to Sponsors

Thank you to Sharon from Mansfield Sands for sponsoring the Presidents Day at Stocksbridge.

Welcome New Members

Simon Hughes, Affiliate member, Rigby Taylor Ltd, Christian Logan, Greenkeeper, Conwy Golf Club, Michael Dwyer, Greenkeeper, Birley Wood Golf Club, James Heels, Greenkeeper, Fulford Golf Club, Daniel White, Greenkeeper, Rothbury Golf Club, Jordan Garner, Assistant Greenkeeper, Ellesmere Golf Club.

Midland

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



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Darren Mugford



Sean McDade sean mcdade@



EAST OF ENGLAND Steve Beverly steveimmingham@



Nigel White nigelwhite1553@

Events Coming Up

MID ANGLIA

Our next meeting will be at Northants County GC on 22 October and is also our AGM. Our Texas Scramble will be on December 10 at Ashridge GC. We need 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 popular event. Please get your entries in early to avoid disappointment.

News

MID ANGLIA

Our Summer Golf Day at Dunstable Downs GC was a great success, it was a fine Summer day up on the Downs with views around many counties. We would like to extend our thanks to Frank Scullion and his team for producing a fantastic course and the catering staff who looked after all with lovely food and service.

Results: 1 R Goddard & L Hall 42pts (c/b), 2 C Watts & R Watts 42, 3 K Armstrong & J Norman 39. Nearest the Pin on 2 and 18 won by R Goddard so he had a very productive day indeed.

BB&O

Our summer event was held at Sonning Golf Club. The course was in fantastic condition and a huge thank you must go to Matt Smith and his team. It was great for the section to visit the course as Sonning celebrates its centenary this year.

Congratulations to Ashley who will go to the Nationals later in the year. The OOM points are being calculated and will be posted very soon. Thanks again to all that attended making it a great day, see you all soon. Results (for full results see website):

Stableford: 1 Paul Hedger 39pts, 2 John Scoones 35, 3 Simon Mallock 34, 4 Sam Evans 31. Medal: 1 Ashley Miles 67 (87 gross), 2 Michael Rapley 68 (71 gross), 3 George Bell 71 (71 gross), 4 Rob Catlin 75 (72 gross). Nearest Pin: Ted Lewis. Longest Drive: Callum Keogh.

EAST OF ENGLAND

Below are the latest results from our most recent golf day at Bolton West Golf Club on 31 July:

1 Steve Sizer, Boston GC, 2 Rob Bemment, Immingham GC, 3 Chris Davies Gedney GC. Trade: Gary Cooper. Nearest Pin: Dave Smith. Longest Drive: Ash Rycroft, Cleethorpes GC

Many thanks to all at Boston West, especially to Richard Owens and his team for the excellent condition of the course. Also to the clubhouse staff for their hospitality afterwards.

Thanks to Sponsors

MID ANGLIA

Summer Golf Day - Many thanks to Ernest Does for keeping all hydrated on the way round with their drinks buggy which was well received on a warm day and especially needed on such an undulating test of golf.

Thanks to our Sponsors of the section for 2014: ALS, Headland Amenity, Avoncrop Amenity, Farmura, Rigby Taylor, 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 2014. If you are interested in sponsoring Mid Anglia Section in 2014 please contact a committee member for details.

EAST OF ENGLAND

Many thanks to the sponsor for the day at Boston West Chris Sellars Groundcare (TORO) for his continued support.

Welcome New Members

Matthew Whiting, Greenkeeper, The Grove, Oliver Pate, Greenkeeper, Oakmere Park Golf Club, Dale Gregory, Greenkeeper, Lutterworth Golf Club, Will Gough, Mechanic, Bearwood Lakes Golf Club, Thomas Hopewell, Assistant Greenkeeper, Mickleover Golf Club, Dale Wright, Assistant Greenkeeper, Castle Royle Golf Club, Sean Sprakes, Assistant Greenkeeper, Elsham Golf Club, Tom Marshall, Assistant Greenkeeper, Cold Ashby Golf Club, Jack Tagg, Assistant Greenkeeper, The Nottinghamshire Golf & Country Club, Christopher Long, Assistant Greenkeeper, Willesley Park Golf Club.





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







Rob Holland premiergolf 2012@hotmail



Chris turf-care.co.uk



EAST ANGLIA Mick Lathrope Arnold essexbigga@ talktalk.net



LONDON John Wells j.wells1@sky

Events Coming Up

KENT

Kent Greenkeepers have a golf event organised at Etchinghill Golf Club on 11 September. Full details should have been received by e-mail by now but anyone requiring more information can get it by visiting our website www.kentgreenkeepers.com

SURREY

Match v Reps, Hankley Common GC, 17 September Surrey Bowl Final, Foxhills GC, 30 September Quiz Night September

ESSEX

Our annual Team Competition is to be held on Thursday 18 September - Colchester Golf Club is the venue. This event is for a team of four players. Each team must contain a minimum of Two Members or One Member and a Sponsor or Two Sponsors plus two other members or guests are welcome. Entry Fee £70 per Team. Entries to Antony Kirwan by 13 September please.

To contact Antony email: antz16@btinternet.com or antony.kirwan@ playgolfcolchester.com

EAST ANGLIA

Next meeting at Gog Magog on 2 October.

News

McMillan Tankard Sunningdale GC Results:

1 Shamus Moriarty 38pts, 2 S Woods 36, 3 Gareth Roberts 32. Longest Drive: Simon Woods. Nearest Pin: Craig Kingston. Thanks to Sunningdale GC for courtesy of the course and Bob at the artisan's club for a warm welcome with the super trio of Willmott, Kirkham and Weston cooking and organising the culinary delights on the grill.

Jack and Rita McMillan attended a memorable day and presented winner Shamus Moriarty with the McMillan trophy keenly fought for on the magnificent new course.

LONDON

The summer golf tournament was played at Hendon Golf Club on 6 August and before the scores, our chairman told me the course was in fantastic condition, so many thanks to Jason and his team. Also the barbecue was great sitting in the summer evening sunshine, so thank

you to Hendon Golf Club for their hospitality.

The winner was Louis Dunn of Hadley Wood, second was Adam Clarke and Third Robin Toovey with best guest being Gavin Morrison, nearest the pin Paul Simpson and longest

First course walk took place at Sandy Lodge GC and a good day was had by all. Best of luck to Kevin O'Neill who is in the final of the Toro Student Greenkeeper of the Year and is going to work at the Ryder Cup.

ESSEX

Tuesday August 5 saw the Essex Section make a return to The Warren Golf Club, after an absence of more than 15 years. We were so lucky with the weather as heavy rain had been forecast to hit us on Tuesday, thankfully they got it wrong by a day, which was lucky for us, as it arrived with a vengeance on Wednesday morning, dumping around 7cm in just one hour in our locality.

The Warren was in great condition and certainly proved to be a real test of golf. Low scores were the order of the day for most of us, I'm afraid. Our thanks go to the new owners of The Warren, the course staff and the clubhouse catering staff for looking after us so well. We certainly enjoyed our day and hope to return for another round a little quicker next time. We understand that major course changes are afoot, so it will be good to play it again when completed.

Results of Essex Trophy and Blind Pairs at The Warren: 1st Greenkeeper: Andy Toomey. 1st Trade: Richard Mackay. 1st Blind Pairs: Mick Fance & Andy Toomey 64 pts. 2nd Blind Pairs: Les Borer & Steve Cousins 58 pts. N/ pin Les Borer. N/pin Antony Kirwan

EAST ANGLIA

Apologies for missing the last two meetings, the timing was not good! Our last meeting was at Eaton. 40 souls turned up. A small but perfectly formed group, you might say. Several old faces missing, but a few new ones to take their place, all of whom were very welcome. Results:

Trade & Guests - Ian Palfrey 39pts, Steve Davidson 36. 1-9 Darren Abbs 39, Graham Hurren 37. 10-18 Terry Carver 37, Tony Thacker 36. 19-28 Richard Brown (aka Nodzy) 36, Steve Freestone 34. The BAFTA! went to Peter Howard (something to do with trees!). Nearest the Pin 2nd Rob Boyce, 13th Graham Hurren. Longest Drive 15th Craig Spooner. Darren Abbs was the winner of the Shield.

Our thanks to Eaton Golf Club for a great day. On a personal note, I hope you all enjoyed the course as much as we enjoyed getting it ready. It was 50 years almost to the day that I started as an apprentice at Maylands Golf Club. In those days a ride on was the pushbike you went to work on and an iron was what your Mum did the ironing with!

Thanks to Sponsors

To our main sponsors at the summer golf tournament Banks Amenity - Simon Banks laid on a great prize table.

EAST ANGLIA

To Bartram Mowers, Aitkens, Rigby Taylor, Limogram, Sherriff & Ransomes Jacobsen for the day at Eaton.

Welcome New Members

Alan Kitchener, Greenkeeper, St George's Hill Golf Club, Daniel Powell, Greenkeeper, Oaks Park Golf Club, Adam Spurgeon, Greenkeeper, Betchworth Park Golf Club, Danny Gibson, Student, Hadlow College, Justin Courtnage, Assistant Greenkeeper, Blackmoor Golf Club, Derek Steele, Assistant Greenkeeper, Epping Golf Course, Steven Rowe, Assistant Greenkeeper, Epping Golf Course.

Around The Green

South West & South

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







SOUTH COAST -Russell Riley, rriley@countrywide farmers.co.uk



DEVON & CORNWALL Cameron Mcmorrin cjmcmorrin@gmail.



SOUTH WALES Andrew Hatcher andrewhatcher1@ msn.com

Events Coming Up

SOUTH COAST

Events for your diaries. Seminar once again to be held at Milton Abbey School on Wednesday 18 February and our AGM at Remedy on the 5 November.

The Regional Conference is at Taunton Cricket Club on Wednesday 19 November, with a host of decent speakers lined up. I believe we are trying to arrange a minibus to ferry anyone interested in attending this event, details to follow.

Lastly we are just finalising details of our autumn tournament due to a change of venue, again details to follow shortly.

SOUTH WEST

We have a packed calendar of events and training over the coming months. Excavator training in both basic and refresher will be available shortly. We have had strong interest and attendance on refresher courses recently with 35 members completing this training over the last two years and demand continues to be strong so please express your interest promptly.

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 Worster (paulw@mgcnew.co.uk), 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.

Upcoming educational programme includes a demonstration day on 29 October at Chippenham Golf Club that will include machinery demonstrations from Campey Turf Care and a presentation from BIGGA Vice Chairman Les Howkins titled Budgeting for the Modern Course. Bookings are essential, please contact Paul (paulw@ mgcnew.co.uk) or Adam (adam.l.matthews@hotmail.co.uk).

South West Section AGM will be held on Thursday 9 October at Saltford Golf Club. This event will be taking a new format involving nine holes of golf followed by an educational presentation by Mark Hunt of Headland Amenity and a two course meal. Contact any of the committee members to reserve place.

Christmas Tournament and charity raffle will be held on 17 December at Circumcester Golf Club, we expect to see everyone there, entries are open!

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

SOUTH WALES

During October we have planned a visit to the Millennium Stadium to see the Desso pitch being installed, not sure if this is during or after construction.

A reminder that we play for the autumn comp and AGM at Glamorganshire GC, more on these next month.

News

SOUTH COAST

With the continued decent weather over the last few months I am sure the recent heavy showers have been welcomed to some extent, particularly on fairways and banks as the only grass I manage now is my lawn it has been welcome.

This has gone from what's best described as Sahara conditions to oasis-like virtually overnight, but that's enough for a few weeks. For all up to date news and events please visit biggasouthcoast@ hotmail.co.uk or myself at rriley@countrywidefarmers.co.uk

SOUTH WEST

Good luck to the semi-finalists in the Countrywide Knockout (yet to be confirmed at press!). The final will be held at Bowood in September. 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 WALES

Just after Rory McIlroy's win at Hoylake the Senior Open came to Royal Porthcawl Golf Club. It was a huge success with excellent comments from the players. I'm sure Ian Kinley was very proud of his team and support staff, the course was in pristine condition and the weather was perfect.

A great day was had for the teams that played for the Golf Management Trophy at Cardiff Golf Club, thanks to Dan Harden for presenting such a superb golf course, and to Everris for sponsoring the event. Top three: 1 Cardiff GC (local knowledge), 2 Cradoc GC, 3 Llanishen GC. Steve Lloyd longest drive, and Tony (Baggio) nearest the pin. Thanks to Tracey Harvey for your hard work on organising the day.

I missed playing golf at Neath but have heard excellent comments about the condition of the course, well done to Mark Tucker and his team.

Results: Big D and Rhys McDonagh are heading to the National Championships well done both. Hugh Morgan winner of Best Trade prize. Henry Stead was present and received a tankard celebrating his retirement.

Thanks to Sponsors

SOUTH WEST

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

Welcome New Member

Matthew Carver, Greenkeeper, Kingsdown Golf Club

Welcome New International Members

Ken Tilt, International, Greenkeeper, Trafalgar Golf & Country Club (Canada), Duncan Bruce, International Greenkeeper, Losby Golf Club (Norway).



Greenkeepers Training Committee

David Golding, director of the GTC, a Trailblazer organisation, announces that a new Golf Greenkeeper Apprenticeship Standard has been approved by the BIS

So, is size important? Often when discussions take place within employers there is a great debate relating to the size of the company within a particular sector e.g. the huge supermarkets versus the corner shop and how they can

You could argue there is a case for this type of debate within golf clubs but I would argue that size is not important when it comes to investing in staff training or recruiting an apprentice or two!

However I do believe there is a debate to be had regarding "Good Employers" versus "Poor Employers" and that for once, size is totally irrelevant. There are golf club businesses of all shapes and sizes. Good Employers are those who say "I want to embrace the apprenticeship programme because I believe it is vital for the future success of my business and because I believe that my people are my most valuable asset, therefore I am prepared to invest in them."

Poor employers, on the other hand take on apprentices because they see an opportunity to save money. They only need pay them less than £3 per hour, they search for a training provider who is probably offering "free training" so they don't have to make any contribution or any commitment. They are in the group which don't want to invest in staff development as they believe "if we train them up, get them qualified then they will move on". Really? Who invested and trained your current Course Manager/Head Greenkeeper? Often not you, and if you did that is what I call excellent succession planning!

Surely it is right that all employers look to ensure their staff are encouraged to take up opportunities for professional development inline with business development?

So let's not talk about large and small employers, but instead focus on Good Employers, whatever their size and build our future apprenticeship programmes to meet all employers' requirements. I have no doubt that when these reforms



are implemented, at least some of the Poor Employers will no longer recruit apprentices but I believe that any fall in numbers will be temporary because Good Employers will be looking to expand their recruitment.

Working with employers the GTC is one of the second phase of Apprenticeship Trailblazers. We have already embarked on reviewing and reforming the current greenkeeping apprenticeship in line with the Governments reform of Apprenticeships. This has put our employers firmly in the driving seat.

Each new apprenticeship standard developed by Trailblazers will include the skills, knowledge and behaviours in the standard for each job profile e.g. for our sector the role of greenkeeper.

The Government are reforming the way it allocates its funding support and rather than give money for apprenticeship delivery to colleges and private training providers they are committed to funding employers directly.

The Government also want employers to invest some funding into their apprentices programme which will show a commitment to supporting them through the various stages of the programme.



The GTC is funded by:













Contact Details

and Standards Director

01347 838640 avid @the-qtc.co.uk

Aldwark Manor /ork /061 1UF

www.the-gtc.co.uk www.greenkeepertraining.com



You can follow the GTC on Twitter @TheOfficialGTC

How funding support will reach the employers is under consultation but there will be funding for employers recruiting an apprentice aged 16-18, small employers (less than 50 employees), any English or maths training and an end of programme payment based on successful completion.

The GTC, as an employer led organisation, is working with Government to look how this would work for our sector.

The GTC will work with the employer to agree a bespoke programme for the apprentice and all apprentices will be subject to an independent, end of programme assessment to ensure competency and consistency across the standard. There will also be a grading system introduced for all Appren-

The standard for the new Golf Greenkeeper Apprenticeship programme has now been approved by Government and is scheduled to be delivered from the autumn 2015 and the Standard can be viewed on the GTC website.

For the latest and information on the GTC Trailblazer project visit:

www.the-gtc.co.uk or call the GTC on Tel: 01347 838640 Email: david@the-gtc.co.uk

Winter work with BunkerFilter

The last three years' rainfall and mild winter weather have exposed fundamental problems with many golf course sand bunkers.

Imagine hosting a Medal or Comp when one inch of rain falls the night before. Most of your bunkers will probably have some water in them and if it does not drain away quickly (completely empty in 6 hours) then there will be a problem for the playability of your course and its reputation in the golfing world.

A member of a Premier Midlands Golf Course Green's committee with a science background has studied the fundamentals of the problem and together with a filtration specialist has invented a long lasting sand/water filter (BunkerfilterTM) for the base of sand bunkers which sits below the playing surface allowing the water to quickly drain away leaving the sand intact. It is a low cost system which is designed to last at least five years when the economical filter cassette can easily be replaced if necessary. It stops sand from going into the drain, it stops silting up and with an additional coating it can prevent algae and slime formation.

This paper explains how much water needs to be removed during a typical downpour; it discusses fairway water runoff and it explains how to install the device.

The filter was launched at BTME 2014. It is manufactured in the UK in Staffordshire at a factory specialising in filtration products. A number of prestigious golf clubs are already trialling it in 2014 with a view to extending its use for major bunker work in the upcoming winter work programme.

A typical area of a sand bunker might be 20m2, if 1 inch of rain falls in one hour then the bunker will collect about 500 kg of water (1/2 tonne) and will have to lose it in a few hours to be playable again. However if the bunker has been designed to allow the fairway slope to fall towards the bunker then water runoff from the fairway will contribute a lot more water; for example if there is a nearby 500m2 (20x25m) of fairway sloping towards the bunker then



there could be as much as 12,500 kg (12.5 tonnes) of water available to run into the bunker. Not all of this will enter the bunker, some of it will percolate into the ground, but even with 25% or 50% percolation there will still be between 6 and 9 tonnes of water in the bunker plus the original 500kg. The runoff water will also carry sludge and soil to contaminate the sand and build up silt. In a recent bunker survey at a Premier Midlands Golf Course, it was found that the sand in a 9-year-old bunker had been contaminated with 10 kg of silt per tonne of sand from fairway runoff problems. Silt and fine sand will clog the conventional drains and contribute to the extended time that the bunker is flooded.

It's time to resolve the problem permanently by excavating a new drain and fitting a Bunkerfilter to stop blocking of the drains. At the same time minimise runoff by lifting the turf levels around the bunker.

This recent renovation saved the life of a Donald Steel designed bunker when it was in danger of being taken out in despair and being grassed over due to excessive flooding. Run off was the major problem but using only local staff the problem was fixed permanently at very low cost.

Bunkerfilter sits under the playing surface and is designed to last up to 10 years without maintenance or replacement. This very much depends upon the level of mud and debris that washes into a particular bunker. Recently a filter cassette was examined after 12 months to check its efficiency, it was clean and clear of silt, clay, soil and other debris below the filter stack level and working as well as when it was installed

A patent application was filed in 2013 when BunkerFilter Ltd was established, to offer the product to solve a serious problem on many existing golf courses as well as to anticipate problems on new course.

Many of the existing bunkers on courses are now more than 100 years old and have received little drainage maintenance. It is hoped that the points made will encourage golf course architects to rethink their bunker designs, not just as course hazards with aesthetic considerations, but also as functioning parts of the course assisting the Greenkeeper's maintenance programme, without adding to his headaches.

BunkerFilter Ltd is based in Stoke on Trent, UK with a manufacturing facility in Hixon, Staffs. The idea was conceived in 2012 after the excessive rain in July which caused the 2012 Golf Open Championship at Lytham & St Annes to commence with some

bunkers completely full of water on the Wednesday and Thursday. The rainfall in that period has been repeated in 2013 and 2014 and will probably feature frequently in the weather in the future.

The initial trials of different prototypes were carried out at Trentham Golf Club allowing the final product to be optimised.

The following is a distribution of golf clubs who have taken the filter as one of a number of ideas for improving their golf course bunkers.

Derbyshire -3 golf clubs, Nottinghamshire -2 golf clubs, Cheshire -2 golf clubs, and one golf club in each of South Yorkshire, Staffordshire, Shropshire, Lincolnshire, Leicestershire, Hertfordshire, Wiltshire, Surrey, West midlands, and Cornwall.

Bunkerfilter is a simple idea to improve maintenance and can be installed by the golf club's own Greenkeepers. Even where the old drain is completely obsolete or does not exist and new drains have to be cut it can be easily integrated with modern drainage pipes. Installation recommendations are included in the sales and technical documents issued with the product.

Bunkerfilter ltd is appointing technical sales agents for the golf club market and welcomes proactive contact from competent specialists.

Straightforward Installation:

Using your own greens' team Bunkerfilter is easily installed. A summary of the process is detailed

- Find the lowest point in the empty bunker (or from previous knowledge identify the centre of where water accumulates).
- Excavate a hole 30 cm diameter and 35 cm deep to site the Bunkerfilter unit plus elbow block (to connect to a drain) at least 5 c m below the sub layer surface.
- · Bed the unit on fine gravel. Excavate a thin channel to the unit for a 10cm flexible drainage pipe that will connect with existing drainage and allow sufficient fall away from the bunker.
- Connect the drainage pipe to the unit and drainage, back fill with gravel and sand covering the top of the filter cone with new clean sand.
- The maximum flow rate of a Bunkerfilter with a sand cover is about 14.5 litres of water per minute. A 10 m2 sand bunker will collect 250 litres of water from 1 inch of rainfall, assuming no fairway rain water runoff into the bunker. Large bunkers may need two filters.



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- Contains a filter system which retains sand
- Requires very little maintenance
- · Can be treated to prevent slimes and algae
- . Is easily installed by your green keeping staff

BunkerFilter is currently on trial at several golf courses. We can plan and supervise installation by your team.



Speak with our experts to discuss your bunker drainage and other course management challenges.



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Effective drainage solutions for unplayable greens

Richard Clark from Shelton Drainage talks drainage techniques and explains what really works when the disruption and cost of a green reconstruction is not an option

The beautiful scenery of an established golf course can rarely be beaten, but history can come at a price, when standing water threatens course closure. One thing we can all be fairly sure of is that weather patterns are changing and global warming aside, that appears to be something that is here to stay.

As golf clubs continue to be under increasing pressure for new membership, the ability to offer year round play has to be an absolute given. The problem faces many old established courses that were built before we all started to talk about greens built to USGA specifications. Drainage systems were rarely installed in these older courses as golf was played infrequently and not in the wetter winter months

Richard said: "The majority of greens constructed in the last 30 years were built to USGA standards and consequently should drain well. In practice they were not all constructed with materials of the precise specification, so improvement to their drainage may be necessary. Many of the calls we get about drainage are from older more established courses that were built prior to USGA specs.

"Drainage techniques are now so advanced that there are lots of options before a full green reconstruction should be considered. The main aim is to speed up the removal of excess water from the green without changing its character or original design features. All situations are different, but if the problem is standing water on a green, we would generally suggest

one of the following three options, all of which have been designed so greens can be back in play in a matter of hours or days depending on the circumstances."

The Shelton Gravel Band System: This is carried out between November and February when the ground is wet. It is a very simple system which uses the Gravel Band Drainer and Lytag as a backfilling material. Closely spaced gravel bands each 20-25mm wide lead to a piped drain situated just off the green. Bands of the Lytag are injected into the green by a vibrating channel opener and as no soil is removed, any surface undulations can be minimised by hollow tining prior to the installation. The beauty of this system is in its simplicity and speed; a large green can be drained in five hours and played on 24

System 25TM is a versatile mini trencher used primarily for installing secondary drainage systems over a network of piped drains in a one pass operation. The System 25™ may also be used to install land drainage pipes and underground services. The trencher cuts a 25mm wide trench, removes the soil and lifts it into a trailer, whilst the Lytag is simultaneously vibrated in. We would then suggest that a free draining top soil is applied over the drainage runs. This system generates fast results and again, the damage to the green is minimal and they can be played on 24 hours later – imperative in the busy summer months. The results really are superb and we have seen it used with great success at many clubs, including Farnham Golf Club who told us that 'The System





25TM greens drainage has transformed the course'. This system is carried out in early summer to

The third option is Lightning DrainTM. This is very similar to the System 25TM except the trenches are dug to 35mm wide and a 25mm perforated land drainage pipe is installed prior to backfilling with Lytag. This gives greater longevity to the system and also speeds the



ABOVE: Boyce Hill Golf Club

flow of water out to the exit drain. The results are immediate and with good greens maintenance, including plenty of aeration, the effects will last for years to come.

Lightning DrainTM is an extremely popular technique, not just because of its effectiveness, but also as its use isn't restricted to any particular time of year, although for optimum results, Spring, Summer and early Autumn are ideal as grass re-establishes well over the cuts.

Boyce Hill Golf Club

Lightning DrainTM was recently used with great effect at the beautiful Boyce Hill Golf Club in Benfleet, Essex. Club Secretary Alex Woodward said, "Boyce Hill was built almost a century ago in 1922 and over the last 90 plus years there have been many changes. We are always looking to improve the course for our members and when we had problems with unplayable greens we used the Shelton Lightning DrainTM technique with great effect back in the winter of 2012. We completed the work using the Shelton partnership scheme, hiring the System 25TM machine and an operator for 3 days to undertake the work. We were so pleased with the results we did a further 2 greens this July. I have to say, it was a very straightforward process, with little disruption. I would recommend any club that has problems with standing water on greens to consider this option."

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Shelton Sportsturf Drainage Ltd is a global business, based in Baumber, near Horncastle in Lincolnshire. Shelton design and manufacture specialist drainage machinery which is engineered with sportsturf in mind.

As a result, and unlike some more traditional drainage methods, Shelton's machinery and drainage techniques will leave minimal impact on grass and get it back in play a mere 24 hours after the work has been completed.

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CLEARWATER REVIVAL

Compliance with the latest legislation puts Highspeed Group's ClearWater washpad water recycling system on track to break records



It has always been an offence to cause pollution and a surge in business was experienced with the introduction of the Groundwater (England and Wales) Regulations 2009. Highspeed Group Ltd, others in the industry, the Environment Agency, other government bodies and the media have been bringing the requirements of legislation to the attention of as many as possible over the last ten or more years yet, surprisingly, there still remain a number of golf courses and others who continue washing off machinery to ground.

However, fresh impetus has been created recently by the growing awareness that the EU Water Framework Directive is due for full implementation in 2015 and the realisation that there is very little time left to bring washoff facilities up to legal requirements. If you are inspected and found to be non-compliant by causing pollution, pleading ignorance of the law is no defence!

Believing "They won't check on us" could be folly! It is fact that the Environment Agency (EA) is enforcing the demands of legislation in many areas.

One sale of a ClearWater system to a golf club recently was as a direct result of a visit from the EA! Pollution was traced back to the club via a stream. The club responded quickly and now has a very effective ClearWater wash-off system.

Ever aware of the growing demands of legislation Highspeed Group knew that customers would be seeking not only a very effective wash-off and recycling system but one that was approved and could bring added benefits. Their class leading wash-off system ClearWater was submitted to the WTL (Water Technology List) in March 2008 and gained approval. Customers could now write off 100 per cent of the cost of installing ClearWater against taxable profits under the ECA (Enhanced Capital Allowance) scheme. A growing number have reaped the benefits of this. Interestingly, one competitor only recently realised the advantages of the ECA scheme.

Price is certainly a factor in contributing to ClearWater's appeal and success, as is that the system can be bought for "selfinstallation", making it very competitive.

Buoyed by export success in Ireland, Highspeed has more recently supplied ClearWater systems in the US, France and Germany. Budgets may still be tight but investing in ClearWater now will not only provide an effective and attractive recycling system with tax advantages but also save valuable water and ensure you are legal!

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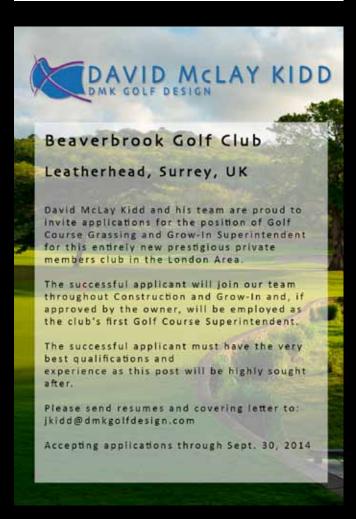
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