

6 weeks to BTME 2015

GI

GREENKEEPER INTERNATIONAL

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Turf Management Exhibition**

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WELCOME FROM BIGGA



Customer service focus

I've had the opportunity to attend a number of golf club manager and owner related events recently and there is no doubt that the tough times the industry is facing have begun to focus golf clubs' minds on what is really important to their business.

The decline in golfer numbers has meant that clubs are competing for customers as never before. In recent years golf clubs have often, perhaps erroneously, chosen to use price as their differentiating factor but increasingly now facilities are placing emphasis on the two other key aspects of golfer enjoyment – golf course condition and customer service. The Syngenta player survey, amongst others, clearly showed the importance that golfers place on the condition of the course. But we must not lose sight of the fact that golf is a leisure experience and the quality of service the golfer receives throughout his or her time at the golf club is hugely important.

The key to customer satisfaction is managing expectations and this means that our members must be skilled in communicating to their employers and customers the rationale behind their decisions. Effective communication is the key to success in any business and it has become one of the most important skills a greenkeeper must possess.

As we approach Continue to Learn at BTME, I am delighted that our conferences, workshops and focus on sessions are filling up rapidly.

As always, some of the agronomic sessions have been extremely popular but it is gratifying to see so many of the management skills workshops doing well. This suggests we will improve on the nearly 3,000 individual learning experiences that took place during BTME 2014.

Not all development is achieved in a classroom and I am pleased we deliver a first-class range of member experiences that

provide networking and exposure to different environments.

In this edition we preview the BIGGA Delegation sponsored by Bernhard & Company to the Golf Industry Show in San Antonio, Texas. The interview process was inspiring, it was a privilege to spend time with 20 educated and passionate members and I know the successful Delegates will represent British greenkeeping, the Association and their employers with great distinction. The Delegation is a once in a lifetime experience and has proved to be instrumental in many former Delegates' career progression.

Also in this magazine is the application form for the BIGGA Open Championship Support Team for 2015.

The Open returns to St Andrews next year, and the Home of Golf always produces a special Championship. The R&A have again asked us to provide a Support Team, and this represents both a fantastic insight into tournament preparation and an excellent networking event, I know competition for places will be fierce so don't delay in filling out your application.

May I wish all our members and friends a Merry Christmas and a very successful and prosperous New Year.

Enjoy the read.



Jim Croxton, BIGGA CEO

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**British and International Golf
Greenkeepers Association Limited**



Chairman's Word

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

REGIONAL CONFERENCE SUCCESS

One of the highlights for me in a very busy November was the South West & South Wales Regional Conference at Somerset County Cricket Club.

I was delighted to see 140 BIGGA members turn up for a memorable day of networking, education and general enjoyment of each other's company. It was particularly fascinating to hear James Braithwaite from Long Ashton Golf Club talk about his team's work on the course – a huge project involving replacing clay-based greens with free-draining ones. Greenkeepers always enjoy hearing stories from fellow greenkeepers, and this was an excellent example.

Craig Campbell, Groundsman from the Millennium Stadium, also gave a particularly informative presentation on how their facility has been improved by the installation of a Desso pitch. Thank you to all who attended, and to South West & South Wales Regional Administrator Tracey Harvey who did a great job in choosing an excellent new venue and organising the whole day.

Don't forget that three Regional Conferences remain. The Midland Regional Conference on 25 February at Stonebridge Golf Club, the Scottish Regional Conference on 3 March at Carnegie Conference Centre in Dunfermline and the Northern Regional Conference on 11 March at Chester le Street Golf Club. Please support these events if you can, a lot of hard work goes on behind the scenes planning them.

Later in the month my partner Pat and I were guests of the GCSAI in Dublin for their conference, which attracted around 200 delegates. It was held at the superb Croke Park, which we were given a tour of, and included a wide range of educational presentations from the likes of Steve Chappell from Gleneagles and Dougie Robertson, Head Groundsman from West Ham United.

Everything about the two days we spent there was first-class and I really want to thank everyone at the GCSAI, particularly their president Michael McFeely, for making us so welcome. They were so hospitable and it was a pleasure for us to attend. Our relationship with GCSAI is excellent and we hope to work together with them closely in future.



Images of the South West & South Wales Regional Conference, courtesy of Steve Lloyd

"I was delighted to see 140 BIGGA members turn up for a memorable day"

By the time you read these notes the IOG Awards will have taken place, featuring three new greenkeeping categories. It's fantastic to see greenkeeping directly acknowledged. Well done to all the nominees, and of course the three winners.

Things are really shaping up now for BTME 2015, and I'm happy to see Ransomes Jacobsen, Toro and John Deere have agreed to exhibit.

We've had several very positive and informative discussions with many exhibitors behind the scenes, and the Board of Management and the Association as a whole remain fully committed to ensuring the best experience for all exhibitors. Without their support, BTME would cease to exist and I'd like to place on record my gratitude to each and every one of them. Hopefully I'll be able to catch up with many of them in the Halls in January.

As I've written in previous months, the Board of Management has put an awful lot of hard work into the Constitution and Governance review.

Feedback is coming in, and it's now at the stage where it's being fine-tuned. There will be further updates soon.

Here at Chippenham, the weather remains mild and we're still cutting greens two or three times a week, cutting the rough when we can and also cutting fairways when conditions allow.

We did suffer from a nasty spot of Fusarium which we've sprayed to keep under control – you can see when you walk round the course there's lots of fungal activity so we're working hard to keep on top of that.

I'm pleased with the course, it's looking good and plenty of golf is still being played which is great to see.

I'd like to end by wishing everyone a very Merry Christmas and a Happy New Year. 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



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

PERFECT REMEDY ON THE SOUTH COAST



November saw the South Coast Section hold a very successful AGM at Remedy Oak Golf Club, which was extremely well attended.

Course Manager Rob Hogarth gave everyone an in depth talk about all the changes the greenkeepers have carried out this year including the reconstruction of the putting surfaces.

Thanks to all at Remedy Oak, all the attendees, David Snowden from Agronomic Services who again lent his support and John Pike from Toro who took some superb images of the day (left).

Look out for a feature on Rob and the team's work in conjunction with Agronomic Services soon in GI.



SUSSEX WIN TRI MATCH

Sussex have triumphed in this year's Tri Match between Sussex, Essex and Surrey.

This year's match took place at Crowborough Beacon Golf Club which, despite 24mm of rain the day before the tournament, was presented impeccably by Mike Poole and his team.

Holders Essex were beaten into second place by Sussex who regained the trophy having lost it to Essex in the previous year. Pictured are the winning Sussex team with sponsors David Bush from Ernest Doe and Michael Fance from Everris.



CAMPEY CHIP IN

An opportunity to see the wares offered by specialist turf care equipment distributor Campey Turfcare in action was very well received by BIGGA South West Section members recently with a strong turnout despite inclement weather.

The afternoon's activities offered welcome respite from the rain with BIGGA Vice Chairman

Les Howkins MG hosting a seminar titled 'Budgeting for the Modern Golf Course'.

Les gave the audience a fine insight into the intricacies of budget creation and management with useful tips being offered to everyone from highly experienced management to the up and coming leaders of the future.



AFFILIATE MEMBER HITS THE HEIGHTS

BIGGA Affiliate member Tito Arana is celebrating after scaling the heights by climbing 214 peaks in the North of England.

Tito, who works for Rigby Taylor, has made it up all of the peaks which are collectively known as the Wainwrights.

He's battled sleet, snow and heavy rain and managed to celebrate his impressive feat at the top of Helm Crag with a beer. Tito said: "I climbed Scafell Pike about 20 years ago, and after climbing a couple more I decided to attempt to scale all of them.

"The toughest weather was on Raise and Whiteside where I was caught in a white out, you couldn't see more than a few feet, the sleet and snow was horizontal.

"The hardest climb was probably the last which for me was Helm Crag. It's only a little fell but on the top is a rock called the Howitzer, this is the true summit of Helm Crag and it was quite a scramble to get to the top as it was very slippery. It was a fantastic feeling to have completed and I celebrated with a bottle of my favourite Lakeland tippie called Langdale.

"Climbing all the Wainwrights is without a shadow of doubt one of the best things I have done in my life, it takes you all around the Lake District and I would highly recommend it to anyone."



SOUTH WEST REGIONAL CONFERENCE SUCCESS

The annual Regional Conference for South West and South Wales took place on 19 November at Somerset County Cricket Club.

The event was very well supported by members, reaching an impressive total of 140.

Presenters included James Braithwaite from Long Ashton GC, Craig Campbell from the Millennium Stadium, Henry Bechelet from Everris, Queenwood's Cameron McMillan and David Langheim MG from Wimbledon Park. All presentations were very well received and each ended with a Q&A session.

Members also had the opportunity to view the Cricket Ground with the Deputy Groundsman, Rob Hake. A big thanks to Rob for taking on so many greenkeepers!

The day wouldn't have been possible without the help of our Region's patrons – a big thank you to them.

Members were able to visit the patrons during mid-morning break and lunchtime.

There was a great buzz during the day with lots of members commenting on the new venue, and feedback from the day has been very positive!

Regional Chairman Rob Hogarth said: "The Somerset County Cricket ground in Taunton is a new venue for us. It turned out to be an excellent choice and no doubt one we will continue to use going forward.

"Thanks must go out to Tracey Harvey for her excellent organisation of the event and to the speakers and patrons for their continued support. The selection of speakers in particular was tremendous as they were from all walks of the turf industry.

"With this sort of attendance and a fantastic sporting venue I am sure the future of our regional conference is extremely bright."



USA TRAINEES EARN AND LEARN

Emily Baines, the Global Work Placement Coordinator for IEPUK, has recently returned from a visit to the USA where she was able to meet Adam, Ben and Kevan – three turf management trainees currently on paid work placements in the USA. Working with partners in America, IEPUK can offer training opportunities to individuals from the UK.

Emily said: "Our paid placements allow UK trainees, like Adam, Ben and Kevan, to experience a new culture, and enhance their knowledge within the turf management industry.

"Trainees receive hands-on training in turf and golf course management. These placements are a once in a lifetime opportunity to experience working in the USA with the latest technology and state of the art equipment. It was great for me to visit the golf courses our trainees work on, they really are out of this world."

For more details about the programme criteria and the opportunity to "earn whilst you learn" on a paid work experience placement with IEPUK, contact Emily on 01572 823934 or email emily@iepuke.co.uk.



WARM TRIBUTES TO JOHN ROBERTSON

The greenkeeping industry was saddened to hear of the passing of John Robertson on 4 November.

John, who was 65, had retired from Richard Aitken, (Seedsmen) Ltd approximately two years ago after 25 years with the company where he worked as Sales Manager covering the North of Scotland, the Central belt and part of the East.

Well known to all the greenkeepers in those areas, he was extremely well liked and respected and always had time for the

younger greenkeepers at the many Clubs he visited, stopping for a 'blether' and offering encouraging words and advice.

He was a regular on the Aitkens stand at both BTME and Scotsturf over the years, something he really enjoyed as it gave him the opportunity to meet so many old friends and acquaintances as well as making new ones.

John is survived by his wife Roz, three children and three grandchildren. Our condolences go to them all.

NEW MIDLAND SECTION CHAIRMAN

There's plenty to report currently in the Midland Section with a new Chairman and Vice Chairman now in place.

New Chairman is Matt Nutter, Course Manager at East Berkshire Golf Club. Matt, right, said: "I am absolutely delighted and honoured to be the Midland Regional Chairman for BIGGA. At a time when our Association is going from strength to strength within the industry, I intend to work on behalf of the membership to ensure that we continue to learn and develop as a region."

"I have already been working closely with our new Regional Administrator, Roger Butler, to make sure that we are prepared to meet the needs of our membership for the future. I would urge all our members to look at the opportunities and resources



that are already available to them from BIGGA and take advantage of what is on offer. Being a part of this Association has been invaluable to my career, and I feel that this is the perfect way for me to give a little something back".

The new Vice Chairman is Kevin Armstrong, Head Greenkeeper at John O'Gaunt Golf Club. He commented:

"This is a great opportunity to try and give something back to BIGGA and its members after being a member myself for over 19 years."

"In that time I have received support and career opportunities that you would struggle to find elsewhere and I would like to help other greenkeepers enjoy similar opportunities."



Rex Baldock

Everyone at BIGGA was saddened to hear of the death of Rex Baldock, former Head Greenkeeper at Hawkhurst Golf Club in Kent, at the age of 80.

Rex joined the nine-hole club in 1966 - two years before it opened - and was heavily involved in its construction. His dedication to the course was such that he could often be spotted on his hands and knees weeding the greens which were his pride and joy.

The legendary hot and dry summer of 1976 proved no obstacle to Rex, as he used to go out on the course after midnight and hand water each green with a watering can.

He retired in 1999 and the club honoured him with a special testimonial competition. His son Phil followed him into greenkeeping and is currently Head Greenkeeper at the prestigious Ganton Golf Club in North Yorkshire.

Phil said: "Dad taught me the value of hard work and achieved results with few resources. He was and will remain one of my greenkeeping heroes as well as being a great father and friend - one of the last of a dying breed."

One of Rex's many friends, John Millen, BIGGA Life Member and Association Chairman in 1994, said: "I was a young Head Greenkeeper at West Malling Golf Club in the Sixties and I needed a mentor. Rex was at Hawkhurst, quite close by, and he became that mentor."

"He was always available to go to for advice, a quietly spoken man but very knowledgeable, and he inspired me to progress in my career. He was a friend, a gentleman, and what I would call one of the unsung heroes of greenkeeping."



STRI GOLF ENVIRONMENT AWARD FINALISTS REVEALED

STRI, the specialist consultancy for golf course design, development and ecology, has announced the twelve finalists of the 2015 Golf Environment Awards.

The Awards highlight effective and sustainable projects being managed by individual golf courses across the UK and reward the individuals that are making real improvements to their local and wider environment.

The 2015 awards continue with the new format introduced last year, with three winning categories; Environmental Golf Course of the Year; Conservation Greenkeeper Award and Outstanding Environmental Project of the Year.

The 2015 finalists are:

Environmental Golf Course of the Year

- Royal St David's Golf Club
- Carnoustie Golf Links
- Lee Park Golf Club
- Hankley Common Golf Club
- Conservation Greenkeeper of the Year
- John Kelly - Royal Birkdale Golf Club
- Paul Mills - Penn Golf Club
- Stephen Thompson - John O'Gaunt Golf Club
- Stephen Clark - Spalding Golf Club

Outstanding Environmental Project of the Year

- Hockley Golf Club
- St Andrews Links - Castle Course
- Royal Jersey Golf Club
- Prestbury Golf Club

The winners of the three coveted awards will be revealed at an awards dinner ceremony on the evening of Wednesday 21 January 2015 at the Hotel du Vin in Harrogate during BTME 2015, and will each receive the 'trip of a lifetime'

to Europe with the chance to visit some of the world's leading golf facilities and sites of specific ecological interest.

The awards are sponsored by the following companies, who are committed to supporting and promoting proven sustainable projects within golf clubs - Ransomes Jacobsen, Farmura, Tillers Turf, Wiedenmann, Syngenta, Greenkeeping, Golf Monthly, Operation Pollinator and BIGGA.

The finalists were selected following a rigorous inspection of 24 UK golf clubs by STRI's team of experts, with each entry judged on their distinct environmental accomplishments and outcomes.

Bob Taylor, STRI's Senior Ecology & Environment Consultant, said: "The quality of entries was again outstanding this year and it is getting harder to select the finalists, as all the clubs we visited are committed to improving environmental conditions on their golf courses."

"It is encouraging to see from all the entries just how many golf clubs are now focusing on ecological and wildlife management as part of their day-to-day course management."

"All this year's finalists have shown an excellent level of commitment and energy in delivering first class courses whilst successfully enhancing their own local environment at the same time."



New Appointment

Syngenta has appointed Master Greenkeeper Daniel Lightfoot as the company's new Business Manager for Turf, Vegetation & Pest Management.

Dan brings a vast wealth of practical experience, technical knowledge and communication skills to the role, in supporting greenkeepers, sports turf managers and golf business operators to get the best from Syngenta's innovative R&D product range.

Dan joins Syngenta from Bearwood Lakes Golf Club in Berkshire, where he has been managing the consistently highly-rated private members' course for the past 10 years including a complete redesign and renovation across all 18 holes.

During that time he achieved the prestigious recognition of Master Greenkeeper awarded by BIGGA, along with attaining an MSc in Sports Surface Technology at Cranfield University. Dan also attended the Canadian Syngenta Super U golf course manager development programme, held at the Richard Ivey School of Business, Toronto and is a Class A Superintendent with GCSAA.

Previously he has held roles of Head Greenkeeper at Gatton Manor Golf and Country Club and Deputy at The Hertfordshire Golf and Country Club.

Many greenkeepers throughout the industry have already benefitted from Dan's education roles, including as a lecturer in Turf Grass Science at Merrist Wood College in Surrey, as well as a frequent participant in seminars at BTME and turf management presentations across the country.

Membership News

The latest news from BIGGA

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.



COME AND SEE US AT BTME 2015

Don't forget that among all the exhibitors at BTME 2015, BIGGA have a stand where you can find everything about the Association - B23.

You can update your contact details with us, and also provide us with a new membership photograph - the team will be on hand with their iPhones to take snaps!

It's also a great way for you to meet the team from BIGGA House and discuss everything about BIGGA. You can discover all the benefits that BIGGA membership offers, learn more about our volunteering opportunities, our Sections and Regions and chat to our Regional Administrators.

You can also find out everything about Learning & Development. Discover how you can apply for

Level 3 Scholarships, Toro Student Greenkeeper of the Year and more about the CPD scheme. You will even be able to claim CPD credits on the stand - if you're not sure of the process, a member of our L&D team will be on hand to guide you through it.

See you in January!

PRE REGISTER AND AVOID THE QUEUES

Don't forget to pre-register for BTME 2015! This helps you avoid the queues at the Harrogate International Centre and ensures you get the most out of your visit to BTME.

Simply visit our dedicated BTME site at www.btme.org.uk and click on 'Register Now'. Remember entry is completely free.



BIGGA AGM AT BTME

The Association's Annual General Meeting will be held in the Queen's Suite

of the Harrogate International Centre at 5.15pm on Wednesday 21 January 2015.

The AGM is open to all BIGGA Members, however only Full Members are entitled to vote. A current membership card MUST be produced to gain entry.

Access to the AGM is either from the escalator link between Halls B & C or from the escalator link in HIC Entrance 3 (Springfield House).

Follow signs for the Queen's Suite.

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Greenkeepers Legal Assistance
0800 177 7891

Lifestyle Counselling Helpline
0844 770 1036
www.arclegal.co.uk/carefirst

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CONTINUE TO LEARN 18-21 JANUARY 2015

TURF MANAGERS CONFERENCE 19 JANUARY 2015

BTME 20-22 JANUARY 2015

Visit btme.org.uk and click Register Now



Visit btme.org.uk and click Register Now

L&D News

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.

FTMI 2015 Launched



Another fantastic educational opportunity is on offer for BIGGA members with applications open for the Future Turf Managers Initiative 2015 made possible by Jacobsen.

20 delegates will again be selected to attend Jacobsen's Ipswich headquarters for an intense three days of first-class education, and you can apply online through the BIGGA website now.

This event is aimed at up and coming greenkeepers who want to make the leap to Course Manager. Focusing on personal and professional development, the FTMI programme utilises the expertise of leading Course Managers, dynamic trainers and industry experts to mentor and educate the next generation of industry leaders.

FTMI 2015 will take place on 24-26 March 2015, and subjects include:

- Communications
- Budgeting
- Leadership
- Team management
- CV Writing and Interview Techniques
- Volunteering

The ideal candidate will show initiative, dedication to greenkeeping, a genuine interest in the industry and be actively involved in education at both a regional and a national level.

Kevin Glazier, Deputy Head Greenkeeper at Royal Mid Surrey Golf Club, attended FTMI 2014 and said: "It's an intense few days but a fantastic opportunity! To speak to the other delegates and the mentors was fascinating as you can discuss aspects of greenkeeping you wouldn't normally discuss."

"The FTMI really made me focus on my greenkeeping goal – to become a Course Manager. It was an honour to be selected and something I would strongly recommend applying for."

Alan Prickett, Managing Director, Ransomes Jacobsen Ltd, added: "Investing in the professional and personal development of greenkeepers is part of the ethos across the Jacobsen organisation, both here in the UK and around the globe."

"We understand the value of education and the importance to our industry of having highly

skilled and motivated leaders in the future.

This is epitomised by our provision of funding over the past 12 years for BIGGA's Higher Education Scholarship programme, which has helped many greenkeepers progress their careers. Now, with the help and guidance of our mentors, the FTMI will provide young greenkeepers with the tools to enhance their skills and reach the very top.

"The first two events surpassed our expectations and we are delighted to be continuing our partnership with BIGGA to deliver this programme. I would urge any aspiring greenkeeper out there to apply quickly for a place on the 2015 initiative; it could be career changing!"

A nominator will be required to validate all applications, and a panel from BIGGA and Jacobsen will select the successful delegates.

To apply visit the BIGGA website. Only BIGGA members can apply, and applications will only be taken via the online system.

If you require any further information, please email sami@bigga.co.uk



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

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CONTINUE TO LEARN UPDATE

Bookings are flooding in for BIGGA's Continue to Learn education programme which is the most comprehensive ever held at BTME – and some sessions are already sold out.

Workshop bookings are 24% up on the same stage last year and seminars are up 43% – several of which are already sold out. One seminar has even had to move from the Harrogate International Centre to The Crown Hotel due to overwhelming demand.

After BIGGA's largest ever educational programme opened for bookings last month, we've accepted reservations from hundreds of greenkeepers at various stages of their career, from a huge variety of facilities across the UK, Europe...and even Australia!

Sami Strutt, BIGGA's Head of Member Development, said: "There really is something for everybody at Continue to Learn whether you're a Course Manager or you're just starting out in your career, and we're very pleased at how bookings are progressing."

"I'd urge anyone thinking of booking a place to contact us as soon as possible as there are only a handful left on many of our workshops, seminars and focus on sessions. Don't forget there are also plenty of free to attend seminars."

The 'Basic Golf Mechanics' and 'Irrigation Design System and Auditing' workshops on Monday 19 January are sold out, as is 'Woodland and Habitat Management' on the Tuesday.

One of the most popular events so far is 'The Dr and the Super: The Art and Science of Golf Course Management', which had to be moved to The Crown Hotel due to overwhelming demand. This will be presented by Dr Brian Horgan (right), Professor at the University of Minnesota, and Chris Tritabaugh, Golf Course Superintendent at Hazeltine National, host of the 2016 Ryder Cup. They will be discussing various cultural, nutritional and golf course management issues from a scientific and practical point of view – and some extra places

are now available due to the change of venue.

Dr Horgan is also presenting a brand new workshop called 'Top 5 (+1) Fertility Topics' where he discusses soil fertility and plant nutrition, and the 'BCSR, MLSN and Sufficiency' seminar which covers the most commonly used soil testing philosophies. He's taught soil fertility and plant nutrition worldwide and is sure to present some fascinating ideas.

Continue to Learn covers everything you could possibly need to equip yourself for success in your career including mechanics, budgeting, people management, managing conflict, grass identification, health and safety and much more.

The Turf Managers' Conference offers a fantastic range of education across one day – covering customer service, water management and precision organic matter management to name just three topics!

To book your places, and also pre-register for BTME 2015, visit www.btme.org.uk, Continue to Learn runs from 18-21 January, including the Turf Managers' Conference on 19 January, and BTME is from 20-22 January.



SCHOLARSHIP AWARDED

Congratulations to Tom Freeman who is the latest recipient of the Higher Education Scholarship supported by Jacobsen.

Tom, Greenkeeper at Kingsdown Golf Club, will be studying for a FdSc in Sportsturf.

He was a runner-up in the 2014 Toro Student Greenkeeper of the Year Award.



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Ever greening the golf course

This month Dr Terry Mabbett looks at the role of evergreen trees on UK golf courses and how they can best be utilised



Trees are crucially important components of playable and pleasurable golf courses although the ability to establish and sustain particular tree species can be affected by local conditions including elevation, exposure to wind, extreme winter conditions and soil profile. That said there is always something in the tree nursery to satisfy the needs of most golf course conditions.

Evergreen trees in all shapes and sizes are well represented on UK golf courses despite the limited number of British native trees falling into this category. There are only three native British conifers – English yew (*Taxus baccata*, common juniper (*Juniperus communis*) and Scots pine (*Pinus sylvestris*) with ‘purists’ dismissing the latter as being a native in all but the Caledonian Forest in the Scottish Highlands.

Apart from these three ‘Gymnosperms’ (trees bearing naked seeds not inside an ovary) there is only a handful of the native ‘Angiosperm’ tree species (flowering trees with seeds inside an ovary) that are evergreen. In shape, size and form most of these broadleaved trees are better described as shrubs. However, this article considers a

‘tree’ to be plant which undergoes secondary thickening to increase stem girth and rigidity through the production of woody (lignified) tissue and therefore does not differentiate between trees and shrubs.

This group of evergreen native ‘Angiosperma’ includes English holly (*Ilex aquifolium*), box (*Buxus sempervirens*), wild privet (*Ligustrum vulgare*), gorse or furze (*Ulex europaeus*) and broom (*Cytisus scoparius*). Add to these the strawberry tree (*Arbutus unedo*) which is of these islands but has a highly restricted native range in the south-western corner of Ireland.

Alongside these comparatively few native evergreens (conifers and deciduous broadleaves) are many different exotic (alien) evergreen species (conifers and broadleaves) some of which are naturalised. Naturalised means they are self-perpetuating via seed or vegetative means (e.g. root suckers) and without our intervention. Included in this category are holm oak (*Quercus ilex*), cherry laurel (*Prunus laurocerasus*), Portuguese laurel (*Prunus lusitanica*), Rhododendron x superponticum and butcher’s broom (*Ruscus aculeatus*).

Evergreens would appear to tick most boxes as far as aesthetics and convenience is concerned with the

main benefits being green canopies all year round and no fallen leaves to clear away in autumn. However, unless these evergreen trees, and especially those which produce tall and broad canopies are sited and situated with due care and consideration, then ever-greening the golf course may prove to be a double-edged sword.

The classic definition of an evergreen (a tree which does not lose all of its leaves in autumn) is misleading. Evergreen trees lose their leaves little by little but since they are producing new ones at the same time the canopy maintains a full complement of leaves throughout the year.

There is a handful of conifers which are deciduous and which therefore buck the evergreen conifer trend by dropping all of their leaves at the same time over the autumn-winter period. Among the very few deciduous conifers likely to be found on golf courses in the UK are several species of *Larix* (larch) together with *Ginkgo* (the maidenhair tree), which is a Gymnosperm but not strictly speaking a conifer.

Evergreens and greens

Evergreen conifers provide excellent backdrops to golf greens and will not undermine the ground in

ABOVE: Tree nurseries will always have something suitable for the golf course. David Gwilliam owner of Prees Heath Forest Nurseries at Whitchurch in Shropshire with a field of good looking pines

TOP RIGHT PAGE : Lawson’s cypress is another popular conifer with a solid ‘block’ canopy and therefore best planted ‘well out of the way’.

RIGHT PAGE: Planning for the future. A pair of healthy-looking variegated cypresses which has been planted staked and tied just off the fairway.

BELOW: Low growing conifers shown here in the foreground add to the attractiveness of the course



the same way that broadleaf deciduous trees like oaks can do. This is because their root systems are superficially shallow and limited in area unlike the deep and extensive root systems of deciduous broadleaf trees like English oak. In addition evergreen conifers generally do not produce root suckers as do many broadleaf deciduous trees, notably poplars and false acacias.

Root suckers from these trees can spring up many metres from where the tree stands which means new trees can actually spring up from roots growing under the turf, even through the poplar or other broadleaf deciduous tree was planted a good distance from the green.

That said, evergreen trees planted so close to greens that the mature canopy casts shade across the surface of the grass can cause all sorts of turf quality and management problems.

The absence of full sunlight falling on the turf during large parts of the day and year round too leaves the grass in deep shade and perpetually wet. The consequence is inhibition of grass growth and conditions which encourage diseases like Fusarium patch as

well as promoting invasion and infestation by bryophytes (mosses and liverworts) plus algae and lichens. Evergreen trees flanking and to the rear of greens provide a positive backdrop provided they are planted sufficiently far away so that no shading occurs even when fully grown.

Short shrub-like species such as gorse are perhaps a better choice in this respect and especially on highland, moorland courses where they are part and parcel of the natural vegetation. But gorse is surprisingly popular in places where you would not expect to find it, including courses in London and the Home Counties where the sharp spiny leaves add a distinct edge to play. Indeed a thick impenetrable gorse bush is not best place to lose your ball.

Britain's largest non-conifer native evergreen tree is English holly. Holly exists mostly as a woodland understorey shrub or as hedgerow tree the vast majority of which have been pollarded. Whether English holly is inside woodland or in the hedgerow the natural and unique pyramidal shaped canopy of the mature tree is rarely seen. Holly trees planted

on golf courses as stand-alone specimens and left to grow naturally will often represent one of the few situations where the true natural canopy shape of *Ilex aquifolium* can be appreciated.

Evergreens as screens

Evergreen trees can be used to provide excellent natural visual and aural screens with exceptionally fast growing conifers being the ideal choices. Leylandii cypress with its ability to put on a metre of extension growth every year for around 15 years and to generate the thickest of evergreen tree canopies is the most popular choice for golf courses.

Many of our older golf courses were constructed near to railways for ease of access before widespread car ownership, but these same railways may now be a hindrance rather than a help. My local course which is adjacent along to a fast and busy London to Scotland line is the classic example.

Some five years ago the management planted a line of Leylandii cypress next to the railway, covering the entire length of the one hole most exposed to the railway and all its accompanying movement and noise.



I recently revisited the site after a three year gap to find that the once small newly-planted Leylandii saplings had already grown and developed into an attractive and effective natural screen some 3-4m tall.

These trees were clearly planted to screen out visuals, noise and dust from the railway but will almost certainly have another important but perhaps not immediately obvious additional benefit. The tees which flank this railway traditionally suffer invasion with a rather unusual weed. Ragwort is a notorious invasive weed with wide-spread and heavy infestations on railway embankments throughout most of the UK but the wild plant is not recognised or documented as a weed of sports turf.

The heavy ragwort seed load originating along the railway embankment apparently gains access to otherwise tight turf swards by exploiting divot damage areas on the tees as germination sites. This line of Leylandii cypress should effectively screen out airborne ragwort seeds and those of related species like sowthistle which have historically caused similar weed problems for these tees.

Evergreens along the fairway

The occasional clump of conifers as a marker between two fairways is fine, but too many trees (especially if planted in a continuous line) will destroy the dimensions and horizons of the course, and impart an enclosed feel rather than the preferred free and open feel. If you decide to plant evergreens anywhere along the fairway then bear in mind the differences in growth patterns and final canopy shape and structure of the various types of conifer.

Cypresses, spruces and firs grow to full height while still keeping their lowest branches intact and with a full complement of needles, which essentially presents a complete visual block on forward play. Pines like native Scot's pine which lose their lower branches as they grow are a much more sensible choice. Lawson's cypress, Norway spruce and Noble fir are fine looking trees but are best consigned the rough or as sentinel specimens near to the clubhouse.

End of the line

Trees including most evergreens will generally outlive those who plant them but all will eventually

come to the end of the line and therefore require felling. Mainly for reasons of safety - but also for tidiness - the tree stump should be removed at the same time, but stump removal using traditional stump grinding techniques can be a messy business. I have seen a novel piece of unobtrusive kit called R-Top used as an attachment to an excavator and which slowly but surely drills out the stump and lateral roots safely, quietly and neatly, leaving the debris in a neat pile which can easily be cleared away and used as mulch.



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Congratulations to the ten delegates who have been selected to join the latest BIGGA Delegation to the Golf Industry Show, which will be held in San Antonio, Texas, next February.

Many BIGGA members applied via an online application form, and a group were then interviewed by a panel from BIGGA and Bernhard Grinders before the final ten were selected.

GIS 2015 takes place between 21-26 February 2015 at the Henry B Gonzalez Convention Center. The group will help man the BIGGA Stand (Booth 5099) as well as viewing the various products and innovations on show.

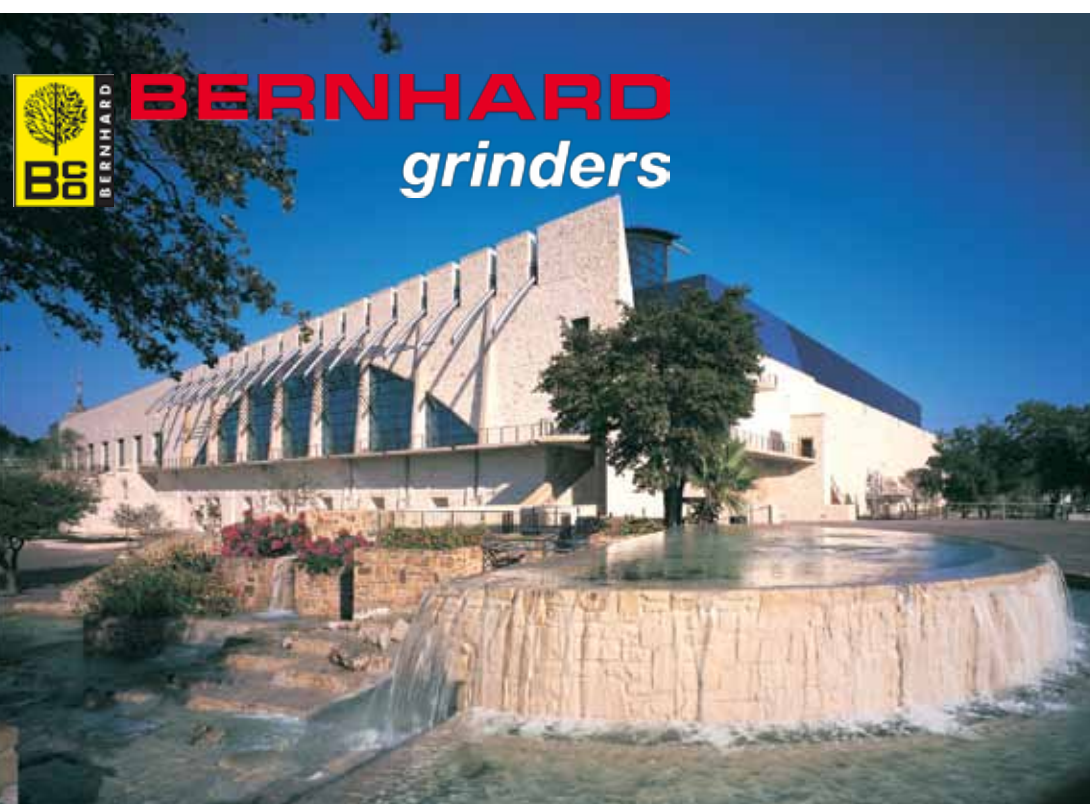
They will also attend the GCSAA education conferences, which boasts a total of 84 seminars on everything from personal development to weather anomalies, bees and irrigation.

They will also have the chance to network with key international industry figures. It's one of the industry's most established and popular trips - many of the previous delegates describe it as one of the highlights of their career - and we again thank Bernhard for sponsoring the trip.

For more on the GIS please visit to www.golfindustryshow.com and follow them on Twitter @GIS_2015. For more on Bernhard Grinders please visit www.bernhard.co.uk and follow them on Twitter @BernhardGrinder

Ten for Texas

Meet the ten BIGGA members preparing to head to America as part of the annual BIGGA Delegation, courtesy of Bernhard Grinders



BIGGA/Bernhard Delegates profiled

Kevin Armstrong – Head Greenkeeper, John O'Gaunt Golf Club

Kevin joined John O'Gaunt in 1995 as a trainee and has spent his entire career at the club. He has passed his work-based Level 3 Diploma, and has risen through the ranks to his current role. He has just taken on the role of Vice Chairman of the BIGGA Midland Section.



Sean Brocklehurst – Assistant Greenkeeper, Harpenden Common Golf Club

After completing his A levels Sean decided to follow his father and uncle into greenkeeping. His first role was at Bocket Hall Golf Club before joining Harpenden Common. He was a regional finalist for Toro Student Greenkeeper of the Year in 2009 and was also a delegate on last year's FTMI.



Steven Hulme – Head Greenkeeper, Murrayfield Golf Club

Steven started out as a trainee at Wortley Golf Club in 1987 and moved up through the ranks before joining Murrayfield and Ravelston in 1998. He was later appointed Head Greenkeeper overseeing both clubs.



Simon Connah – Deputy Course Manager, St Andrews Links

Simon has spent his whole greenkeeping career at St Andrews, beginning as a seasonal worker on the Old and Jubilee courses in 1989. He has risen through the ranks and is currently Deputy Course Manager on the Old Course. He has extensive tournament experience including five Open Championships.



Richard McGlynn – Course Manager, Blumisberg Golf Club (Switzerland)

Richard studied Commercial Horticulture before he joined the greenkeeping industry, helping to construct a new course in Cheshire. He accepted a position in Switzerland, then worked in Dubai, India, Russia and Oman before returning to Switzerland.



Sam Evans – Deputy Head Greenkeeper, Oakland Park Golf Club

Sam started out at Heythrop Park and studied for a degree in Sports Management and Coaching Studies. Following a brief spell away from the industry, he returned to Heythrop Park before joining Oakland Park last year. He joined the Open Support team this year and is presenting 'BIGGA – A Tool for Career Development' at BTME 2015.



Leigh Powell – Assistant Golf Course Manager, Hockley Golf Club

Leigh began his career at Bearwood Lakes and spent 12 years there as a relief mechanic at the facility. He then joined Waterloo as workshop manager, gaining further machinery experience, as well as furthering his greenkeeping expertise too. In January 2013 he moved to Hockley.



Graeme Roberts – Deputy Course Manager, Camberley Heath Golf Club

Graeme was first bitten by the greenkeeping bug as a seasonal greenkeeper at Hankley Common, working alongside his father. After completing his apprenticeship he joined The Ohio Program and worked at Pinehurst and Harbour Town, preparing for various tournaments as well as furthering his greenkeeping education. After a spell at Tandridge he joined Camberley Heath.



Lee Sayers – Course Manager, Mid Kent Golf Club

Lee started out at two clubs in Australia – Rangeview followed by Cotteslow, before joining Royal Blackheath. He then spent four years at The London Golf Club before securing his first Head Greenkeeper role at Hemsted Forest Golf Club. He then returned to The London before joining Mid Kent in 2003.



Miles Todd – Course Manager, Llandudno (Maesdu) Golf Club

Miles started out as a part-time greenkeeper at Rhuddlan Golf Club while he was studying his National Diploma at Northop College. He later became Deputy Course Manager at Rhuddlan and was a runner-up in the 2011 Toro Student Greenkeeper of the Year award. In 2013 he became Course Manager at Llandudno (Maesdu) and with his team has completed a series of improvements.



There is currently much industry focus on golf rejoining the 2016 Olympics in Brazil, with many focusing on the construction and progress of the Gil Hanse designed Olympic course in Rio. However, this event won't be the first time golf will have been played as an Olympic sport since 1904.

That honour was given to the athletes of the 2nd Youth Olympic Games held in Nanjing, China, in August 2014 at the Nanjing Zhongshan International Golf Club.

Australian-born, International Golf Course Project Manager/ Superintendent Gavin Reid, was approached by the International Golf Federation (IGF) to consult and advise the Nanjing Zhongshan International Golf Club during the preparations for the Youth Olympic Games (YOG).

This appointment followed Gavin's successful consulting role to the Asia-Pacific Amateur Championship at Nanshan International Golf Club in Qingdao, China.

The IGF is recognised by the International Olympic Committee as the world governing body for golf and the YOG was a great showcase for the IGF and the return of golf to the Olympic movement.

After Nanjing hosted a test event in August 2013, substantial turf loss was experienced on many of its A1/A4 Bent Grass Greens, with some greens having as little as 20% turf coverage when the event was concluded.

This significant turf loss highlighted the need for additional

Olympic dream

How an Australian greenkeeper helped prepare a golf course for the Youth Olympic Games in China, ahead of the sport returning to the Olympics in 2016



Photographs show the Nanjing Zhongshan International Golf Club



Gavin Reid

expertise to assist the Youth Olympic Games Organising Committee (YOGOC) to prepare an international standard course that would withstand the rigors of an Olympic tournament.

Having successfully worked in various roles within China and other parts of Asia and the Middle East, YOGOC appointed Gavin to ensure the quality of the course and to minimise the previously experienced turf loss. Gavin’s experience and understanding was vital to ensure that YOGOC could successfully achieve a world class course.

A significant challenge was the Nanjing climate and the August timing of the Games. Situated 300km west of Shanghai, Nanjing is known as one of the ‘inland ovens’ of China with August being one of the hottest months of the year. With maximum temperatures expected to exceed 38C, minimum temperatures of 24C and average humidity of 76% the potential weather impact posed a significant issue.

Another significant element affecting the turf health was light

about the author

Gavin Reid

As a second generation greenkeeper, Gavin had a childhood immersed in turf and golf which led him to start his career as an Apprentice Turf Manager at Royal Melbourne GC. This has evolved to golf course construction and maintenance, race track and stadium construction and management.

	<i>Applications Greens</i>	PRODUCT
JULY 1st Application (1st week of July)		
Growth Regulator		Trinexapac-ethyl (1.5ml/100m2)
Fertiliser		Liquid fertilizer 3+3+10+TE (20ml/100m2)
Fertiliser		Liquid fertilizer 6.9%Fe (15ml/100m2)
Wetting Agent		Nuturf Stamina Express (20ml/100m2)
Fertiliser/Root Stimulator		Kelpak 30ml/100m2)
Separate Application		
Wetting Agent		Nuturf Stamina Relieve (spot areas only as required)
Separate Application		
Fungicide Application		Azoxystrobin 50 WDG (12g/100m2)
		Chlorothalonil 40SC (150ml/100m2)
JULY 2nd Application (3rd week of July)		
Growth Regulator		Trinexapac-ethyl (1.5ml/100m2)
Fertiliser		Liquid fertilizer 6.9%Fe (15ml/100m2)
Wetting Agent		Nuturf Stamina Express (20ml/100m2)
Fertiliser/Root Stimulator		Kelpak (30ml/100m2)
Insecticide Application		Chlorpyrifos 48EC (40ml/100m2)
Separate Application (4th week of July)		
Fungicide Application		Pyraclostrobin (20ml/100m2)
Separate Application (5th week of July)		
Fungicide Application		Azoxystrobin 50 WDG (12g/100m2)
		Chlorothalonil 40SC (150ml/100m2)
AUGUST 1st Application (first week of August)		
Fertiliser		Liquid fertiliser: 3+3+10+TE (20ml/100m2)
Fertiliser/Root Stimulator		Kelpak (30ml/100m2)
Growth Regulator		Trinexapac-ethyl (1.5ml/100m2)
Separate Application		
Wetting Agent		Nuturf Stamina Relieve (spot areas only as required)
Separate Application (1st week of August)		
Insecticide Application		Bifenthrin (80ml/100m2)
Separate Application (1st week of August)		
Fungicide Application		Iprodione SC 50% (90g/100m2)
		Fosetyl-Al, WP (200g/100m2)
Separate Application (2nd week of August, apply on 15th)		
Fungicide Application		Azoxystrobin 50 WDG (12g/100m2)
		Chlorothalonil 40SC (150ml/100m2)
AUGUST 2nd Application (apply rest day of competition)		
Growth Regulator		Trinexapac-ethyl (1.5ml/100m2)
Fertiliser		Liquid fertilizer 6.9%Fe (15ml/100m2)
Wetting Agent		Nuturf Stamina Express (20ml/100m2)
Fertiliser/Root Stimulator		Kelpak (30ml/100m2)
Separate Application		

intensity with most days being hazy at best. Gavin explained: “I’ve experienced light intensity issues throughout most of China and combined with the heat and humidity it certainly wasn’t ideal bent grass conditions.”

The course, designed by Gary Player, opened in 2008. Greens were constructed to USGA specifications and a blend of A1 and A4 bent grass was used on the greens. Tees, fairways and all roughs were sand capped with locally sourced sand to a depth of 150mm, TifSport Bermuda Grass was used in all grassed areas outside greens.

Gavin visited the course for the first time in February 2014 when it was under light snow and all greens had regained full cover due to A1/A4 bent grass reseeded that had taken place the previous September.

Gavin’s Chinese golf construction and operations experience was called upon in order for him to work effectively with his Chinese colleagues. He said: “A common challenge in China is working with

a lack of science with regards to implementation.

A general lack of education among the course workers and their level of flexibility to change the way they have always done things was a challenge. I worked hard to encourage my colleagues to be open to new methods and adopt a more scientific approach rather than following the same practices year after year.”

Following this first visit, soil and water testing was conducted and Gavin spent time with the Superintendent to gain as much information as possible about his previous practices and nutritional and pesticide prevention programs.

“The local Superintendent had always followed the same greens programme year on year which included overseeding greens twice per year, only using granular products for nutritional needs. Also, no soil or water testing had been conducted in the previous three years.”

By understanding the practices that had been previously implemented, and by sharing his views



with the Superintendent, Gavin was able to effectively lead a team willing to learn and change their methods in order to achieve the best outcome. Despite the challenges of language and culture, Gavin and the Superintendent were able to implement new practices.

“With the Superintendent willing to change his thinking, I was able to put together an entirely new approach. This began with not doing the overseeding that was planned and adding in foliar fertilising, a growth control program through the entire summer period and a much improved wetting agent regime.”

For Gavin and the team, the major focus for the greens programme was to have full grass cover with a smooth ball roll. Gavin explained: “I felt that if the focus was on the speed of greens we would face some serious problems through the event, and this proved to be a very good decision. Although we did need to remind the Club of this decision when there was pressure to increase speed on the eve of the tournament despite having achieved full grass cover and smooth, true putting surfaces”.

Despite the inevitable challenges of preparing a golf course in China, Gavin and the team were able to implement valuable training to introduce new practices that produced a world class course for the Games.

Overall, the return of golf to the

Games movement was a great success and the course looked great, performed well and withstood the demands of the event. Both the golfers and the various IOC officials who visited the course were impressed by its quality, and former IOC President Jacques Rogge even commented that he believed that the course was the best presented venue in the whole Games.

Every summer the club suffered turf loss on many greens, six greens in particular had extremely poor air movement so locally manufactured fans were installed. The fans provided the required additional air movement and reduced the ambient air temperature by up to four degrees when in use. They also allowed the greens to dry out much faster in the morning, which in turn reduced the disease pressure.

The club’s past fertilising practices were purely based on a granular only programme, additional trace elements were added within the renovation fertiliser following testing, however no PH adjustments were required. From early June a foliar/liquid fertiliser programme was introduced to ensure the plant was receiving constant small amount of nutrients.

A 14 day rotation of liquid fertilisers began, in conjunction with an improved wetting agent program, preventative fungicides and a growth inhibitor program which proved very successful.

Also, the height of cut was raised

to 3.6mm from early July through until the event. Dew was removed from greens prior to cutting each morning and only smooth rollers were used to reduce stress. Greens were single cut and rolled only each morning of the event, therefore moderate (9 feet) speeds were achieved without undue stress on the greens and ball roll was smooth and constant.

Gavin concluded: “I feel very privileged and proud to have been involved in the reintroduction of golf to the Olympic Games, working with the R&A, IGF, USGA and others was a great experience and the efforts of the entire team under the leadership of Antony Scanlon from the IGF and Dominic Wall of the R&A (based in Hong Kong) was impressive.

“The tournament was not without its frustrations and interesting moments. For instance myself and the referee from the USGA had to push up washed out bunker sand and remove the standing water from the 18th fairway after a torrential downpour. We were unable to contact the standby maintenance staff so took matters into our own hands!

“I truly believe that the more professional like-minded people you are exposed to and the broader your networking (and friendships) are in this great industry, the greater your learning and exposure to new things is and therefore the more employable you are.”

Lichens – solar powered survival

In his latest BASIS article, Graham Paul from Sherriff Amenity looks at lichens – what they are, how they are used and how they are controlled

Lichens grow on a variety of plants and hard surfaces and sometimes need to be controlled or removed by those managing amenity areas. The subject is too complex to cover here in detail, so I will provide only a brief introduction.

Lichens are not single organisms but a partnership or association between a fungus, an algae and/or a cyanobacteria. The relationship between these different organisms is known as symbiosis, where all partners receive some form of benefit.

The fungal partner, referred to as the mycobiont, needs a supply of sugars and carbohydrates for energy and growth, which it is unable to manufacture, and these are provided by single-celled green algae or in some cases by cyanobacteria (blue-green algae) – in a process called photosynthesis.

The algal species or cyanobacteria are referred to as the photobionts. In return for basic food, the fungus provides its photosynthetic partners with moisture, minerals, protection from the elements and

harmful UV radiation as well as physical support.

The resulting conglomeration of these symbiotic partners that we call lichens are diverse and can be difficult to classify, as they contain two or more different organisms. The accepted strategy is to name lichens after the fungal partner.

The self-sufficiency of lichens allows them to grow in inhospitable places such as on bare rock and in extreme conditions; from arctic tundra to hot deserts, on rocky coasts battered by salt-laden winds and even on toxic slag heaps.

They are also abundant on leaves and branches in woodland, on footpaths, walls and roofs of buildings. In harsh environments they survive on just what can be extracted from the air, with warmth and light from the sun.

Lichens have been around for a very long time; almost since dry land was first colonised from life in the sea. They have gained the status of 'pioneer' species, a reflection of their extreme survival abilities. They can be very slow growing; often increasing in size by as little as 1mm per year. However, they

compensate for this by their long life span.

The study of these fascinating organisms is known as lichenology, a subject that has occupied lichenologists for thousands of years. Originally, lichens were thought to be autonomous organisms and it was not until 1867 that the Swiss botanist Simon Schwendener put forward his 'dual' theory, that their true nature began to emerge. His theory was based on observing specimens with a crude microscope and many of his peers rejected this postulation due to lack of conclusive experimental evidence. After many years of study, the final proof of Schwendener's theory came in 1939 when Eugene Thomas published the results of a laboratory experiment in which he artificially re-synthesised the lichen *Cladonia pyxidata* from its component mycobiont and photobiont parts.

Some 28,000 lichens have been discovered worldwide. The fungal species that form such associations are said to have been 'lichenised' and can be found in all of the fungal phyla. However, 98% of lichens



TOP: Orange coloured lichen growing on a limestone tomb in a Cornish churchyard

ABOVE: A churyard wall (LEFT) and Lichen on a twig (RIGHT)

are formed from associations with the 'cup fungi' (from the phylum Ascomycota), with members of the Basidiomycota accounting for most of the remaining 2%. The cup fungi are characterised by disk or cup-shaped structures called apothecia, often resembling 'jam tarts', which bear sacks (asci) containing ascospores produced by sexual reproduction.

In contrast to the large number of different fungi that have been found in lichens, these form associations with only a very small number of species of photobiont partners (approximately 100), which belong to just 30 genera. Two thirds are green algae and the remaining third are cyanobacteria.

These statistics are made more complex by the fact that some lichens contain both green algae and cyanobacteria. It is estimated that unicellular green algae are found in 60% of all lichens, the most common being *Trentepohlia* spp. – occurring in half of all lichen species.

Approximately 30% of lichens contain the orange-pigmented green algae *Trentepohlia* spp., whilst 10% contain cyanobacteria, half of which belong to the genus *Nostoc*.

The Fungus forms the major part of the lichen body (thallus) and serves to protect the photobiont from environmental extremes. The photobiont accounts for less than 20% of the total mass and is usually contained just below the upper surface of the structure where it can receive controlled exposure to the sun. Many species of mycobionts synthesise a chemical sunscreen to protect the photobiont from harmful UV radiation.

Most lichens anchor themselves to the substrate using superficial root-like structures called rhizines. These do not function like plant roots; being solely used for the purpose of holding the lichen still. The basic nutrients required for growth are provided by the photobiont in the form of carbohydrates manufactured from carbon dioxide and moisture obtained from the air.

Some species have been found to be sensitive to air pollutants and will not survive in atmospheres with high concentrations of heavy metals, sulphur, nitrogen or their oxides; sulphur dioxide and nitrous oxide e.g. from vehicle exhaust fumes. Other lichens, however, thrive in such conditions and can be found growing close to motorways, trunk routes and

industrial areas. These pollutants can affect the lichen population directly by their presence in the air or by dissolving in moisture and falling as acid rain. This sensitivity has provided researchers with a method of monitoring air pollution by surveying areas for the presence or absence of indicator Lichens.

Reproduction

Lichens reproduce asexually in several ways; the simplest being by fragmentation of the thallus, whereby small pieces break off the main body and grow to form new lichen. Some species produce small packages called 'soredia' composed of both the fungal mycelium and a few algal cells – when dispersed from the parent, these handy 'lichen kits' contain everything needed to grow a new individual. Soredia are usually grouped together in clusters known as 'sorolia', which can be easily seen with a hand lens as a powdery texture on the upper surface of some lichens.

Sexual reproduction occurs only in the mycobiont partner and is slightly different in Basidiomycete lichen but since the majority are derived from Ascomycete fungi, I shall concentrate on these. The male and female gametes fuse to



form ascospores, which are contained in asci stored in the cup or disk structures called apothecia. Once released the ascospores will germinate under suitable conditions and capture an algal cell (or cyanobacteria) to start the life cycle again. The shape and colour of these apothecia is varied and is useful in identification of the lichen.

There are several types of lichen growth forms that are also useful in identification.

- Crustose lichens have the appearance of 'paint splashes' and grow as a crust closely attached to the substrate.
- Foliose lichens are leaf-like, having a distinct upper and lower surface and are often only loosely attached to the substrate.
- Fruticose lichens look like tiny shrubs or tufts of vegetation, with branches that are either hair-like, strap-like or scaly.
- Squamulose lichens are composed of small scales or plate-like structures, often anchored along one edge.

Uses

Lichens have been used by many cultures for dyeing wool and textiles. In Scotland, brown dyes (known as crottle) and red dyes (corkir) were both obtained from lichens and used to colour the wool for weaving tartans. Some purple dyes were extracted from *Roccella* spp lichens, which is also the source of the water soluble pH indicator dye 'Litmus'. Lichens were also widely used in traditional medicine and we now know that extracts from many species contain antibiotics; one of the most potent being usnic acid, obtained from *Usnea* spp.

Reindeer lichen (*Cladina* spp.) is a staple food of reindeer and caribou in the Arctic and lichens have been eaten by humans as a delicacy in some regions of the world but for the most part, consumption has

ABOVE: Lichen showing apothecia - black 'jam tarts', BELOW: Rock outcrop with orange lichen



tended to be only in times of famine, since the carbohydrates they contain are mostly indigestible. In addition, some lichens contain toxic substances that we can only tolerate in small amounts. Indeed, a few of the yellow lichens contain vulpinic acid, which was used as a poison for killing wolves and by certain indigenous American Indians for poisoning arrowheads.

Evidence suggests that the ancient Egyptians of the eighteenth dynasty (1550 BC) were using lichens for embalming, some 200 years before the reign of the pharaoh Tutankhamun. One such lichen *Pseudevernia furfuracea*, known for its preservative and aromatic qualities, is believed to have been used for preserving bread as well as human tissue.

Control

There are few opportunities for cultural control of lichens due to their strong survival abilities. Some of the leafy species that are loosely attached can be removed by scrubbing and this is often made easier when the target is thoroughly wet.

There are no chemicals approved for the control of lichen, however, some of the proprietary biocides, surface or patio cleaners may be useful in removing them e.g. 'Safor' which contains organic acids and 'Qualgex' containing citric acid.



Apothecia



Yellow jam tart apothecia



Crustose



Foliose



Fruticose



Squamulose

BASIS

SELF ASSESSMENT

Use the questions below to check your understanding of this topic. Readers can claim BASIS points by visiting the 'BASIS Points Article' section on the Sherriff Amenity website – www.sherriff-amenity.com and answering the questions correctly.

1) Which components come together to form lichen? More than one may apply.

- Yeast and algae
- mycobiont and photobiont
- fungus and cyanobacteria
- fungus and algae

2) In which year was the 'dual' theory proposed by Simon Schwendener?

- 1949
- 1867
- 1849
- 1939

3) Approximately what percentage of known lichens contain the algae *Trentepohlia* spp.?

- 98%
- 60%
- 30%
- 10%

4) What is the disk or cup structure of an Ascomycete-based lichen called?

- an apothecium
- a basidium
- a soralia
- a pustule

5) Which of the following statements are true? More than one may apply.

- Lichens are toxic to humans
- lichen proteins are mostly indigestible
- Lichens have been used as food preservatives
- Lichens are used to survey air quality



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Payments

1st Payment
March 2015

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JohnDeere.com

We need you



Now is your chance to join BIGGA's Open Championship Volunteer Support Team for the 144th tournament at St Andrews in July 2015.

The R&A have again asked BIGGA to supply a Support Team of volunteer greenkeepers and The R&A will again be providing accommodation, food, refreshments and uniform.

This team, made up of full BIGGA members, will support the home greenkeeping team at St Andrews.

Arriving on site on Sunday 12 July, members of the team will be required to rake for the players

during the tournament itself. You may also be required to help out with early morning preparation work and evening divot duties until the end of the final round on Sunday 19 July.

It's intense and tiring, but a superb professional and personal development opportunity, and also an excellent chance to meet the home greenkeeping team and other BIGGA members from across a huge variety of courses.

Tony Bartram, Greenkeeper at The Richmond Golf Club, was a member of last year's team and

summed it up when he said "You must apply, try and get picked and enjoy it for yourself. The best moments of my life are my wedding day, the birth of my son and now walking up the 18th on the final day of The Open. As I walked over the bridge at the end I was really quite choked because it hit me it was all over."

To apply, please fill in this application form in full and return by post to Rachael Duffy, BIGGA House, Aldwark, Alne, York, YO61 1UF by Friday 30 January 2015. The team will be announced in February.

Join the BIGGA Open Support Team at the home of golf in July 2015



Name	I have applied for/appeared on the team at:	Applied	Successful
Golf Club			
Position	Royal Liverpool, 2014	<input type="checkbox"/>	<input type="checkbox"/>
Age.....	Muirfield, 2013	<input type="checkbox"/>	<input type="checkbox"/>
BIGGA Membership Number	Royal Lytham & St Annes, 2012.....	<input type="checkbox"/>	<input type="checkbox"/>
Home address	Royal St George's, 2011	<input type="checkbox"/>	<input type="checkbox"/>
.....	St Andrews, 2010	<input type="checkbox"/>	<input type="checkbox"/>
.....			
Email Address	I have been a BIGGA member for more than three years	<input type="checkbox"/>	<input type="checkbox"/>
Mobile Number	I serve, or have served in the last three years, on a Section/Region Committee.....	<input type="checkbox"/>	<input type="checkbox"/>
.....	I have attended three of the last five BTMEs.....	<input type="checkbox"/>	<input type="checkbox"/>
Passport photo attached?..... <input type="checkbox"/>	I am/have been a member of the PGA Championship Support Team	<input type="checkbox"/>	<input type="checkbox"/>
Waterproof measurements; waist.....leg length.....	I am willing to be a mini bus driver (You must have held a full driving license for three years and be over 25 years of age.).....	<input type="checkbox"/>	<input type="checkbox"/>
Polo shirt measurement; chest.....	I am an overseas Member	<input type="checkbox"/>	<input type="checkbox"/>
Are you available for the Early Morning Prep team from Monday 13th July? <input type="checkbox"/>			
Sunday final night (19th July) accommodation required? .. <input type="checkbox"/>			
Any specific dietary needs?.....			
If so please state			
Please declare any medical issues we should be made aware of			

Note: A place on the team is open to all full BIGGA members but priority will be given to the more active members. Subject to the availability of sufficient numbers of experienced team members no regular team member will be selected for more than three teams in succession. A limited number of places will be made available to younger members and overseas members. **Please ensure that you have spoken to your golf club or Course Manager prior to applying and have arranged the time off.** To apply please fill in the application form and enclose a passport photograph and send to Rachael Duffy, BIGGA House, Aldwark, Alne, York YO61 1UF. **Closing date is 30 January 2015.** You will be notified by the end of February if you have been successful.





SOMETHING FOR EVERYONE AT BTME 2015

BIGGA TURF MANAGEMENT EXHIBITION



Keep up to date with all the exhibitor news by visiting www.btme.org.uk/media/press releases, which features regular updates on new products, innovations, giveaways and attractions on the stands.

BIGGA's largest ever Continue to Learn education programme is thriving with some seminars already sold out.

Don't forget there are a series of free seminars for BIGGA members on a wide range of subjects from staging the Open Championship to guidelines for fertiliser use.

Remember that you still need to pre-book for these seminars at www.btme.org.uk

Also, the increasingly popular Turf Managers' Conference returns

For updates on BTME 2015 follow us on Twitter @BIGGALtd, and use the hashtag #BTME2015

The BIGGA Turf Management exhibition has something for everyone as the countdown continues to the exhibition of the year at Harrogate in January.

Over a hundred exhibitors will be packing the four halls of the Harrogate International Centre, with several new names joining the party including Perrot, Engo

Group, Gianni Ferrari and GGM Groundscare.

There are also a host of long standing companies returning – the Baroness stand in particular has grown (B78), close to BIGGA's own stand (B23).

Hall M sees Ransomes Jacobsen, Toro and John Deere exhibit too as excitement builds.



to Harrogate's Crown Hotel on Monday 19 January with five more internationally renowned speakers providing 'bitesize' learning on a range of topics including customer service, water conservation and precision organic matter management.

This event is ideal for greenkeepers of all levels – not just Course Managers and Head Greenkeepers – as is all of the Continue to Learn schedule. Again, to book please visit www.btme.org.uk or contact the team at BIGGA.

Another highlight of a busy week is the 'Welcome Celebration' which takes place in the Royal Hall of the HIC from 5.30pm – 7.30pm on Tuesday 20 January.

This is a hugely enjoyable evening celebrating the various greenkeeping achievements of BIGGA members over the last 12 months. Entry is free.

BIGGA CEO Jim Croxton said: "Our focus is now firmly on ensuring BTME 2015 builds on the excellent foundations of recent BTMEs which have been overwhelming successes.

"We're constantly communicating with exhibitors to ensure BTME remains the 'must visit' turf industry exhibition and provides the best delegate experience.

"We're extremely confident in providing this in January.

"For 2015 we're particularly proud of our Continue to Learn

programme which is the largest and most comprehensive ever.

"I urge anyone thinking of booking a place on the Turf Managers' Conference, or any of our seminars, workshops and presentations to act now as places are disappearing fast.

"The whole BIGGA team is very much looking forward to welcoming delegates, exhibitors and Continue to Learn presenters from across the UK, Europe and the world and from every corner of the industry to our flagship show."

BTME runs from 20-22 January 2015, with Continue to Learn covering 18-21 January and the Turf Managers' Conference taking place on 19 January.



20-22 JANUARY 2015



18-21 JANUARY 2015

Avoid the queues - pre-register for BTME 2015 - www.btme.org.uk

For more news and updates follow BIGGA on Twitter @BIGGALtd



EXHIBITOR BOOST FOR BTME 2015

Europe's biggest turf management exhibition has been boosted by the announcement that Jacobsen, John Deere and Toro have decided to exhibit in January.

In a move which acknowledges the importance of BTME in the turf management calendar, the three brands are set to take small-scale stands at January's event and have also committed to return in 2016 with a full scale presence.

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

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

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

"We are therefore delighted to

welcome Jacobsen, John Deere and Toro to the exhibition.

"We believe strongly that the annual gathering of turf management professionals in the unique environment of Harrogate is a not to be missed event, and it's great that these companies have made the decision to support the event in this way. Whilst their presence at the event will be low key, it's fantastic that they will be in attendance and have also committed to exhibiting in full force in 2016."

Gina Putnam, Director, Marketing & Communications International, Ransomes Jacobsen Ltd, said: "With the tough economic conditions being experienced throughout the UK golf industry we at Jacobsen have recently reviewed our marketing strategy and taken the decision to support BTME in 2015.

"Our policy going forward will alternate between small and large stands, so for 2015 we will have a limited presence, but will return in 2016 with a more significant stand. This shift of policy clearly demonstrates our continuing support for BIGGA and the industry in general."



SYNGENTA DISEASE CONTROL INSIDE OUT

A fascinating new insight into turf diseases, and how they impact on plant health, will give greenkeepers, turf managers and agronomists the chance to make better agronomy decisions to minimise damage and protect playing surface quality more effectively.

Presented for the first time at BTME 2015, revolutionary new high-tech microscopy and novel 3-D imagery - exclusively captured by the Syngenta R&D biokinetics crop imaging and sensing unit - has captured details of just how Microdochium (Fusarium) Patch germinates and penetrates into the leaf, and where the disease pathogen attacks cells.

Using these techniques Syngenta Technical Managers can explain how different fungicides work, and identify where the modes of action are most appropriate in tackling different stages of disease and under different conditions.

Looking at turf disease at such incredible detail and understanding the issues inside out means that greenkeepers can select the most appropriate option for any given situation.

Look out for your 3-D glasses and special BTME offers from Syngenta, or visit the BTME stand B52.

Disease Control Inside Out will also be presented by Syngenta Technical Services Manager, Marcela Munoz, as part of the BTME Continue To Learn seminar series on Tuesday 20 January at 4.00pm.

Also, visit the Syngenta stand to find out the winner of this year's Operation Pollinator Award, which recognises excellence in ecological habitat conservation and wildflower resource creation.

LIMAGRAIN AT BTME 2015

Limagrain UK, one of the world's largest seed companies, will be exhibiting at BTME 2015 on stand C39 where it will be showcasing its sports turf and wild flower mixtures including the market leading MM mixtures for golf greens, tees and fairways.

The demand and pressure placed on the modern day greenkeeper to produce the best possible, most consistent playing surface continues to grow. Seed quality, purity and vigour are the essential ingredients of a first-class golf course and Limagrain's MM range of seed mixture provides exactly these.

No matter what the condition or requirements of your course, the extensive MM range has a solution for all. All of the mixtures have been thoroughly tested at the Sports Turf Research Institute (STRI).

Also on show will be the company's other established brand of amenity grass - the widely popular Designer Range. Both the MM and Designer range give greenkeepers access to some of the very latest varieties and a wide selection of mixtures.

Visitors to stand C39 will also be able to gain a fantastic insight into Limagrain's range of wildflower mixtures. Not only can they add attractive colours to compliment any golf course but they also help to improve the biodiversity.



STRONG LINE-UP FOR JOHNSONS SPORTS SEED

Johnsons Sports Seed is all about consistently improving and setting new standards and at BTME 2015 the company will showcase its strongest mixture line up ever with 12 new mixture formulations, two completely new mixtures and the introduction of three new cultivars.

Market leading brand Johnsons Sports Seed has undergone a complete review for 2015 to ensure grounds professionals have access to the highest quality grass mixtures to give the ultimate performance. The new cultivars feature high performance DLF fine fescues, like Beudin – a slender creeping red fescue that has received the highest possible rating for visual merit under independent trials - and the new No 1 rated chewing fescue Humboldt.

For Sports Turf applications Johnsons leading renovation mixture, J Premier Pitch, sees the inclusion of the new cultivar Eurocordus to complete its all-star line-up.

All Johnsons Sports turf mixtures are pre-coated with GroMax biostimulant and the most popular mixtures are also available with the patented iSeed® nutrient coating, ensuring even better value from the top class Johnsons cultivars.

A visit to stand A20 will not only be educational but also offer a chance to walk away with some Free NASA developed turf management equipment when placing advance orders.





HEADLAND SHOWCASE CRYSTAL GREEN

At BTME 2015 Headland Amenity will be showcasing Crystal Green®, a source of slow-release phosphorus, nitrogen and magnesium recovered from nutrient-rich UK waste water. Crystal Green makes for an eco-friendly fertiliser that enhances nutrient efficiency, while significantly reducing the risk of leaching and runoff.

Most phosphorus fertilisers are highly water soluble and rapidly react in the soil becoming unavailable for plant uptake.

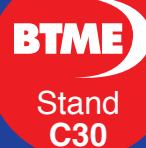
As turfgrass grows it produces organic acids, such as citrates, to help roots absorb nutrients. Crystal Green® is formulated with citrate-soluble phosphorus, which has low water solubility, releasing slowly in response to organic acid production, gradually supplying the soil solution with nutrients to meet plant demand.

This process minimises excess phosphorus in the soil, lowering the risk of leaching and runoff while providing the turf a season-long supply of phosphorus according to the plant's requirements.

Whilst the original Crystal Green® 5-28-10 formulation is suitable to aid establishment and to maintain P availability in free draining soils, it is also a perfect slow-release partner in fertiliser blends.

Headland has used it successfully in their Xtend 10-10-10+2MgO product, launched at BTME 2014.

Also of note is Headland's new ProTec® liquid nutrient range and improvements to the highly successful 'Weathercheck' location specific forecasting module – all feature on stand C30.



NEW JOHN DEERE MOWER AT BTME 2015



One of John Deere's new A Model fairway mowers, a 7700A PrecisionCut model, will be shown for the first time at BTME 2015 in Harrogate. The company will be taking a small-scale stand to highlight the range's advanced technology features, which are designed to produce a higher quality finish on golf courses and other sports and amenity turf areas, as well as provide users with greater control of the machines and easier operator training.

Based on extensive feedback from greenkeepers and other golf and turf industry professionals, these features include a simple to use TechControl digital display, LoadMatch as used on the John Deere compact tractor range, and OnCourse Technology for improved overall performance and reliability, better diagnostics and increased operator comfort.

The simple to use, password protected TechControl display enables the course manager, head greenkeeper or deputy to quickly set or change mowing, turning and transport speeds, for example, to limit variations in performance by different operators and provide a more consistent, quality finish. On-board visual diagnostics and the ability to set regular service intervals also help to maximise productive time.

In addition, the new A Model E-Cut hybrid electric fairway mowers can be set to automatically deliver reduced engine speed during mowing, with fuel savings of up to 30 per cent.

John Deere will also be joining BIGGA in announcing the regional winners of a special membership promotion at the show. Five lucky members of BIGGA (plus one GCSAI member in Ireland) are being given a once-in-a-lifetime opportunity to travel to the US and work with the greenkeeping team and other volunteers from around the world at the legendary Tournament Players Club at Sawgrass in Ponte Vedra Beach, Florida.

The TPC Sawgrass volunteer programme will see the winners travel to the States in May 2015 to work on the course before and during the Players' Championship, a PGA Tour event. "John Deere is a long-term supporter of both BIGGA and the GCSAI, so we are very pleased to provide this exciting new opportunity for their members," says John Deere Limited turf division manager Chris Meacock.

"TPC Sawgrass is well known as the home of The Players' Championship, as the backdrop to the PGA Tour headquarters, and for the intimidating island green on its 17th hole, but it also has one of the most well-managed and effective volunteer programmes in golf. The successful volunteers from the UK and Ireland will get invaluable experience as part of a 125+ member team involved in this major tournament's preparation and organisation, as well as the opportunity to network with their peers. We look forward to meeting and congratulating the winners at Harrogate in January."

**BIGGA
TURF
MANAGEMENT
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BAYER TO ANNOUNCE INNOVATIONS AT BTME 2015

Dr Colin Mumford, Bayer's technical manager, will be talking about more developments in turf fungicide innovation in his seminar at BTME in January.



Talking to Greenkeeper International, Colin explained this new chemistry has been in the making for the past 15 years, which gives us an insight into the research and development process that brings new products to market. He also gave details of the CLP label changes we can expect to see and discusses the growing importance of environmentally friendly disposal of chemicals.

Bringing new chemistry to market

The process of developing each new active ingredient often includes the analysis of up to 100,000 potential active substances, extensive trial work and around €300 million.

Those attending BTME will have the opportunity to see some of our work and, at the same time, gain valuable insight into the research that's carried out to develop any new product.

Currently in the final stages of the regulatory approval process, the latest Bayer fungicide innovation will see a whole new chemical class introduced to the sports turf sector with the advent of a new active ingredient. This new fungicide will also use the unique Bayer StressGard™ Formulation Technology which has been proven to be both effective and reliable in enhancing disease management and stress reduction, and to improve playability and performance within our existing fungicide product, Interface®.

PhytoBac

Alongside bringing new chemistry to market, waste management and environmentally friendly practices are also high on our agenda.

We're working proactively to reduce waste in all areas of our business, from recycling packaging to the management of chemical effluent. Developed by our French counterparts, the PhytoBac system is a new introduction to the UK turf and amenity sector, and one very well received by those who attended the recent STRI Research event.

PhytoBac provides a more environmentally friendly option for the removal of chemical residues from your tank washings post application than current methods. The PhytoBac process offers an efficient system for the collection and reduction of pesticide residues in water.

PhytoBac is a free standing enclosed bio-bed system made up of a network of connected tanks, with a sump pump pushing the tank washings into holding and filtration tanks. Inside the tank are two layers of barley straw and soil, creating a microbial community that then feed on the active ingredients. It's a modular system, meaning additional modules can be added to increase capacity if and when they're needed.



SEE COLIN'S SEMINAR AT BTME FOR FREE ON WEDNESDAY 21 JANUARY AT 4PM. FOR MORE VISIT WWW.BTME.ORG.UK

There's no drainage, but once the levels of active ingredient have significantly decreased, the clean water is gradually released to the atmosphere through evaporation.

It's worth noting that although the process can take several weeks to complete, it's possible to continue adding tank washings as it's a continuous, ongoing process.

We're taking the environmental impact of these much needed chemical products seriously and are always searching for ways to reduce any impact. Best practice dictates that where there is no need for a chemical to be applied, then it shouldn't be. PhytoBac enables greenkeepers and turf managers, to remove and reduce residues in a much more controlled and efficient way.

CLP label changes

Over the next two years fungicides and other chemical products will undergo a number of changes to the labels that appear on the product packaging. This follows the United Nations' Global Harmonisation System (GHS) for classification and labelling of chemicals.

This system introduces revised hazard symbols, signal words, hazard statements and precautionary statements, with the aim of creating a globally-recognised system.

The CLP (Classification, labelling and packaging) legislation incorporates all industrial and household chemicals, including those products used within the turf and amenity sector, such as fungicides, herbicides and insecticides.

It's important to emphasise the updated labels don't reflect any change to the products themselves. The risk that products pose to turf

managers and greenkeepers, to the consumer, or to the environment hasn't changed in any way: it's purely the labels themselves that are being updated.

However, outside these CLP changes, it's important to remember that, as part of good practice, you should always continue to review product labels in order to keep abreast of any additional changes.

Users of any chemical products will now see a selection of nine new hazard pictograms, depicted within a red diamond, which replace the original square symbols with an orange background.

There are new signal words which replace those currently on chemical labels, with 'Toxic' and 'Harmful' being replaced with 'Danger' and 'Warning'. A new disposal phrase will also be introduced to the labels.

In terms of timescales, all products leaving the manufacturer or the marketing company must be labelled in accordance with the new CLP regulation by the 1st June 2015.

However, distributors and users have until the 1st June 2017 to use up stock which still holds the old labelling.

Overall, we see BTME being another successful, interactive and interesting event for all involved, with legislation changes and new product developments just two elements of this ever-evolving industry.

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Visit stand A46 to enter the Bayer competition

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GRASS GROUP DOUBLES UP AT BTME 2015

With so many new products The Grass Group has had to double its stand size at BTME 2015! In part, it's to make room for new signing GKB machinery, plus an expanded showing from Trilo. Established brands like ATT, RotaDairon and CTI Tines have also been accommodated.

One of the highlights from the Trilo portfolio will be the BL960 Blower, designed to be one of the most powerful on the market.

The BL960 is fitted with a 960mm fan complete with 9 fan blades providing a large capacity and far reaching air making it ideal for use in large parks or on the golf course.

It is driven by a Walterscheid PTO shaft and can optionally be equipped with a 180 degree reversible spouts which can be operated from the driver's seat.

Selected out of the innovative GKB range of equipment will be the Sandfiller. This machine is ideal for golf courses and sports fields where surface water and moss forming are a problem.

It provides economic and environmentally-friendly aeration of the top layer by using three adjustable depth rollers and a slitting rotor. It can then fill the trenches with sand - the flow of which is controlled hydraulically by a valve on the side of the machine.

Following on the heels of last year's launch of the ATT INFINISystem™ in a 26" configuration, comes a whopping 30" version! This pedestrian unit will be kept under wraps until its launch at BTME 2015.

Making its first appearance at BTME, and extending the comprehensive range of seeding machinery available from RotaDairon, is the pedestrian propelled SEED-CAR - perfect for small spaces, or those with difficult accesses, it has a working width of just 700mm and weighs in at 51kg, but offers a 55 litre capacity. The SEED-CAR has an integral 18kg rear roller and height adjustable handlebar, complete with all controls, for easy seed distribution.

No newcomer to BTME is CTI Tines, exclusively from The Grass Group. In the field of replacement tines and bedknives, their one piece solid rod construction from 4140 superior steel is gaining acknowledgement as 'best-in-class'. They exceed the norm and lead to a longer life, with optimum wear, and are considered to provide significant operational performance with value for money.

The slot outside Hall A will be taken by a Trilo S3 - a compact and economical vacuum sweeper with a loading capacity of three cubic metres.

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HIGHSPEED TO HARROGATE

Highspeed Group Ltd (Stand C15), a regular exhibitor at BTME will be well worth a visit this year as the company will be featuring new products and there's to be rather a special surprise.

Pressed on this, joint MD David Mears was reluctant to divulge details but commented: "If you are washing machinery, it will certainly be in your interest to visit the Highspeed stand!"

Highspeed Group with their various brands has become a "One Stop Shop", particularly in the UK.

The One Stop Shop now offers:

ClearWater - Already established as the number one below ground Water Recycling System, the system is gaining new customers regularly, especially since the introduction of what has become a real winner: the Buy Now - Pay later offer.

There is growing awareness of the impending full implementation of the EU Water Framework Directive and, of course, compliance with The Groundwater Regulations; already law.

To prevent pollution, meet these legal obligations and save thousands of litres of precious (and increasingly expensive) water, ClearWater offers you probably the least expensive and most effective solution.

Bundedtanks.com - This online division of Highspeed Group Ltd will be exhibiting new products at BTME and all orders placed, as a result of the show, will be at online or even better prices! See the latest diesel Fuel Points from Carbery and their exceptional value oil tanks.



BTME
Stand
C15

Check out too the innovative CUBE diesel tanks from CEMO together with their portable petrol and diesel trolleys, not forgetting the popular DT Mobil mini tanks.

Bundedtanks.com is not just tanks however; the range includes sump pallets, salt spreaders, transit boxes (for petrol), below ground and steel tanks, locks, electronic contents gauges, pumps, flow meters, IBC's.

Waste Management Services.

The service is operated nationally by the group from their registered waste transfer station in Keighley. Collections are made with their own liveried fleet and with uniformed and trained drivers.

The most popular package comprises five dedicated UN approved containers for waste oil, filters, chemical packaging, aerosols and workshop waste (normally sufficient for most golf clubs). With unlimited collections and package prices from £295, Waste Away is well worth looking into!

Workwear

The range of workwear and PPE from Highspeed has grown over the years with new items added each season and staying up to date.

A speciality is the personalisation of shirts, pullovers, jackets, etc. with club and/or individual name and often a logo.

Tools and Equipment

Highspeed offers massive range of hand, power tools and equipment from a simple screwdriver to a large four post vehicle lift.

Ask for a catalogue.

Oils, Lubricants and associated products

The group's original products but now an up to date range of oils, greases and associated items incorporating the latest technology and including non-turf burning hydraulic oils.

There's also screen wash, degreasers, line marker paint, anti-freeze and more.

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Water, water everywhere

Continue to Learn speaker Dr Stan Kostka deconstructs water by discussing water molecules and how water behaves in soils

Water is essential to life and plant productivity, constituting up to 95% of the contents of the protoplasm of a cell. It is essential for photosynthesis. It is the solvent for soil nutrients and the transport of those nutrients to, into, and through the plant. Without it, neither man, animals or plants can survive.

As turfgrass professionals, we strive to use water and resources as efficiently as possible to maintain a quality turfgrass sward and a habitat for a broad diversity of microorganisms (algae, fungi, bacteria, actinomycetes) and fauna (insects, arthropods, nematodes, earthworms).

How water interacts with soils and soil organic matter regulates infiltration, percolation, drainage, and retention, and influences runoff and groundwater recharge.

Knowledge of the chemical and physical properties of water is an important element in understanding how water moves through soils and how it interacts with soil particle surfaces.

Let's Deconstruct a Water Molecule

Many of the unique properties of water can be attributed to its molecular construction. The two hydrogen atoms and single oxygen atom of water are held together by a strong covalent bond (Figure 1).

Although a water molecule is electronically neutral (i.e. nonionic), the geometric configuration of the covalent bonds of water creates a molecular structure for the entire water molecule, with oxygen having a partial negative charge and each hydrogen having a partial positive charge. This uneven distribution of charge within a molecule is known as a dipole, the bond and the molecule are said to be polar. Since opposite charges attract each other, the hydrogen region (positive charge) of the water molecule is attracted to the oxygen region (negative charge) of other water molecules or negative sites on other molecules. This attraction of the hydrogen region of water molecules to negatively charged regions of other molecules is called hydrogen bonding (Figure 1).

Understanding the polar nature of water and the attraction of its

hydrogen region to negative regions of other molecules (including negative sites on soil surfaces) will help to explain what happens to water when it is applied to, and moves through a soil profile. The natural state of water is in the form of a liquid. This fluid state of water is the consequence of water molecules existing in strong association with each other due to intermolecular polar attraction and hydrogen bonding.

How do water molecules interact? Cohesion

Within a water droplet, water molecules are in a constant state of movement toward other water molecules. Each water molecule is subject to attractive and repulsive forces from nearby molecules that, on the average, are distributed in all directions. This strong attraction between water molecules is defined as cohesion (Figure 2). Cohesive tension plays a major role in determining the amount of water that is attached to surfaces, collects in pore spaces, or moves through the soil profile.

Interfacial Tensions Surface Tension

When water comes into contact with air (liquid-air interface) only half of the surrounding space is occupied by other water molecules. This causes a new arrangement of the intermolecular forces in order to hold the surface molecules in place. Since air contains no polar entity to move toward, water molecules at the surface tend to move inward toward the bulk of water molecules.

This inward movement of water molecules at the liquid-air interface is known as surface tension. Surface tension causes water to "bead" on a surface rather than spread out (Figure 3). Surface tension also has a great deal to do with the ability of water to infiltrate pore spaces, whether they occur at the soil surface or within the soil profile.

Adhesion

When water comes in contact with a solid surface (liquid-solid interface), the polar attractive forces between water molecules and the solid surface (referred to as adhesion) will dictate the affinity of the water for the solid. Water molecules at the liquid-solid interface will attach to surfaces containing polar sites through hydrogen bonding (hydration). Adhesive tension is associated with hydration or 'wetting' of a soil. When adhesion exceeds the attraction between individual water molecules (cohesion), water will spread out on the solid surface.

The forces of cohesion, adhesion and surface tension influence capillarity which controls water retention and the upward and horizontal movement of water within the soil profile. Gravity, on the other hand, causes the downward movement of water. After irrigation or rainfall, soils drain due to gravity until drainage is limited by water's adhesive, cohesive forces, and surface tension properties – a point referred to as field capacity. From field capacity to the permanent wilting point (the soil water content that plant can not recover from), plants have used suction to draw water from the soil. The water retained in the soil between field capacity and permanent wilting point is referred to as available water – the water in soil pores that is accessible for use by the plant and most soil microbes and fauna.

What happens to water in soil?

In a perfect world, soils behave like sponges. The physical attraction between water and a solid surface is achieved because the

hydrogen (positive end of the molecule) end of the water molecule is attracted (polar attraction) to the negative sites on the surface of a soil particle.

Soils also contain organic matter that includes living organisms (bacteria, fungal hyphae, and fauna), the remains of soil organisms, plants, and animals, decomposition products from soil organic matter, root exudates (mucilage and organic acids), and microbial exopolysaccharides (EPS) – think xanthan, a common food thickener. All influence how water behaves in pore spaces.

- Organic matter improves soil water retention and increases cation exchange capacity.

- Soil microorganisms are critical in mineralization (converting organic matter and bound nutrients into plant available forms) – be that bacteria that convert organically bound nitrogen to plant available forms, or mycorrhizal fungi that develop symbiotic relationships with plant roots facilitating solubilization of and access to phosphorous.

- Other bacteria produce plant hormones that are active in plant responses to abiotic stress, and even inducing a type of plant resistance to disease.

- Some bacteria increase the amount of water retained in soil as a consequence of the accumulation of EPS in the rhizosphere. Even when present at low levels (fractions of a percent) EPS will reduce flow.

- Plant produced seed and root exudates (mucilage) into the rhizosphere dramatically affects the efficiency of water transport into plants. Mucilage (a plant biopolymer) retains water as the soil dried out, protecting the plant from water stress. However, when water was reapplied, the biopolymer polymer response was delayed, compromising access to and transport of water into plants. Why? The researchers found that the mucilage, once dried, had become hydrophobic.

Where does hydrophobicity originate?

Researchers generally agree that water repellency in soils is caused by a range of hydrophobic organic materials that form non-polar "coatings" on soil particles. Decomposing plant materials, microbial deposits, organic acids, and fungal hyphae have been identified as possible sources of hydrophobic organic materials.

When a soil particle coated with

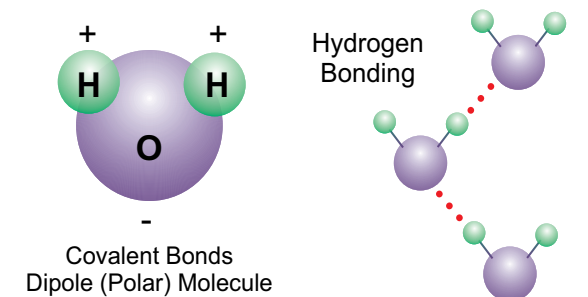


Figure 1 (ABOVE) Chemical structure and bonding in water molecules

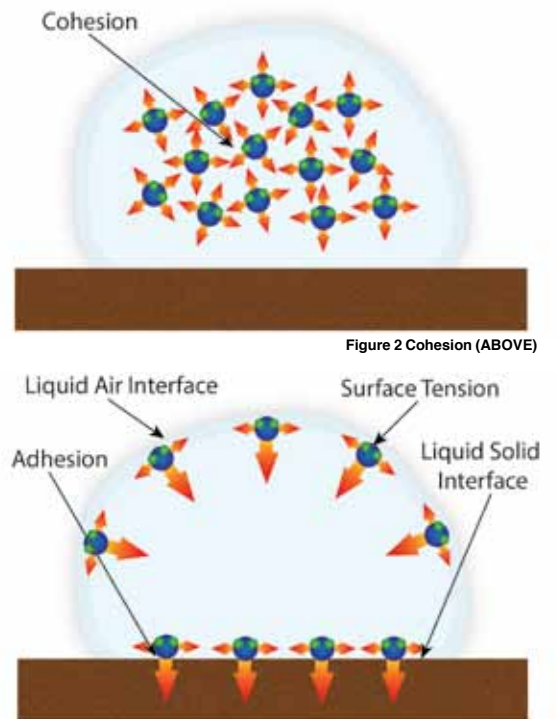


Figure 3 - Adhesion (ABOVE)

these hydrophobic organic materials becomes dry, the normal polar characteristic of the soil is changed to a non-polar surface. Water molecules, because of their polar nature, tend to prefer other polar molecules rather than the non-polar sites of water repellent surfaces. Therefore, since there is no polar entity to move toward, water molecules at the water boundary tend to move inward toward the bulk of other water molecules. This is the molecular basis of water repellency. The scientific definition of water repellency is described as a condition where the adhesive polar forces at the water solid interface are less than the cohesive force of water.

This article has provided glimpses of some of the basic chemical, physical, and biological interactions occurring with water and how it behaves in soil.

As scientists, we are only now beginning to look at soil, not just from a chemical perspective, but more interdisciplinary perspective – one that looks at the dynamics of biophysical soil interaction. So, stay tuned. There are lots of new discoveries that the scientific community will be sharing.

about the author



Stan Kostka

Stan Kostka is Director of Technology and Business Development at Aquatrols Corporation of America. He has spent over twenty years working in the area of understanding how surfactants can be used to manage soil water repellency, to improve water use and productivity in turfgrass, ornamentals, and agricultural crops, and to improve performance of soil applied plant production products. Stan has been an invited speaker at numerous technical meetings in the fields of turfgrass and soils sciences, in North America and globally. He holds fifteen patents relating to novel surfactant technologies and agricultural formulations. Stan received his PhD in Plant Pathology from the University of Massachusetts, a MS in plant science from the University of Connecticut, and a BA in biology from the College of the Holy Cross (Worcester, Massachusetts).



STAN IS PRESENTING A MEMBERS' CHOICE FOCUS ON SESSION ON TUESDAY 20 JANUARY AT 2.45pm: 'WATER DISASSEMBLED AKA BACK TO BASICS ON UNDERSTANDING WATER.' HE IS ALSO PRESENTING THE SEMINAR 'DEVELOPMENT OF A FINE FESCUE FAIRWAY PROGRAM – PLANT HEALTH, SWARD RESILIENCE AND NUTRIENT AVAILABILITY' ON WEDNESDAY 21 JANUARY AT 2.15pm.

Sweet smell of success

How the greenkeeping team at Sweetwoods Park Golf Club in Kent have addressed playing surface difficulties

This story begins with the club's owner Martin Long, also co-owner of Premier League football club Crystal Palace. He wanted to make Sweetwoods the best course in this particular part of the south east. A two million pound investment in the clubhouse showed ambition – but the plans of Course Manager Allan Tait and his team were the key step.

Recent bad winters had highlighted some weaknesses in the playing quality of the course. The 17th says everything about the beauty of Sweetwoods Park, yet it was a microcosm of the issues. This par three hole is just 133 yards long, but a real challenge – uphill, and over water. The vista is glorious. Since last spring, it is here that the vital balance between a greenkeeping team's mechanical routines and the biological means of uplifting a green has been tested.

The main players were Allan, his team of five full-time greenkeepers and turf care supplier Sherriff Amenity. Extreme turf husbandry in tandem with biological support was the way forward.

Before Allan became a greenkeeper he was an apprentice footballer with Tottenham Hotspur. A professional career didn't materialise, but his competitive edge stayed with him through his NVQ at Plumpton College, on to Deputy Head Greenkeeper and then Course Manager positions at Lindfield Golf Club and later for five years at nearby Kent club Nizels.

Allan said: "The way to make progress and to learn more about the profession is to move." The move he made to Sweetwoods Park was a challenging one indeed.

There had been a degree of disquiet among members concerning the greens, notably the iconic 17th. Allan's first duty was to address the club's AGM where he spelt out

ABOVE: The new Smithco Spraystar 2000, at work on the 17th green

TOP RIGHT: Sand – lots of it – to break-up the Black Layer

RIGHT: Hollow coring, the weekly routine

what he would have to do, which included some drastic measures.

Water movement was the main problem on the 17th – it was either too dry or soaking wet. Through lack of aeration, black layer had appeared. When water sits near the surface it can cause anaerobic conditions and ultimately surface degeneration. That's exactly what was happening on the 17th green and others at the club. Forcing rainwater and irrigation through the profile was the only answer.

This initial action of coring and deep scarifying was a priority just to get life back into the green after several weeks of winter rain.

Allan's plan for the 17th green was fairly extreme culturally. The greenkeepers were to solid tine it weekly to start the process of ridding it of black layer. They would 'hide' the necessary surface disturbance by hand mowing afterwards, then apply Redhill 28 sand as a top-dressing, brushing it in by dragmat



and firm it by vibrating roller. By the end of the year Allan estimates that about 25 tons of sand will have been distributed on the 17th green alone. Club members were getting used to seeing a sandy pin target as the months went by, but there were no complaints.

Tining was carried out by a combination of the John Deere Aercore and a Wiedenmann deep aerator to different depths to avoid pan-nings. Allan carried out this routine throughout the summer, yet even in early May, barely a month after the start of this cultural revolution, there were signs of an improvement.

Root mass was benefitting from double-passing with 12mm hollow tines, removing 4in deep cores. Same width solid tines penetrating down to 8-10 inches encouraged water to pass through the profile and unlock nutrients within the soil.

Allan said: "Firstly I needed to get full grass coverage, dry the surface out by top dressing regularly, and solid tine as frequently as possible to get rid of the black layer.

"By aerating the ground the layer will gradually go and there are already signs it is receding. The sand is starting to get into it and breaking it up too, but it is a slow process.

"Thatchy turf is high maintenance. A thatch level of 8-10 mm is the optimum. We had an inch here.

If you remove the conditions, you won't get the disease, so that's our other priority."

There had been input from Sherriff Amenity's Adam Hartley from the word go. He and Allan had worked together previously on solving course turf issues and soil sampling revealed that lower down it was too rich in fertiliser. Thatch and black layer were acting as barriers to nutrients.

The use of seaweed extract in combination with vigorous aeration was Adam's recommendation. The aim was to reduce the stress and release the excessive fertiliser.

Allan said: "We needed to make use of what was already there, but trapped. So we agreed that a combination of cultural mechanics and biological remedy was the best way forward. Adam recommended a tried and tested Sherriff Amenity product, SeaVolution, to help uplift the 17th green and the others around the course.

"As a result of the AGM, I had the full support of the members from the outset and they have been totally supportive of the tough regime I needed to adopt. The owner has given me his practical backing, making over £50,000 available to invest in new equipment."

A fully automatic ride-on sprayer, the Smithco Spraystar 2000, and a new Jacobsen GP400 greens mower were delivered to the course in May. Allan put them to work immediately





and have proved valuable additions to the team's armoury. Since then he has pursued a fortnightly programme of SeaVolution application to greens, and as summer drifted into autumn he was more and more convinced by its effectiveness.

"Seaweed is just a gentle means of enhancing and stimulating microbial life without creating too much top growth. It gives added value to my routines and I plan to make it a standard part of the work, not just on greens, but tees too. You could say I've become a seaweed fan."

Allan reckons that in just six months there has been 30 to 40 per cent improvement in the 17th green and others similarly stressed.

As summer kicked in the use of a wetting agent became essential as the thatch-laden surface began to repel both rainwater and irrigation. Allan used either Tricure or Drench, both equally successful products. Their chemistry allows them to be held by the soil particles and together with SeaVolution they are important aids to root development.

"In golf everywhere we're pushing our greens turf more than

ever these days. Expectations are higher. We roll more, so we have to aerate more. The extremes are greater, so seaweed and wetting agents come into play to ease the stress. Farmers have been putting seaweed on crops since the dawn of time. It's not a cure-all, just a wonderful health ingredient."

As disease goes, Fusarium is the 'leader of the pack'. For this, Allan's new sprayer has been at work applying the preventative fungicide Astute from Sherriff Amenity. He's also needed to reduce nitrogen levels on the 17th and other greens while the locked-up nutrients are being released. Another Sherriff Amenity product In Trench is helping him here. The product stimulates root growth and thicker stems giving a dense, green grass without causing a leaf growth. It can be used within a range of application rates. In Adam's words "you can use it at lower rates, so reducing nitrogen inputs, without compromising results."

There are plans to improve the 17th further. Restructuring to prevent water from getting on the green from the high surrounds and taking back the tree line canopy

are possibilities once his cultural efforts – and SeaVolution – have improved the surface.

There is a distinct air of optimism now at Sweetwoods Park. The 17th green and other problem areas are on the mend, so players are happy: renewals are up on last year, so the Chairman is happy. The state of the greens is everything to the wellbeing of a course, and that's where the greenkeeping team, with Sherriff Amenity's help, are concentrating their efforts. Basic principles and sound biological knowledge are working well together.



ABOVE: Short, picturesque and challenging, the 17th from the tee

BELOW: Early days – Allan Tait (left) and Sherriff Amenity's Adam Hartley looking at the Black Layer scarring on the 17th green

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Section Notes

Please email your notes to steve.castle@bigga.co.uk by the 10th of the month

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

Around the green



Midland

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



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Events Coming Up

MIDLAND

STRI will be running 'Lunch Club' events in conjunction with BIGGA Midlands Section during the winter months. This is an opportunity for Course Managers and Deputy Head Greenkeepers to meet and provides a platform for discussion on a range of subjects. A working lunch is provided and CPD points will be awarded. The next event will be held at Blackwell Golf Club on 8 December, from 11.30am until 2pm, with the following event to be confirmed in February. The event is strictly on a first come basis and must be booked in advance where details can be found on STRI and BIGGA Midland websites.

Congratulations and good luck to Andy Lane who's moving from Countrywide to Headland and good luck to his replacement at Countrywide Geoff Fenn.

MID ANGLIA

By the time you receive this we will have had our last outing of the season at Ashridge GC for our Texas Scramble event (weather permitting). We would like to wish all our members a Merry Christmas and a Happy New Year and look forward to seeing you all in 2015 for some more great golf days.

EAST OF ENGLAND

Our next golf day is the Christmas Invitation Texas Scramble. This will be held at Cleethorpes GC on Friday December 12. Tee off is from 9am. Teams can include greenkeepers and other golf club officials. To enter a team contact Bruce Hicks ASAP as numbers are limited.

News

MID ANGLIA

We had a fantastic day at Northants County GC on October 22 where all who played enjoyed a fine course and some lovely dry weather. Our thanks go to David Lowe and his greenkeeping team for providing us with a fantastic course which was in stunning condition as given the night before we had gale force winds. Results: 1 K Armstrong 34pts, 2 V Holt 33, 3 L Thorne 33. Nearest the Pin at the 3rd was G Bruce and the 15th was L Thorne.

EAST OF ENGLAND

AGM stableford was held at Burghley Park GC, many thanks to all at Burghley Park, especially to David Salisbury and his team for the excellent golf course.

Results: 1 Simon Bossett, 2 Rob Bemment, 3 Merv Davies, 4 Chris Davies. Trade - Gary Cooper.

Thanks to sponsors

MIDLAND

Many thanks to this month's calendar sponsor Burrows Grass Machinery. For all your Ransomes Jacobson machinery, parts and service contact 01785 666100 where a friendly member of their team will be happy to help.

MID ANGLIA

Thanks to our Sponsors of the section for 2014: ALS, Headland Amenity, Avoncrop Amenity, Farmura, Rigby Taylor Ltd, Amenity Technology, Tuckwells Machinery. We thank you for your continued support with funds towards the Mid Anglia Section. Banks Amenity also sponsor our Golfer of the Year Trophy again this year so once again your support means a lot. If you want to sponsor the Mid Anglia Section in 2014/15 please contact a committee member for details.

EAST OF ENGLAND

Thanks to the sponsors of the day at Burghley Park LMS Lincoln Ltd, Ransomes Jacobsen and Dave Hampshire for the prizes on the day and their continued support of the section.

Welcome New Members

Mark Timberlake, Affiliate, Amtech Amenity, Peter Watts, Greenkeeper, Cleethorpes Golf Club; Bradley Styring and Kristian Allen, both greenkeepers, Robin Hood Golf Club.

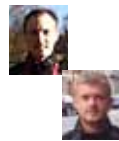
CLARIFICATION: Last month Stuart Donald was listed as Course Manager at Knebworth Golf Club. His title is in fact Executive Course Manager, and Andrew Kennett is Course Manager. We're happy to make this clarification.

Northern

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



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Pete Maybury
petemayb66@aol.com

Events Coming Up

NORTH WALES

We will be running a coach to BTME 2015 on Thursday 22 January, will anyone interested in joining the coach please contact myself or Jeremy Hughes before the Christmas holidays so we can confirm numbers and pick up points.

CLEVELAND

TSL Quiz Night on 17 December at Billingham Synthonia Cricket Club from 7pm

News

CLEVELAND

With the grass cutting at Richmond Golf Club seemingly halting overnight I can turn my attention to the autumn renovation work. With nothing too big in the pipeline I shall be concentrating on tree pruning and woodland management on our feature 18th hole. Part of the project will include the regeneration of gorse plantations from tee to green.

This year's autumn tournament was held at Bedlingtonshire Golf Club. The course was a real credit to Martin Woods and his team and was a real pleasure to play. The competition was a ¾ handicap stableford.

Results: 1 Martin Woods 32pts, 2 Spuggie 32, 3 Paul Walton 32pts, 4 Ben McGratten 31, 5 Paul Legg 30, 6 Richie Hood 30. Trade Simon Holmes, longest drive Doug Avey, nearest the pin Martin Woods.

NORTH EAST

The north east section would like to welcome Simon Pearce who taken the role of Head Greenkeeper at Alnwick GC, Simon was previously Head Greenkeeper at Painswick GC in Gloucester.

The north east section committee would like to wish everyone within the section and beyond a happy Christmas and a prosperous new year.

SHEFFIELD

Our Christmas comp was held at Bondhay Golf Club on Thursday 4 December a big thankyou to all who played and to the greenkeepers who produced a great course. Results will be posted next month.

Any news from our AGM will be posted next month. I hope that everyone has a Merry Christmas and a Happy New Year.

NORTH WALES

The GUW ran an agronomy road show at Conwy Golf Club on 25

November I hope it was well attended especially as it was a free event and would have been extremely educational.

Our Christmas tournament, course walk and AGM took place at Wallasey Golf Club on Thursday December 4. Information on results, course walk and AGM news will be posted next month.

NORTHERN

As you are aware we have lost three members of the committee this year and so after our call for help and Sandra beating a few guys up (!) we have volunteers to come on board. Hopefully these guys will be voted on at the AGM and we will be back to full strength! Our first task will to study the feedback from the survey and decide how many golf days we put on and where we are going to play.

Finally I would like to wish you all a great Christmas and look forward to seeing you all at next year's fixtures.

NORTH WEST

The Bert Cross Trophy Competition was held at Wilmslow GC on 11 November. Steve Oultram and team had produced a high standard course for the day with Mark Hillaby the overall winner of the stableford competition although everyone went home with a prize. Thanks to Wilmslow Golf Club for a superb day and to all those who attended. The golf was followed by the AGM with 38 in attendance. 16 committee members were elected and at a meeting the following Monday the following officers were elected:

William Merritt, Treasurer (07791 399229), Warren Bevan, Education Officer (07545 985855), Scott Reeves, Chairman (07955 708719), Chris Sheehan, Secretary (07840 706738), Gwynn Davies, Education Officer (07920 078814), Nicholas Gray, Membership (07973 815113), Tim Johnson, Communications (07773 343509), David Weir, Golf Organiser (07774 999230), Tom Wood, Communications (07709 244663). Committee members: Allan Donlevy (07534 984646), Chris Gibson (07885 299613), Chris Harding (07807 924277), Richard Roberts (07963 520734), Rob Sandilands (07779 258118), Colin Parish MG (07974 938905), John McLoughlin (07900 884000).

Thanks to Sponsors

CLEVELAND

A big thank you to all the autumn tournament sponsors: Jamie Applegarth and Glen Baxter of Rigby Taylor and Tacit, Greenlay, Rickerby's, Lloyds Turfcare, East Riding Horticulture and Northern Lubricants.

SHEFFIELD

Thank you to Mike Brear of Rigby Taylor and Sharon Morris of Mansfield Sand for sponsoring our Christmas comp.

NORTHERN

On behalf of the committee we can't thank the sponsors enough for their fantastic support of our golf days, also to you guys for making the effort to come and play and support our section. So a massive thanks go to Everris, Mel Guy and Bathgate Sands, Rigby Taylor, Bolton Abbey mowers, Bob Wild grass machinery and to all trade members for their support over the year.

NORTH WEST

Thanks to all the sponsors of the Bert Cross Trophy.

Welcome New Members

Edward Nutt, Greenkeeper, Oaks (The) Golf Club, Andrew Messenger, Assistant Greenkeeper, Percy Wood Golf & Country Retreat.

South West & South Wales

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



SOUTH WEST –
Jaey Goodchild
j.goodchild@
bowood.org



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



DEVON & CORNWALL
Cameron McMorris
cjmcmorris@gmail.
com



SOUTH WALES
Andrew Hatcher
andrewhatcher1@
msn.com

Events Coming Up

SOUTH WALES

Our Christmas Competition will take place at Glyn Neath Golf Club on 12 December, one of the most interesting and varied golf courses in Wales within the Brecon Beacons National Park. First tee booked for 10.00am, Cost £15 and a three course meal. Quick reminder: The BIGGA Turf Management Exhibition is 20-22 January 2015.

DEVON & CORNWALL

The Christmas meeting is Wednesday 10 December at St Enodoc Golf Club and the comedian will be Tank Sherman.

If anyone is interested we are putting on a minibus this year to BTME, please contact George Pitts on 07929754401 or gpitts.yelverton@gmail.com. An away trip is being looked at to visit South Wales in March, possible dates and venues are being explored.

SOUTH WEST

Christmas Tournament and charity raffle will be held on 17 December at Cirencester Golf Club. We expect it to be a fantastic day. The day kicks off at 9.30am with coffee and bacon rolls before golf, dinner and our world famous raffle.

Both basic and refresher excavator training courses are still available through section training, please contact Paul Worster promptly (paulw@mgnnews.co.uk) for enquiries. These courses will have to run before Christmas so now is your last chance to secure a place.

Please contact Paul Worster (paulw@mgnnews.co.uk) or Stuart Bowman (s.bowman@thornburygc.co.uk) for all education needs and enquiries.

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

News

SOUTH WALES

Congratulations to Cardiff Golf Club for flying the flag for Wales at the Golf Management Trophy held at Frilford Heath Golf Club, Cardiff came third well-done Tony and his Team.

Results of our recent visit to the Glamorganshire Golf Club: 3 Big D with 35, 2 Marc Anderton 36, 1 Mark Tucker

countback on back six. Nearest the pins were Mark Wells and Colin Fulton, best Trade P Holmstrom. The course was in excellent condition thanks to Mike Williams and his team, the food after was amazing.

DEVON & CORNWALL

The recent meeting at Torquay Golf Club gave those attending the chance to see the latest offering from Campey Turfcare. In conjunction with local dealer and event sponsor D.G.M., the VGR Top Changer was put through its paces.

Using high pressure water, holes were created, which were then automatically filled with kiln dried sand in one pass. Everybody was impressed, especially when the depth of sand injection was exposed by taking a soil profile.

Thank you to Jason Brooks, Head Greenkeeper at Torquay for setting the course up for the day. Thank you for the course walk and the catering. Results: Nearest the pin ~ Antony James, Longest Drive ~ Shaun Warren. 1 Antony James Nett 66, 2 Terry Farkins Nett 67, 3 Cam McMorris Nett 72.

Thanks to Falmouth Golf Club for hosting the recent day, and thanks to the catering staff and Head Greenkeeper Simon Johnson for setting up the course for us in the trickiest of conditions.

The course walk went really well as did the PowerPoint presentation on the construction they had done to create the new greens. Thank you to Steve Gingell for the presentation and his time.

The competition was reduced to 9holes due to the rain we had first thing. 1 Mike Ellis 19pts, 2 Anthony James 16, 3 Andrew Prowse 14.

The section presented a plaque to Brian Summers as a founder member of the section and former Chairman.

We appreciate his hard work and time. We wish Brian and his wife the best for the future.

SOUTH WEST

Congratulations to Leigh Mordly and Mike Sage from Knowle GC who have won the Countrywide Farmers South West Knockout Competition held at Bowood Golf Club on 14 November.

Well done guys and commiserations to Jamie Blake and Dan Taylor from Broadway GC for fighting their way all the way to the final.

Following a minor reshuffle of the section committee the structure for the coming year is: Chairman Chris Sealey, Vice Chairman Darren Moxham, Secretary Lucy Selleck, Treasurer Antony Knight, Education Paul Worster and Stuart Bowman, Fixtures Joe Curtis, Magazine Jaey Goodchild, Regional Representative John Keenaghan, Committee member Adam Matthews and Trade Representative Ian Barnett.

After many years of hard work as Section Secretary, Adam Matthews has taken a step back. Adam will remain on the committee to offer his valued support. On behalf of all section members I would like to thank Adam for his hard work and commitment over the last few years.

Also, we have to welcome Stuart Bowman, Course Manager at Thornbury Golf Club who has joined the committee and will be assisting Paul Worster with education co-ordination.

Thanks to Sponsors

SOUTH WALES

A big thank you to the Patrons for 2014 thanks for your support.

DEVON & CORNWALL

Thanks to DGM and Martyn Lane Golf for sponsoring the event at Torquay. Thanks also to Bayer and Southwest Reel Grinding for their prizes and contribution to the section at Falmouth.

SOUTH WEST

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

Welcome New Members

Ethan Brennan, Assistant Greenkeeper, The Point at Polzeath, Matt Law, Assistant Greenkeeper, Bowood Golf & Country Club.

Whether you're looking after the **back garden**, or the **'back nine'**, we have a machine to suit your needs.

Milton Common, Thame, Oxfordshire	01844 278843	FarolLtd @FarolLtd
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CONTACT EAGLE FOR MORE INFORMATION

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Scotland

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



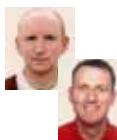
CENTRAL
Gordon Moir
Gordon.moir@standrews.org.uk



SOUTH WEST
Jim Paton
jimp54@btinternet.com



EAST
Scott Corrigan
scottcorrigan4@aol.com



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



WEST
Stuart Taylor
stuart.taylor@glasgowgolfclub.com

Events Coming Up

EAST

Annual Xmas Soiree in December (Please contact section for details).

News

CENTRAL

The Section held its AGM at Auchterarder GC on 4 November with 17 members attending. Shaun Anderson from Piperdam was elected Chairman, replacing Bob Meikle. Richard Jenkinson of gWest was then elected Vice Chairman.

Thanks were given to Andy O'Hara, Derek Scott, Gordon McKie and Derek Robson who all stood down from the committee after numerous years of service and the four were presented with a small something to help keep them warm over the coming winter. Gordon Moir remains as Sec/Treasurer while Craig Boath, Carnoustie and Paul Armour, St Andrews were elected on to the Committee. Jim Croxton was presented with a cheque for £80 from the Section for the BIGGA Greenkeepers Benevolent Fund.

Congratulations to John Bateson of St Andrews Links for winning this year's Patrons award in the Section. John will now be travelling to BTME for a few days as his prize. Commiserations to all the other entrants.

There is nothing planned in the education front for the immediate future but we will look to arrange a few things prior to April. It's your Association, please let us know the subjects you would like us to try and cover. For the latest information, please check we have your email address and that it's correct.

To date we probably only have 60% of members email addresses. You can also friend/like us on Facebook.

NORTH

The north section would like to pass on our condolences to the family of the late John Robertson (Aitkens) who sadly passed away recently. John was well known to many in the north section and will be sorely missed by all who knew him.

Dale Robertson from Newmachar Golf Club has stepped down as secretary of the north section after doing a ten year stint. All in the north section thank Dale for his hard work and dedication to

the section over the ten years as secretary.

He can now enjoy some free time and will maybe clean up at the outings.

Also another commendable level of service to the north section was Hugh McClatchie who stepped down from the committee after a 23 year spell helping to run the north section. Hugh is well known to all of us in the section and we would like to pass on our thanks to him for sterling service over many years. Hugh served when it was SIGGA all these years ago and probably has seen many changes in the industry in that time. Dale and Hugh were presented with a small gift at our AGM as a token of our thanks for their contribution to the section.

Neil Sadler and George Mitchell have come onto the north section committee to replace Hugh and Dale.

We recently held our AGM at the Paul Lawrie Golf Centre in Aberdeen. A healthy 24 played on a dull but dry day in mid October. Our thanks go to the golf centre for courtesy of the course and Head Greenkeeper John Merchant and his team for the excellent condition of the course. We played nine holes twice with a stableford format.

Fraser Downie from Peterculter GC was the winner beating George Mitchell from Newmachar on count back. It's a tough track and all nine par threes offer a different challenge. The committee would like to pass on our thanks again to our trade members who continually support the section throughout the year. Dave Vrooman from Andersons Fertilisers gave an informative talk for twenty minutes on humic acids and the role they play within turf management.

WEST

The last few weeks have supplied the usual rain, rain and more rain, with very mild temperatures creating good growing conditions, even the east coast appears to be suffering somewhat with more growth and softer conditions. What a fantastic year we have experienced, in fact the last two years have been great and they were well overdue.

The AGM held at Haggis Castle seemed to go well, some very topical questions were raised, a very good turnout with 35 people on the day, which seems to be the standard number these days.

The attendees were treated to talks from David Carson on new grass developments, Alistair Taylor on Chikara total weed control, and Jamie Lees on soil analysis, all talks were excellent and the section would like to thank them for their efforts, please remember CPD points are awarded for attending.

Gerry Bruen stepped down as Chairman and Ronnie Myles takes over, so we wish him well for the future and thanks to Gerry for all his work during his time in charge, especially setting up the blog. Fraser will retain the secretary's role and education will be taken on by Gerry Bruen. David McBride has stepped down from committee as has John Brown and we thank them both for all their efforts over the years.

The Committee is now Ronnie Myles (chairman), no vice chairman, Gerry Bruen (past chairman and education), Fraser Ross (secretary/treasurer), Brian Hillan (handicap), Stuart Taylor (magazine), Gordon Howatt (golf competitions). Contact hem with any queries. The Association would like to thank Haggis Castle Golf Club for assisting us with a venue and Scott Ballantyne for helping to arrange it.

At the first meeting of the new committee it was nice to see Michael Slack there as an observer to see if he might be interested in joining the committee.

Gordon Gilmour of Nairn Brown had a scare recently and was off work with a small heart problem which we hope he has recovered from now, and Ryan Espie has left Nairn Brown to join Scot JCB in their parts department, let's hope his new role is enjoyable.

The casual evening out in town was arranged for 28 November so I will report on this in next month's issue, in the meantime I would like to wish everybody a Merry Christmas and a Happy New Year, and all the best for next season, I look forward to catching up with a few people at Harrogate.

Finally, if anyone has information please contact me on

01419 425554 or 07790 823914, or stuart.taylor@glasgowgolfclub.com I will be at your disposal and I will be submitting something each month, as one of the chairman's first points was my lack of articles in the magazine. I would appreciate some input from members, I might also suggest meeting for coffee every two months to go over some discussion points if people are interested.

EAST

It is with sadness that we report the untimely passing of John Robertson, the section have sent its condolences to his family and our thoughts are with them at this time.

The section recently held our AGM at Old Musselburgh GC, the day was a success again, although with a disappointing turnout, especially with the historic venue that was chosen for the event and the work that goes into the setting up of these events.

The AGM passed with no major issues with Jamie Martin stepping into the role as Section Chairman, we have two new members added to the committee - Bruce Watson (Cardrona) and Hamish Alan Campbell (Silverknowes) welcome aboard guys.

The Section are delighted to announce the nomination for our Representative to be Scottish Chairman, the section have chosen Stuart Ferguson to fill this role, Stuart is a stalwart of BIGGA and the Section and is a worthy candidate for this role, Stuart will take over as Scottish Vice Chairman in the near future.

Anyone wishing to have news added or are willing to write a short topic of interest for the GI Magazine then please get in touch. Again a reminder that if your contact details have changed please feedback ASAP.

Thanks to Patrons

WEST

May I take this time to thank all the patrons for their support through the year especially those in the west Section, your continued participation in this scheme is extremely valuable and the section thanks you very much for assisting in the year's proceedings, this year's winner of the award is David Orr of Drumpellier.

EAST

Our Patrons awards has changed this year with criteria being drawn up to be met before winning this award, this has added value to this excellent award, following nominations received from our section, the section has selected Stuart Ferguson as our Patrons Award Winner for this year.

Welcome New Member

Duncan Mackenzie, Greenkeeper, Forfar Golf Club

Your notes

Please send your notes into us by the 15th of the month to appear in the next edition

South East

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



SURREY
Mark Day
mark@daylinks.co.uk



KENT
Rob Holland
premiergolf2012@hotmail.co.uk



SUSSEX
Chris Humphrey
chris@collier-turf-care.co.uk



EAST ANGLIA
Mick Lathrope
m.lathrope@ntlworld.com



ESSEX
Arnold Phipps-Jones
essexbigga@talktalk.net



LONDON
John Wells
j.wells1@sky.com

Events Coming Up

SURREY

The Surrey section AGM and Turkey Trot will be held at Guildford GC on 19 December, be sure to get your entries in for this end of year event.

News

SURREY

Scott Roberts has been appointed Senior Greenkeeper at The Wisley GC. Wishing you the very best in your new role .

The Surrey website is up and running – www.surrey-bigga.co.uk

Any ideas on how to get an Englishman to wear a kilt? "It cannae be done" came the reply. Chief Clansman Ron Christie has led the Scots to victory at the annual event held at Hankley Common GC. Magnificent win for the Scots this year, 41/2 – 1/1/2.

SUSSEX

18 November was the AGM for the Sussex Section, held at Crowborough Beacon GC and thanks to the club for their hospitality.

This committee was elected: Chair - Mike Poole, Vice Chair - Eric Green, Secretary - Pete Smith, Treasurer - Pete Smith, Committee Member - Tony Woolly. Trade Representative - Chris Humphrey.

Special thanks were given to Rob Hudson for the last 10 years' loyal service and dedication as Chairman of the section. Rob saw the section through some hard times and helped make Sussex the strong and well supported section it is today. Thanks Rob.

Thanks to Sponsors

SURREY

On behalf of the committee, thanks to all the sponsors who have supported us this year, keep in mind your thoughts for those less fortunate than ourselves and all the family over this festive period.

Welcome New Members

Daniel Cates, Greenkeeper, Harrow Hill Golf Club, David Tucker, Greenkeeper, Bishop's Stortford Golf Club, Jack Green, Greenkeeper, Lamberhurst Golf Club, Philip Hawkes, Assistant Greenkeeper, Bognor Regis Golf Club, Luke Standing, Assistant Greenkeeper, Burgess Hill Golf Club.



Greenkeeper Training

A guide to the range of training provided throughout the UK

BIGGA is actively involved in raising the standard of Greenkeeper Training. The Association is a member of the Greenkeepers' Training Committee and strives to enhance the level of education through various means, including Section, Regional and National workshops, seminars and conferences.

The range and quality of training now available throughout the UK means there is a training course for every greenkeeper.

This should improve the quality of greenkeeping and help to produce better quality golf courses to the benefit of all within the industry.

Golf Course Managers should ensure that their staff are trained to the highest standards.

This begins by selecting a training provider that meets the criteria laid down by the GTC.

There is a clear link between education, training and economic success and all clubs should invest in the education of their staff.

There are now a number of GTC Quality Assured Centres and Training Providers identified by the GTC Quality Assured logo



Sami Strutt
Head of Learning & Development
BIGGA
01347 833800
sami@bigga.co.uk
www.bigga.org.uk

SCOTLAND

ENGLAND



Cupar, Fife, KY15 4JB
Contact: Michael.clark@sruc.ac.uk
www.sruc.ac.uk/elmwood
01334 658969

Full-time National Certificate Greenkeeping, Block Release / Fast Track and Work-based Learning options for SVQ Levels 2 & 3 Sports Turf. HNC/D Golf Course Management (full time and distance learning), HNC/D Golf Facility Management (full time and distance learning). Short course in Chainsaw, Tree Climbing and Rescue Techniques, Plant Operations, Pesticide Spraying and Norso Certification/Courses



50 Brook Street, Glasgow, G40 2AB
Contact: Lesley Lowrie 0141-556-3999
Fax: 0141-556-4999 learn@gostatraining.co.uk

SVQ Level 2 and 3 and Modern Apprenticeship in Greenkeeping/ Sportsturf and Landscape. Attendance Day release or Distance Learning. SVQ Level 4 Management is available with flexible learning options. Lantra and NPTC Industry related short courses with certification include Pesticide courses, Chainsaw, full range of Machinery training, First Aid, Defibrillation training and many more. Candidates may use their Individual Learning Account to fund many of the courses. Training courses are available in Glasgow and Edinburgh areas throughout the year.



Askham Bryan, York, North Yorkshire, YO23 3FR
Contact: Central admissions 01904 772211
enquiries@askham-bryan.ac.uk www.askham-bryan.ac.uk

Extended Diploma and Subsidiary Diploma in Horticulture. Foundation and Extended Foundation Degrees in Sports Surface Management, Horticulture, Landscape and Garden Management or Arboriculture. All available full or part-time.
Block release courses: WBL Diploma Levels 2 and 3 Greenkeeping WBL Diploma Levels 2 and 3 Groundsman Sportsturf Maintenance.
Short courses: FEPA spraying, irrigation, chainsaw and brushcutter courses.



Tonbridge, Kent, TN11 0AL
Contact: Anthony Stockwell
01732 853163
anthony.stockwell@hadlow.ac.uk
www.hadlow.ac.uk

City & Guilds work-based qualifications at Levels 2 and 3 in Greenkeeping, Groundsmanship and Landscaping for apprenticeships for all ages. We also offer a range of short courses, such as Health & Safety, COSHH, Chainsaw and Pesticide Application.

Additionally full and part-time courses (post GCSE through to degree level) are available in horticulture and a variety of other land-based subjects.



Stoke Climsland, Callington, Cornwall, PL17 8PB
Rosewarne, Camborne, Cornwall, TR14 0AB
Contact: Customer Services: 0845 609 9599
duchyteam@duchy.ac.uk www.duchy.ac.uk

A range of courses delivered throughout the South West: Levels 2 and 3 Workbased Diplomas and Apprenticeships in Horticulture including Greenkeeping and Groundsmanship. NVQ 4 Amenity Horticulture (Management). Level 2 and 3 Diplomas in Horticulture (including Sustainable Horticulture) FdSc and BSc (Hons) Horticulture. HND/HNC in Garden and Landscape Design. RHS Level 1, 2 and Advanced Certificate. Also short courses in pesticides, plant machinery vehicles, and chainsaws. Distance learning available via e-portfolios.



Worplesdon, Guildford, Surrey
GU3 3PE. Contact Andrew McEvoy 07896 674786
amcevoy@guildford.ac.uk www.merristwood.ac.uk

Courses include: Sports Turf Management NVQ Level 4 - on-line distance learning, Sports Turf Diploma Level 3 - on-line distance learning, Sports Turf Apprenticeship Diploma Level 3 (October to the end of March only), Sports Turf Apprenticeship Diploma Level 2 (October to the end of March only, NPTC Safe Use and Operation of Mowers, Tractor Driving, Hedge Trimmers, Turf Maintenance Equipment & FEPA Spraying, Safe Use of Aluminium Phosphide for Mole Control. Funding is available for Apprenticeships for Level 2 and 3, 16-18 (fully funded), 19+ (partially funded).



OAKLANDS COLLEGE

Smallford Campus, Hatfield Road, St Albans, Hertfordshire, AL4 0JA
Contact: Andrew Wight 01277 737735
andy.wight@oaklands.ac.uk
www.oaklands.ac.uk

Oaklands College offers on demand on-line learning for City and Guilds courses at levels 2,3 and 4. Apprenticeships at level 2 and 3 and an On-line Higher National Certificate in Greenkeeping and Sports-Turf Management throughout the South East. In addition we offer monthly certificate of competence courses for PA1/2 and 6. Full time Horticultural courses on offer include City and Guilds Entry Level 3 to Level 2.



Plumpton College

Ditchling Road, Nr Lewes, East Sussex BN7 3AE. 01273 890454 www.plumpton.ac.uk
Apprenticeships offered at Levels 2 and 3. Diploma in Horticulture, Levels 2 and 3. Part time courses: Work based Diploma: Level 2: Greenkeeping, Groundsmanship, Landscaping and Horticulture. Level 3: Greenkeeping, Groundsmanship, Landscaping and Horticulture. Level 4: Horticulture. RHS Levels 2 and 3, both Theory and practical. Short courses available, including FEPA Spraying and Chainsaw. Bespoke Training, e.g: Manual handling, Mower use and Maintenance. Risk Assessment. Strimmers and Hedgetrimmers.

ENGLAND



Nantwich, Cheshire CW5 6DF
Contact: Courses Hotline 01270 613242
Enquiries@reaseheath.ac.uk
www.reaseheath.ac.uk

Industry tailored, block / day release Level 2 and Level 3 Apprenticeships in Horticulture, Greenkeeping and Groundsmanship. NPTC and other short courses including pesticide application, chain saw operation, safe use of mowers and manual handling. Also full time Level 2 and Level 3 Extended Diplomas in Horticulture with sports turf modules. £8.5 million national centre for horticulture, food production and the environment currently under construction. See website for course events



Billsborrow, Preston, Lancashire PR3 0RY
Contact: Course Enquiries team on 01995 642211
www.myerscough.ac.uk Email: enquiries@myerscough.ac.uk

Myerscough College is a pioneering centre for Sportsturf Education and Training in Europe. Courses are available at all levels from Introductory Diploma to Honours Degrees in Sportsturf Science and Management. There are options for full-time and part-time study with our FdSc Sportsturf and BSc Sportsturf Science courses uniquely available ONLINE also and having students enrolled throughout the UK, Europe and the USA. A new "Top-Up" BSc Degree in Sportsturf Science and Management is now available for those already holding FdSc or HND qualifications in Sportsturf. Our Work Based learning team offers apprenticeship opportunities throughout the UK.



Sportsturf Degrees

Full-time and online study

Myerscough College is one of the UK's leading centres of excellence for the delivery of Higher Education courses in Sportsturf and Turfgrass Science. Applications are invited for courses starting in September 2015.

Foundation Degree Sportsturf

Full-time or online study.

BSc (Hons) Sportsturf Science and Management

Full-time or online study.

BSc (Hons) Sportsturf Science and Management

Top-up programme for students with a HND or Foundation Degree.

Apprenticeships

Greenkeeping and Groundsmanship Training.

R&A Scholarships available to many students



Myerscough College's Degree programmes are validated by the University of Central Lancashire

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For more information and to receive a prospectus contact
Course Enquiries on **0800 652 5592** or visit
www.myerscough.ac.uk



Greenkeepers Training Committee

David Golding, GTC's Education Director, provides an update on the work of Reaseheath College and how substantial Government funding is to be invested

Reaseheath College has a national reputation for the excellence of its turf care training. It has used its golf, football, rugby, bowls and cricket resources to train students for over four decades.

Students have gone on to professionally serve the industry all over the world, having completed full-time and part-time courses at varying levels.

The College currently recognises that the majority of students are now employed in the industry and gain their practical skills in the workplace under the Apprenticeship/Work Based Diploma scheme. The work-based qualification is delivered to answer the requirements of industry, with the students attending college during the quieter Autumn/Winter season of October to March for blocks of three days each month.

Additionally Horticulture students on the Level 3 Extended Diploma have the opportunity to study a Sports Turf route, supporting progression into the industry and to Higher Education. This has allowed the College and Sports Turf Team in particular, the opportunity to consider how training is currently delivered, and how to maximise its full potential. It has been decided to develop an £8m national centre for Horticultural Production, Environmental Management and Conservation, and Renewable Energy on the site.

Capital funding has been awarded by the Department for Business Innovation and Skills to develop this national centre, particularly as it aligns with the recently announced agri-tech strategy.

To answer increasing demand for its sports performance courses, the college will also use the opportunity to build a new sports centre which will be available for the community and educational use.

It will reconstruct its existing turf based sports pitches and build new 3G and multi-use artificial sports areas. Elements of the golf course will be retained for teaching purposes, and create future opportuni-



The GTC invites employers and greenkeepers to visit its stand, B29, at BTME to discuss all aspects of greenkeeper education, training and qualifications

ties for students to maintain and design golf courses.

This will also provide future Reaseheath sports turf students with a greater range of practical facilities upon which to hone their skills and test their knowledge.

Reaseheath continues to meet the demand for quality training in Sports Turf/ Groundsmanship maintenance and management, delivering and developing courses, from Level 2, up to Level 3.

The Sports Turf Team are currently exploring opportunities to develop an HNC Course in order to encourage progression for those wishing to become Head Greenkeepers/Head Groundsman within the industry, and courses that will meet the requirements of those working at racecourses.

The turf team at the college are constantly looking to engage with industry professionals and specialist workshops have proved very popular with more in the planning.

In accordance with the GTC Quality Assured criteria, the college hosts industry liaison meetings and this all helps ensure the college is working in partnership with industry.

Reaseheath is very proud of its past students and those currently registered on the various turf



The GTC is funded by:



Contact Details

David F. Golding
GTC Education Director
and Standards Director,
Greenkeeper Training

01347 838640
david@the-gtc.co.uk

GTC
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Near Aine
York
YO61 1UF

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



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courses are assured that every effort is made meet their individual needs.

The needs of employers are also paramount and the Government's new Trailblazer initiative, which places employers at the heart of Apprenticeships and the college are supporting the GTC through its Technical Working Group.

Recently the college has strengthened its work-based delivery by strategically engaging with DART, an established and well-respected private training provider operating throughout the Midlands.

Anne Morgan, Director of DART and Departmental Head at Reaseheath Training said: "If you work on a golf course or a sports ground and don't want to stand still, the college has a course for you with flexible delivery models to fit round your work".

For more details contact:
Christine Middleton
Team Leader
Reaseheath Training
01270 613221

APOLOGY: Last month's GTC page duplicated October's page in error – the Reaseheath article should have appeared last month. Gl apologies for this mistake.



Indigrow

Quick yet sustained release from turbine granular fertilisers

The binder used to control release within the Turbine granular fertilisers is a combination of L-Lysine based microbial protein, and a combination of short and long chain saccharides. Instead of methylene urea acting as the binding and release agent, the L-Lysine based protein acts in very much the same way.

The only way the granule can be broken down, and in turn solubilise all the nutrients, is by soil microbial activity.

One of the real advantages of Turbine Biological fertilisers is the solubility of the amino acids. Using an amino acid profile which is very soluble, achieves a combination of fast, medium and slow components, so that customers will see a quicker yet sustained response from our products.

Alternative organic fertilisers can be very slow to release any nutrients, particularly if they are made up of cured manure or sewage bio-solids. These products can lead to an increase in black layer problems, particularly in fine turf areas. Within the Turbine range we do not use any manure or sewage sludge, we use only premium raw materials and L-Lysine based microbial protein.

One of the problems in developing a "performance" organic fertiliser in the past was the release curve was too slow. By using the L-Lysine microbial protein to help, not only with chelation, but with the nitrogen component, these problem are solved problem. Turbine organic fertilisers give a quick, yet sustained response.

Amino Acids on Golf Courses, and how Turbine Biological Fertilisers can help

The impact of amino acids

on sports turf has been well researched. Amino acids help create a better environment for turf to grow in, in a natural, environmentally friendly and sustainable way.

Turf, and indeed all plants, synthesise amino acids from the primary elements the carbon and oxygen obtained from the air, and hydrogen from water, to form carbohydrate by means of photosynthesis, and then combining it with the nitrogen which the turf obtains from the soil, leading to synthesis of amino acids by creating metabolic pathways. Only the L-Amino acids, present in Turbine Reaction, have metabolic synthesis activity in turf.

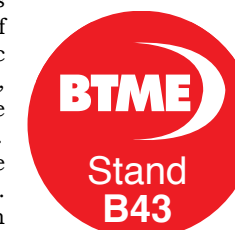
Amino acids are required by the turf at several vital stage of growth. Turf absorbs amino acids through stomas, and by root up-take; absorption is reliant on suitable ambient and soil temperature (minimum 10°C). Amino acids are essential ingredients in the process of protein synthesis. About 22 important amino acids are involved in the process of each function.

Dealing with Stress – High temperatures, low humidity, high traffic, wear and other stress have a detrimental effect on the turf's metabolism. This leads to poorer turf quality, and an overall decline in plant health. An application of Turbine Reaction before, during and after these stress conditions, supplies the turf with the necessary amino acids which are directly related to an anti-stress physiology, helping prevent and aide recovery from these conditions.

Healthy Soil Microbial Activity – Having the correct balance of the microbial flora in the soil is good for soil structure and nutrient mobility around the root zone. Amino acids have shown in countless studies

in all forms of agriculture and turf maintenance, to drastically increase soil microbial population. Effective use of the Turbine Biological fertilisers from Indigrow not only leads to healthy stress-free turf, but also a healthy root zone.

Overall, the role of amino acids in creating healthy turf has been clearly understood for many years. Adding organic amino acids, in either a granular form or as a liquid/foliar spray will create favourable conditions that will help the plant to better assimilate and absorb both macro and micro nutrients. The use of amino acids also helps to reduce the input of macro nutrients due to the more efficient use of the fertiliser, thereby saving the turf manager time and money in reduced applications.



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or email **james@bigga.co.uk**

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Ben Burgess has served the local agricultural and horticultural community since 1932. As one of the original John Deere dealers, the company has grown to have six depots across East Anglia. With a specialist golf and turf department, Ben Burgess also operates the largest dealer-based agricultural, construction and horticultural hire fleet in Europe.

Our fleet includes specialist machinery, suitable for golf courses, particularly the Optimal 1100 Tree Spade. Having offered this service for the last six seasons, this model of machine has been used to remodel the approach, tee or green for numerous courses throughout the UK. Originally imported from Germany, it is reliable and easy-to-operate, plus offers a root ball diameter of 110cm and

depth of 75cm. The tree spade allows a variety of trees to be moved, and with it currently being the prime time to move the deciduous variety, it may be worth considering how you could improve your course.

There are many things to consider when moving trees in order to provide the best chance of survival. Our hire manager, Jason Bond, is able to answer any questions and provide information on the factors and conditions worth considering before your course staff get to work.

For a range of used golf and commercial machinery, arborist equipment, plus details of the specialist equipment available to you for hire, please visit www.benburrigess.co.uk or contact Jason Bond on 01603 628251.

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**Deputy Course Manager Required**
Windmill Village Hotel Golf & Leisure Club

There are a total of 6 full time staff and 1 seasonal person. The job will be based on a 39hr week, but overtime will be required when necessary. Weekend work will also be required which is one in three for the majority, with lieu time in the off season. The following attributes are required;

- Qualified to minimum NVQ level 3
- PA1,6 and 2 spraying licence
- Chainsaw preferred but not a necessity
- 7 years or more experience with 2 seasons in a managerial role
- Experience in construction and use of diggers would be beneficial

The closing date is Jan 4th 2015

Please send a full CV with covering letter by post or email to;

Golf Course & Grounds Manager.
Windmill Village Hotel & Golf Club
Birmingham Road, Allesley, Coventry, CV59AL
greenkeeper@windmillvillagehotel.co.uk

**Experienced Greekeeper**

We are currently looking for an experienced and suitably qualified Greenkeeper to join our team. The successful candidate will have a wide range of responsibilities and be passionate about golf course maintenance.

Following the direction of our Head Greenkeeper, in our quest to move the course forward, the applicant will ideally possess the following attributes and qualifications:-

- Self motivated with a positive attitude
- Excellent interpersonal skills
- Good time management and communication skills
- Be capable of operating a full range of equipment associated with the post
- Have basic mechanical and machine maintenance skills
- NVQ levels 1 & 2
- Pa1, Pa6 spraying qualifications. (Pa2 desirable)

A strong work ethic and ability to demonstrate they can work as part of a team and as an individual

Please forward a CV along with a covering letter and salary expectation to steveg148@hotmail.co.uk or alternatively by post to:
Steve Grantham, Head Greenkeeper, Lees Hall Golf Club, Hemsworth Road Sheffield, S8 8LL

Course Manager
Lancaster Golf Club

The successful Candidate will:

- Have a minimum of 5 years management or supervisory skills and hold a suitable qualification in turf management.
- Promote and maintain Health and Safety and ensure compliance with appropriate legislation as part of the Management Team.
- Set and manage greenkeeping policies and procedures.
- Manage all resources within budget and financial controls.
- Lead and motivate a highly qualified and skilled greenkeeping team, ensuring staff performance and training requirements are maintained.
- Hold all appropriate certification and capable of carrying out all tasks at a high level with sound agronomic practice.
- Manage a computerised irrigation system.
- Be capable of effective communication with all relevant stakeholders within the Golf Club.
- Be responsible for all machinery management and ensure all equipment is maintained to the correct standard.

Closing Date for Application: Wednesday 31st December 2014

Please apply in writing or e-mail with a full CV and covering letter to: The Secretary, Lancaster Golf Club, Ashton Hall, Ashton-with-Stodday, Lancaster. Lancs LA2 0AJ.
By email: secretary@lancastergc.co.uk

Head Greenkeeper, Duxbury Park Golf Course
Location: Chorley, Lancashire
Salary: £23k - £26k dependant on qualifications and experience



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- Providing effective materials and machinery management to ensure all equipment is correctly maintained and serviced.
- Conducting basic risk assessments and contingency plans and be able to respond to emergencies.
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Salary is negotiable depending upon experience and will be reviewed after a successful qualifying period. Experience of working in the industry would be an advantage but not essential.

Interested candidates should email their CV in confidence, which should include current salary to info@farmura.com - If you would like an informal discussion prior to applying please contact Gerald Orme on 07739 800 916 regarding this position, for further product information please visit our website www.farmura.com.

CLOSING DATE: 20th December 2014

Contact Details:
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- Be able to achieve and sustain the course in a condition that would justify top 100 status. Hold appropriate certification and be able to carry out all tasks at a high level
- Have sufficient knowledge to operate and control computer driven irrigation system. Keep the membership informed regarding course matters
- Understand and have sympathy with the heathland characteristics of the course
- Appreciate the ethos of a traditional member's run club
- Have a really good eye for detail and presentation

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Please apply in writing or email with full CV and covering letter stating your current salary and benefits to: The Secretary, Northamptonshire County Golf Club, Church Brampton, Northampton, NN6 8AZ or email secretary@countygolfclub.org.uk All applications will be treated in strict confidence.

Closing date for applications will be 10th January 2015 and invitations for initial interviews will be sent out week commencing 12th January 2015 with the interviews likely to take place week commencing 26th January 2015.

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Applicants must have a sound knowledge of all aspects of modern greenkeeping including Health & Safety procedures. The successful candidate will also require

- Minimum NVQ Level 2 in Sports Turf Management
- PA1, PA2 & PA6 spraying certificates
- A chainsaw qualification is desirable but not essential

Applicants should apply in writing or email with a covering letter and a CV to Mr Andrew Pritchard, Director Sandfield Golf Ltd, Ince Lane, Bridge Trafford, Chester, Cheshire, CH2 4JP.

Email sandfield_golf@yahoo.co.uk.

Closing date for applications Friday 9th January 2015

For an informal discussion about the role please contact Andrew Pritchard initially by email as above.

Recruitment

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Agronomic Services are delighted to announce we are now Education Supporters @BIGGALtd #greenkeeping

@DaveStewart93

Thank you @BIGGALtd for the post on your website! Means a lot! #bigga #greenkeeper #wgc #walmley #golf

@TurfProUK

Read how bookings are flooding in for @BIGGALtd's Continue To Learn at BTME in today's Turf Pro Briefing <http://bit.ly/1Fiv4d9>

@SkyCaddieSteve

Clubs, Pros & CourseManagers please look out for the @SkyCaddie "link" for course changes via ThePGA & @BIGGALtd newsletters #appreciatehelp

@GavinSpeedie

2nd last green for drainage, rough management in the background!! @Gleneagleshotel @BIGGALtd #busybusy #progress

@rlupton197

All set up for the @BIGGALtd South west, South Wales conference @TheToroCompany

@tomofreemo

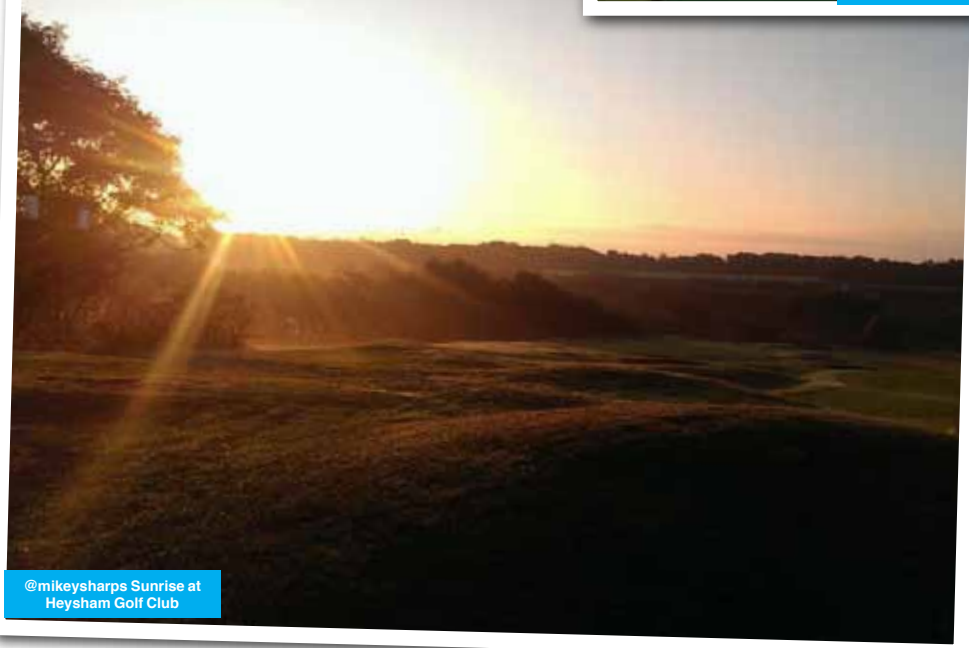
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All set up for our #SportsTurfMachineryDemo at .@CastleStuart #Greenkeepers #CampeyMachinery .@the_iog .@BIGGALtd

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