





apply the required water volume.

Tom added that, in the early days of sprayer testing, worn hoses were identified on 20% of sprayers that failed the test, with leaks on 18% of sprayers. A dripping spray hose, or worse still a leaking hydraulic oil pipe, could have catastrophic effects on the turf if it finally burst on a green – with further costly implications for environmental clean-up.

"On 20% of failed sprayers the sight gauge was also unreadable, which makes accurate filling difficult and impossible to assess accuracy during spraying," said Tom. "If you have calibrated to apply 250 litres across 18 greens, then stop after three and check you have used around 40 litres, and again after six holes etc., to pick up any inconsistency at the earliest opportunity," he advised. Other common problems that lead to sprayer test failures included faulty pressure gauges and missing control labels.

Duncan Russell, National Sprayer Testing Scheme (NSTS) manager at the Agricultural Engineers Association added that the introduction of the sprayer test scheme has seen an important significant improvement in the overall standard of spray application equipment, along with a rise in the professionalism of operators in maintaining machines to give more efficient results. Well maintained and tested machinery also retained better second-hand values.

"At a time when costs and budgets are under pressure, the financial losses that could be easily avoided by regular maintenance and simple calibration testing are considerable," he said. "Even at low levels of inaccuracy the cost of sprayer test would be quickly recouped, along with fulfilling demands of club managers, players and regulatory authorities for greater justification and accountability."

The new rules, implemented as part of the EU Sustainable Use Directive, apply to all boom sprayers over three meters used in agriculture, landscape and amenity. All sprayers should be tested by 26 November 2016 and every five years until 2020, then every three years; however the NSTS recommends testing every year – which is also seen as best practice by the industry-backed Amenity Assured scheme.

There is an exception for knapsack and hand held sprayers, which do not require testing under the SUD.



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

Around the green



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











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

AYRSHIRE EAST Jim Paton Scott Corrigan jimp54@btinternet. scottcorrigan4@ aol.com

NORTH WEST Dale Robertson & Stuart Taylor Robert Patterson daleturnberry@ stuart.taylo glasgowgolfclub. btinternet.com / com grassman351@ aol.com

Events Coming Up

com

Central - The Section are staging a one day irrigation course at Elmwood Golf Course on Wed 25 September in conjunction with the Toro Company and Lely UK with Adrian Mortram of R Hume Associates and Callum Oliphant of Applied Irrigation delivering the course.

It will be a mixture of showcasing the latest technology and designs and practical demonstrations of repairing and adjusting sprinklers/ troubleshooting. Attendance is free but numbers are restricted to 40 so you must register with gmckie@standrews.org. uk. There will also be a limit on how many people can attend from the one Club or organisation.

The AGM will be at Elmwood GC on 29 October.

East - Our Autumn Golf/Education day will be held at Haddington GC on 17 September, please contact our secretary to confirm your attendance.

The 27th Annual General Meeting will be held at Ravelston GC on Tuesday 5 November, more details to follow next month.

West - The Autumn outing is at Eastwood GC on 19 September - it will be interesting to see the new layout, and the AGM will be held at Haggs Castle in October, I will confirm the date next month.

Ayrshire - Bernhard Grinders Seminar at West Kilbride Golf Club, 10 September between 12-4pm. We're very keen to get a good attendance for this so please attend if you can. Any questions please call Jim or Derek.

News

East - Birthday wishes to Jimmy Nielson (80) - the section hope you enjoyed Benidorm - and George Stavert (86).

West - I attended the Norrie Whytock tournament held at Auchterarder on 15 August with Douglas Mackintosh, Alistair Reid, and Peter Boyd, and believe it or not we won, no thanks to my efforts though. I would like to thank my team mates for their good golf on the day and the last minute replacement of Peter who gave a valuable contribution, well done boys. Congratulations to Archie Dunn and his staff for once again producing a lovely golf course it is a joy to play even the way I did.

West - Stuart Clayton was on the phone recently and although not out on the road yet, he has informed me he will be going round everybody just to say hello. Stuart has been through a lot in recent months since his car accident, he apologised to me and others but I think his health comes first, so from all the section I would like to pass on our best wishes and I hope he makes a full recovery soon.

West - I mentioned David Carson recently regarding his knee operation and saw him recently walking with no problems, nice to see him out and about. Gents, please get in touch if you have any other information to let the other members around the country know about, I can be reached on 07790823914 or on e-mail at stuart.taylor@glasgowgolfclub.com so don't be shy.

Ayrshire - Congratulations to George Morrison and his partner Maggie who have tied the knot. Best wishes from all the Section.

Movers and Shakers

Central - Three new members are welcome to the section; Gary McLaren from Leven Links, Remi Passiatore from Dunfermline GC and Samuel Zeng who is at Elmwood College. We hope you are able to attend events.

East - One new section member is Sam McCaller (Murrayfield GC).

Results

Central - The results of the Autumn outing at Stirling GC should be on the website, www.biggacentralsection.org.uk

Welcome new members

Richard Bell - Dullatur Golf Club, Philip Jinks - Paisley Golf Club, Gareth Quinn - Paisley Golf Club, Dominic Dougan - Airdrie Golf Club, Danny McGurn - Langside College, John Dale - Renfrew Golf Club, Remi Passiatore - Dunfermline Golf Club, Samuel Zeng - SRUC (Elmwood), Gary McLaren - Leven Links Golf Course, Ronnie Frame - Affiliate member - Rigby Taylor Ltd, Christopher Wilson - Turriff Golf Club, David Robertson - Gairloch Golf Club, Jack Harrison - Golspie Golf Club, Stuart Gillies - Golspie Golf Club, Craig Mackay - Golspie Golf Club, Alexander Macdonald -Golspie Golf Club



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









NORTH EAST Glen Baxter glen.baxter@ rigbytaylor.com

 NORTH WEST
 NORTHERN

 Chris Sheehan
 Andy Slingsby

 jsheehan@
 andy.slingsby98@

 blueyonder.co.uk
 googlemail.com

SHEFFIELD NORTH WALES James Stevens Pete Maybury jimmy_jams20@ petemayb66@aol.com hotmail.com

Events Coming Up

North East - The Autumn tournament will take place at Westerhope GC on Wednesday 9 October. Timings will be posted on our Facebook and Twitter pages, you will all be also notified via our new text service!

Northern - Autumn tournament at Woodsome Hall GC, Huddersfield on 19 September, tee off 1.45. Northern Regional Conference : Phoenix Golf Club Rotherham on 7 November £10 for members, £20 visitors.

Sheffield - We would like to remind members if they would like to go on the trip to St George's Park to get their forms in quick as places are running out. Our next comp is at Hillsborough GC on 25 September.

North Wales - The autumn tournament takes place at Royal St. David's golf club, Harlech on 18 September, also keep in mind that the Christmas tournament is at Royal Liverpool GC, Hoylake on 25 November. There is a seminar in the pipeline provisionally booked on 7 November at Deeside College further details soon.

News

North East - Massive congratulations to Martin McCririck of Chester le Street GC, who recently won the Durham county matchplay championship at Consett GC, which according to Martin was in 'great nick' (credit to Dave Jobey and his team). Martin has now won both codes of Durham championship events having won the stroke play in 2011 - all the lessons I gave him as a kid have obviously paid off!

Northern - We had to settle for a draw against the Sheffield boys in our match up due to a massive downpour stopping play halfway round - so the Sheffield chaps retained the cup! Many thanks to Howley Hall for their support.

Northern - Please could all members wishing to contact me try and ring after 2pm. If urgent please text and I will ring you back but if it's to book your place for the golf days a text would be brilliant too - thank you.

North Wales - James Hampson a member of the greenkeeping team at Llanymynech GC became club champion in August, I know the club are very proud of his playing ability.

Movers & Shakers

North Wales - Don Rowlands, Deputy Head at Chester GC, has decided to step down from the role after 25 years faithful service. Paul Stanley will take over the vacated role, congratulations Paul and best wishes go to both of you.

Results

Northern – Invitation Day: 1 Paul Davies & S Oliver 42 pts, 2 Rob Turner & D Hughes 40pts 3 Joe Walsh & K Miller 40pts. Nearest pin: K Miller & Tony Gerrard.

North Wales – The North Wales v North West cricket match took place at Ashley CC on 24 July and North Wales won, a big thank you to Ashley CC for the facilities and everyone who took part, it was a very entertaining evening. I'm afraid the North Wales v South Wales match at Borth and Ynyslas GC on 26 July was cancelled due to under subscription.

Thanks to Sponsors

Northern - An enormous thank you goes to Rigby Taylor and Mike Brear for their fantastic support of our Invitation day at Wetherby GC and their continued support of our section. Big thanks to Wetherby for looking after us and giving us courtesy of the course, the staff were excellent and catering was first class. Thanks to Darren and his team for their hard work setting up a outstanding course. Also thanks to Golf and Turf Machinery for their sponsorship of our match against the Sheffield section.

Sheffield - We would like to thank Mansfield Sand for sponsoring our spring comp. Also thanks to golf and turf machinery/Platts Harris for sponsoring the Sheffield v Northern match.

Welcome new members

Colin Donaldson - Percy Wood Golf & Country Retreat, Jack Friar - Percy Wood Golf & Country Retreat, John Hogg - Seahouses Golf Club, Ciaran Porter - Close House Golf Club, Christopher Davies - Portal Golf & Country Club, Michael Etchells - Ulverston Golf Club, Joe Needham -Staining Lodge Golf Course, Daniel West - Staining Lodge Golf Course, Frank Strickland - Heaton Park Golf Centre, Mark Whiting, Affiliate member - Rigby Taylor Ltd, Simon Oliver - Cookridge Hall Golf Club, Ryan Healey - Oulton Hall Golf Club (De Vere), Vincent Casey - Heaton Park Golf Centre, Richard Marshall - Stocksbridge & District Golf Club, Jon Gleed - Wath Golf Club, Nathan Bradey - Bawtry Golf Club, Lee Greveson - Hallamshire Golf Club

A new look

Based on feedback from the recent GI survey, we've refreshed and improved this section of the magazine.

Please send your news and photos in to your section correspondent or Steve Castle (steve.castle@bigga.co.uk) by the 10th of each month

Around The Green



events or anything else for Around the green...







aol.com

BB&O - The Stick bboscribe@gmail. com or Matt Nutter d.mugford@ bbosecretary@gmail. rigbytaylor.com; com

Darren Mugford Sean McDade sean mcdade@ homecall.co.uk;

EAST OF ENGLAND EAST MIDLAND Greg Skinner greg.skinner92@ btinternet.com Steve Beverly steveimmingham@

Events Coming Up

Mid Anglia - Autumn Golf Day at Berkhamsted GC on 16 October. Get your entries in ASAP. AGM to follow.

East Midland - Our AGM/Autumn competition will be held at Lutterworth GC on 31 October, the AGM offers the opportunity for members to put themselves forward for committee selection or form a coup d'état and completely overthrow the present incumbents...food for thought.

East Midland - November 6, Midland Region Education Seminar at Forest Hill Golf Club. More details next month.

News

BB&O - Summer golf event took place at Caversham Heath Golf Club. A great turn out saw 52 people take part, and was kindly sponsored by Rigby Taylor. A big thank you to Course Manager John Scoones and his team for all their hard work which ensured the course and day was a great success! See results.

BB&O - The Rigby Taylor Pairs Knockout continues - good luck to all teams left in the competition. If anyone is interested in or needs any training be it chainsaw or spraying courses etc plus funding then please get in touch with our RA Sandra Raper sandra@bigga.co.uk

Midland - Apologies to Dave Healy, who was kind enough to send me something to report two months ago. Moor Hall GC has been blessed with the services of Graeme Phipps and on the 20 June he celebrated working there for 40 years. I trust that a platinum watch was presented Sir. I'm sure that the section will join me in congratulation.

East Midland - 1 August saw Dave Leatherland's Kedleston Park host our Summer Tournament. Despite having had over 50mm of rain in the days building up to the day Dave and his team produced slick true greens and a beautifully presented course. The sunshine certainly had an effect on a suncream-free Chairman who presented the prizes with rather a red face - results below.

Mid Anglia - Our thanks go to Steve Braddock - Head Groundsman at Arsenal FC's Training ground for allowing a group of us to view their very impressive facilities.

Movers & Shakers

Mid Anglia - Congratulations to Steve Cherry who after a brief flirtation with groundsmanship is now back in greenkeeping so good to have you back amongst us.

Results

BB&O - Summer golf day: 1 36pts John Quinn; 2 34 pts Adam King, 3 33 pts Patrick Whelehan. NP - Rob Catlin, NP- Simon Mallock, LD- Matt Smith NPin2- Brian Witney.

East Midland - Summer Tournament: Category 1 1 Nick Miles, Nett 75, 2 Ken Harding Nett 76, 3 Mark Blacknell Nett 77. Category 2 1 Asa English Nett 69, 2 Greg Skinner Nett 79. 3 A Mitchell Nett 86. Trade prize: K Haslam.

Mid Anglia - Summer Golf Day held at Brookmans Park GC on 6 August. Our thanks go to Trevor Smith and his team for providing us with the course in beautiful condition. Results: 1 48 pts N Pestle and I Worsley, 2 45 pts R Groves and L Owen, 3 45 points D Watt and N Roberts. The nearest the Pin prizes went to R Goddard at the 9th and Rob Catlin at the 11th.

Thanks to Sponsors

Mid Anglia - Autumn Golf Day Sponsors Avoncrop Amenity, Amtech Amenity, Vassgro Amenity, Farmura, Headland Amenity, ALS, Tuckwells and Rigby Taylor Ltd. Also thanks to our Golfer of the Year sponsor Banks Amenity.

BB&O - The longest drives and nearest the pins were sponsored by Swan Golf Designs, Banks Amenity and Countrywide. Without the continued support of our sponsors these days could not happen and in particular a thank you must go to Gareth Acteson of Rigby Taylor.

Midland - Our thanks to Everris for this month's calendar page. Please consider Emma Kilby of Everris for your fertiliser and maintenance products. Tel: 07784 111965 or email emma.kilby@everris.com

East Midland - AGM Autumn Comp to be kindly sponsored by Farols of Hinckley in conjunction with John Deere with a tremendous offering of prizes.

East Midland – The committee would like to thank Mansfield Sand for sponsoring our Summer Competition and also for Tacit supplying prizes for Nearest The Pin (Mark Blacknell) and Longest Drive (Lee North). The event also attracted Trade members from Banks Amenity, Farols, John Deere, Aitkins and also Tracey Maddison from BIGGA.

East Anglia - A massive thanks to Vassgro Amenity, Avoncrop Amenity, ALS, Amtech Amenity, Headland Amenity, Farmura, Tuckwells Machinery and Rigby Taylor for your continued support. Banks Amenity also sponsor our Golfer of the Year Trophy.

Welcome New Members

Ashley Webb - Oakland Park Golf Club, Jack Andrews-Newbury & Crookham Golf Club, Callam Gwynne - The Nottinghamshire Golf & Country Club, Andrew Green - The Nottinghamshire Golf & Country Club, Martin Hickling - Rothley Park Golf Club, Alan Mitchell - Scraptoft Golf Club, Scott Cranny - Bedford Golf Club, David Evans -Woodthorpe Golf Club, Lee North - Scraptoft Golf Club, Jayne Leyland, Affiliate member - Rigby Taylor Ltd

Around The Green



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







KENT Rob Holland grassyars@ hotmail.com

SUSSEX Chris Humphrey chris@collierturfcare.co.uk

EAST ANGLIA Mick Lathrope

ntlworld.com

A ESSEX e Arnold Phipps-Jones essexbigga@ talktalk.net

Events Coming Up

East Anglia - 9 October, event at Bury St Edmunds (I didn't even know he was dead!), 4 December, Thorpeness turkey trot. Merry Christmas in case I forget.

Sussex - The next event is on 20 September at Beauport Park GC. Please contact Pete Smith for more information and entry details on 07880 030113.

Kent - 19 September, Autumn event at Sene Valley GC. Please advise us of your attendance ASAP.

Surrey – Coming up are The Cresta Cup at Wimbledon Park GC on 24 September and the final for the Surrey Bowl is on the 1 October at Foxhills GC.

Surrey - Merrist Wood College has been booked for early evening educational seminars, which are scheduled to take place on October 17 and November 28.

News

East Anglia - Stowmarket in June was lovely thanks to Mat Gill and his team - 50 souls turned up. Prizes were presented by Dick Taylor, Stowmarket Captain. Larry Pearman won the loo seat mainly because he hadn't won it before! Results below.

Sussex - 1 August saw 28 members turn out for our section's summer competition at the glorious heathland course of Piltdown. Many thanks go to John and all of his team for the condition in which this pretty course was presented. Thanks again to the sections annual sponsor for enabling another enjoyable day, and also Pete Smith for all his organisation for the event. I would be grateful if you could contact me with anything of interest for future articles – thanks.

Kent - Congratulations to Russ Bain of Chislehurst GC. He and his wife Kelly have welcomed baby Ruben who arrived on 14 August. Congratulations too to Lydd GC Course Manager and Kent FC reserve goalie Darren Burton who has managed to qualify again for the Trilby Tour. Be prepared to see him on TV plying his trade in a silly hat.

Essex – Recent golf day, a big thank you to Tony Stubbings the owner of Channels Golf Club plus Ray Clark and his team for the fantastic

condition of the course and a golf day to remember, the revised set-up is a true test of golf. Results below.

Essex - The next golf day is at Braintree Golf Club on Tuesday 24 September (Please note the revised date). Lunch will be served before we play with, prizegiving straight after play finishes. Times to be advised.

Entries to Antony Kirwan: at "Play Golf Colchester" Bakers Lane, Colchester, Essex. CO3 4AU or antz16@ btinternet.com by Friday 20 September.

Essex - Ben Scrivener is still waiting to hear from those seeking further education. For more information please contact Ben at gingermunky@hotmail.com

Movers & Shakers

Surrey - The Willmott & Weston duo are launching their Cookbook and TV series after successfully providing the catering recently at The Sunningdale GC McMillan Tankard.

Results

Mid Anglia - Stowmarket: 0-9 Mick Buck 38, Graham Hurren 31; 10-18: Adrian Hollins 37, Mark Broughton 30; 0-10: David Driver 34, Adam Mulley 32.

Sussex – Summer Comp: Winner of Division 1 Richard Webber 40 points. Division 2 Pete Smith with a poor 31 points. Division 3 Kane Smith with just 28 points.

Surrey - The 33rd McMillan Tankard Comp: 1 Craig Ayton 40 pts with 25 scored on the front nine, described as a dream round and the best golf he has ever played. 2 Grant Steward 37pts, 3 Tom Brearley 36 pts. Jack and Rita McMillan presented the prizes on a day fuelled with friendship and camaraderie on and off the green.

Essex – Channels Golf Club – Greenkeepers: 1 Ross Bennett 39pts, 2 Stuart Rogers (National Qualifier), 3 Antony Kirwan (National Qualifier). Trade: Michael Fance. Guest: Steve Crosdale. Nearest the Pin 11th: Andy Cracknell – 17th Roy Shepard.

Thanks to sponsors

Mid Anglia - Main sponsors at Stowmarket were Toro, others were Aitkens, Rigby Taylor, Collier Turf Care, Headland, Tomlinson, Everris and Lely UK.

Surrey - A superb and interesting course walk and presentation by Murray Long on heathland management proved very popular. Thank you to Sunningdale GC and those who gave up their time to organise this event.

Welcome New Members

Howard Jenner - RAF Marham Golf Club, Luke Curtis - Epping Golf Course, Adam Oakley - Bishop's Stortford Golf Club, Nigel Harris - Langley Park Golf Club, Zach Hall - Royal Cinque Ports Golf Club, Tyler Rodgers - Langley Park Golf Club, Adam Peck - Silvermere Golf Club, Jack Hamer - Silvermere Golf Club, Matthew Fox - Queenwood Golf Club, William Hammond - Broadwater Park Golf Club, Conor Walsh - Beaverbrook Golf Club, Kristian Knight -Beaverbrook Golf Club, Dylan Brychta - Beaverbrook Golf Club, Andrew Axell - Willingdon Golf Club, Alex Merritt - Rookwood Golf Course.

Around The Green

South West & 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 – Tony Gadd greenkeeper bosgc@gmail.com

 DEVON & CORNWALL George Pitts m gpitts@ yelvertongolf.co.uk

SOUTH WALES Peter Holmstrom pholmstrom@ countrywide farmers.co.uk

Events Coming Up

South Coast - Next golf fixture is at Meon Valley Golf and Country Club on 9 October. We haven't played there for many years so please come and support the event, entries as usual to Kevan Glass at Keepers Cottage, Brokenhurst Manor GC, Sway Rd, Brockenhurst, Hants, SO42 7SG, or glassy2003@hotmail.com.

South Coast - Match against the South West is at North Wilts GC on 26 September, I need a team of 10 so if you want to play please let me know on greenkeeper@gmail.com as soon as possible.

South Coast - The Toro Irrigation Roadshow Seminar is to be held at Sherbourne GC on 23 October. This is a full day educational programme on the importance of your irrigation system, finishing with a workshop on repairs and trouble shooting. Included in the day is coffee and a bacon roll on arrival and a 2 course lunch for the incredible price of £10. The section committee will be assisting in organising the day so entries to Alex McCombie, for more info southcoastsecretary@gmail.com. This will be open to other sections so be quick with your entry. More info next month.

South Wales - Next meeting is our AGM at Machynys Penisular GC on Wednesday 16 October **South West** - SW Section v South Coast Section at North Wilts GC on 26 September, South West Section AGM at Filton GC on 16 October and South West Section Christmas Tournament at Ogbourne Downs GC on 19 December, enquiries to Wayne Vincent. There are a few spaces still to be filled on Excavator Safety Training Update to be held towards the end of the year, a must-do for all licenced operators in order to maintain their certification, please contact Paul Worster for details and keep an eye on the BIGGA Bulletin boards for more details.

News

South Wales – We've recently received the sad news that Chris Jenkins, Course Manager of Tenby Golf Club and lifelong supporter of the bowling club network in Pembrokeshire, had suddenly died. Our thoughts from everyone in our section go out to all his family and friends.

 ${\bf South \, Wales}$ - I am now a grandfather at the ripe old age of 34 only a step one thankfully!

South Wales - Our golfing team unfortunately went down 4.5-1.5 recently a big thank to JK and his team at Chipping Sodbury Golf Club for their hospitality and of course the superb golf course set up.

South West - A thoroughly convincing victory of 4.5 to 1.5 was had by the South West Section over South Wales Section at Chipping Sodbury on 15 August, many thanks to John Keenaghan and his team for all of their efforts in preparing a fantastic golf course.

South West - Once again the South West Section will be sponsoring a place to attend BTME in January 2014 to include accommodation, transport and education. Please contact any of the committee members to express your interest in this fantastic opportunity.

Thanks to Sponsors

South West - Many thanks to our section patrons Ecosol, Irritech, Headland Amenity, Countrywide, Greensman and Farmura for their much valued support of section events and training contributions.

Welcome new members

Shayne Savident - St Pierre Park, MJay Anderson - Romsey Golf Club, Stephen Dear - Romsey Golf Club, Rob Donnelly - Hockley Golf Club, Matthew Amy - La Moye Golf Club, Owen Haskins, Affiliate -Tony Valentine Golf Centre, Sean Chapman - St Mellion Hotel G&CC

Welcome new overseas member

Ryun Holden - Limpachtal Golf Club



THE MAD MOWER BOYS ARE BACK...AND THIS TIME IT'S THE HARD ROAD TO HARROGATE!

A Textron Company NORE DETAILS CONING SOON....



IN SUPPORT OF SCOTTY'S LITTLE SOLDIERS The charity for children of the fallen

CHARITY NO 1136854



Greenkeepers Training Committee

In a new series, the GTC has invited representatives from its Quality Assured Centres and Training Providers to discuss their particular specialism within the sports turf sector



In this first month, Martin Ward, Managing Director of Symbio, explains the basics of good greenkeeping practices and how the company is intent on helping course managers and greenkeepers understand what happens below the surface. There is also a series of workshops planned...

20 years have passed since the first products containing soil microbes became available for turf managers. In the early years they were designed to solve specific problems like black layer, nutrient retention and thatch degradation, based upon easily observed actions of common soil bacteria.

The early results sparked off a wave of research initially by professors interested in microbial reactions on turf with Professor Alan Gange at Royal Holloway College, University of London at the forefront. Latterly colleges offering degrees in turf science have played a practical role guiding students through research into a range of topics for their degree theses.

Dr Andy Owen and his colleagues at Myerscough College, a leading GTC Quality Assured Centre, have played a leading role in this respect.

Specific turf research in the UK and the USA has increased our understanding about the myriad of relationships between the grass plant and the chemistry, biology and physical properties of sports turf rootzones. So how does this information affect the daily management practices of the course manager?

The main areas where healthy soil allows management practices to improve to help produce fast, even, low thatch greens are:

Reduced Physical Aeration (it is still needed but in less disruptive form)

Reduced Fungicde Use Reduced poa annua - improved perennial grass growth Reduced fertiliser input

The main change is the treatment of organic matter. Organic matter comprises of dead grass i.e. thatch which is generally considered bad and roots, organic nutrients, soil biomass (bacteria, fungi, protozoa, nematodes, arthropods and worms), humic compounds and organic acids which are essential for healthy plant growth.

Thatch is also the primary food for fungi. Traditionally thatch has had to be physically removed with costly invasive practices, deep scarification and hollow coring, however aeration provided by micro tines into the thatch layer is sufficient if it is to be degraded by fungi and bacteria.

Thatch is converted to plant food and humic compounds which increase cation exchange capacity (CEC) and reduce fertiliser inputs but more importantly, the rootzone develops a fungal biomass which we now know is needed if perennial grass is to be grown instead of poa annua.

This means that less top dressing is required to maintain a fast surface, less fertiliser is required for more consistent surfaces and you do not need to starve greens to reintroduce bent and fescue.

Percolation rates are also a function of the biological activity in the rootzone. Practically all beneficial microbial activity is undertaken by aerobic microbes but it is perfectly possible to manage many golf greens without large tine hollow coring, because bacteria, fungi and beneficial nematodes all maintain friable, fast draining, aerated soil.

Regular microtining and occasional vertidraining should be all that is required for all but the most compacted, thatchy greens.

Disease management is now high on most people's agenda with the cost and gradual reduction in available fungicides.

The basic premise is that healthy grass is less susceptible to disease but the stresses put upon greens, tees and fairways means that the grass is always susceptible to pathogen attack.



The GTC is helping to organise a series of seminars around the UK this autumn to explain the practical aspects of making soil biology work for you.

For further details visit: www.the-gtc.co.uk

Also contact Symbio direct for dates, venues and to book your place on a workshop:

Tel: 01428 685762 Email: polly@symbio.co.uk



Contact Details

David Golding GTC Education Director and Standards Director, Greenkeeper Training-Europe

01347 838640 david@the-gtc.co.uk GTC

Aldwark Manor Near York YO61 1UF

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

Lwitter You can follow the GTC on Twitter @TheOfficialGTC The good news is that there are four natural methods that greenkeepers can employ to manage disease.

All require a healthy population of bacteria and fungi around the root system. When the microbial population is in place: -

1) The beneficial microbes form a protective barrier around the roots and leaf lesions.

2) Some produce natural antibiotics to kill pathogens.

3) Pathogens become a food source for the beneficial microbes.

4) Some microbes and biostimulants encourage the plant to produce hormones called phytoalexins that help it fight off disease.

Fertiliser requirements are also reduced, microbes are made from carbon, nitrate and phosphate so they live on and hold applied nutrients in the soil but more importantly they help convert the proteins and carbohydrates produced by the grass during photosynthesis and are the driving force behind the nitrogen cycle.

Apart from reduced physical disruption the key changes to management practices required by the modern greenkeeper are to introduce the correct microbiology to the rootzone and to keep it alive by the correct use of biostimulants, aeration, fertilisers and fungicides.

If you want to manage poa annua greens you will need a bacterial dominant rootzone that supports annual plants and feed the biology simple sugars and carbohydrates.

If you want to grow and manage perennial grasses, a balanced fungal bacterial mix is required that is fed by more complex carbohydrates, seaweed, humic and fulvic acids.



puzzlepage

Our monthly puzzle page to keep you entertained

weekend of the Premier League season ...

1) Which player scored the first

2) Who was the first player to be

3) Three players missed penalties

on the opening weekend - name

4) Which manager was charged by

the FA for comments made against

a decision - days after vowing to be more subdued in interviews this

5) Name the scorer of Norwich's second goal on the opening day.

sent off?

them.

season?

goal of the Premier League season?

QUICK 'NINE HOLE' QUIZ - Nine questions all about the opening

CROSSWORD



ACROSS

1 Large container for carrying post (7) 5 Subclass of Eutheria, mammals excluding monotremes and marsupials (7) 9 Of a woman's garment, having a low-cut neckline (9) 10 --- box; a television, colloquially (5) 11 1869 travel book by Mark Twain (9,6) 12 President of Venezuela who died on 5th March 2013 (4.6)15 US sitcom in which Danny DeVito played Louie DePalma (4) 17 1977 Commodores hit written by Lionel Richie (4) 18 Leading newspaper commentaries (10) 20 One who is unacceptable or unwelcome (7,3,5) 23 Drive out (5) 24 Flour from which some bran and germ have been removed (9) 25 Add afterwards, append (7)26 Line which touches a curve (7)

DOWN

1 1978 Alan Parker film whose title is prison slang for an inmate's attempt to escape (8,7)

2 Pertaining to an ancient Peruvian people (5) 3 Device used to control the water level in a cistern (8) 4 Permit allowing permanent residency of a foreign national in the US (5,4)5 Musical which features the

song I Know Him So Well (5) of a George du Maurier nove (6)

7 Small thin sausage (9) 8 Novel which introduced th character Sherlock Holmes (1, 5, 2, 7)13 Inn providing restaurant quality food (9) 14 Outgoing person (9) 16 Town whose soccer group is the Falmer Stadium (8) 19 Stage name of US rapper Artis Ivey Jr. (6) 21 Ancient Egyptian city, its name associated with two dams across the Nile (5) 22 --- Laurie Blue Adkins,

English singer-songwriter (



6 Hat named after the heroine Monster Daily SuDoku: Eri 23-Aug-2013

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5)	Daily \$	SuDok	u: Fri :	23-Au	g-2013	3		ver	y hard

6) Which Everton scorer was on loan at Leeds last season only to be largely ignored by their then manager Neil Warnock?

7) Which 40-year-old striker made a substitute appearance in his side's first game?

8) Who scored Arsenal's goal before it all went wrong against Aston Villa?

9) Name the four players who started Mourinho's first match back in charge of Chelsea who also started his final game in his first spell in 2007.

MONSTER **SUDOKU**

Fill in the grid so that every row, every column and every 4x4 box contains the numbers 0 to 9 and the letters A to E.

SUDOKU

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Fill in the grid so that every row, every column and every 9 box shape contains the numbers 1 to 9.



BUYERS' GUIDE



WASTE2WATER ENSURES YOUR **EQUIPMENT WASH FACILITY COMPLIES WITH THE NEW ENVIRONMENTAL LEGISLATION**

A significant number of golf clubs have been busy during the past year upgrading their equipment wash facility to ensure they are in compliance with the new environmental legislation. If you are not one of these clubs we strongly recommend you take action now. The Environment Agency provide additional measures to ensure compliance with the new EU Water Framework Directive, backed by a Variable Monetary Penalty (VMP) of up to £250,000 for non-compliance.

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