### Sunday 16th January

- **10.30 - 18.00**: Basic Golf Mechanics Workshop ................................................. Member: £95 + VAT, Non Member: £190 + VAT
- **10.30 - 18.00**: Golf Course Design ........................................................................... Member: £190 + VAT, Non Member: £275 + VAT
- **10.30 - 18.00**: How to be an Outstanding Manager - Setting and Managing Expectations .......................................................... Member: £95 + VAT, Non Member: £190 + VAT
- **10.30 - 18.00**: Irrigation System Design ................................................................. Member: £95 + VAT, Non Member: £190 + VAT
- **10.30 - 18.00**: Moving into Management .............................................................. SOLD OUT
- **10.30 - 18.00**: Moving with the Times ...................................................................... Member: £95 + VAT, Non Member: £190 + VAT

### Monday 17th January

- **09.00 - 17.00**: Basic Budgeting and Golf Club Finance ........................................ Member: £95 + VAT, Non Member: £190 + VAT
- **09.00 - 17.00**: Diagnostic and Problem Solving ................................................... Member: £95 + VAT, Non Member: £190 + VAT
- **09.00 - 17.00**: Golf Course Design ........................................................................... Day Two
- **09.00 - 17.00**: How to be an Outstanding Manager - Part 1: How to Motivate and Engage Your People .................................................. Member: £95 + VAT, Non Member: £190 + VAT
- **09.00 - 17.00**: Moving into Management .............................................................. Day Two
- **09.00 - 17.00**: Pesticides Update for NPTC Certificate Holders .............................. SOLD OUT
- **09.00 - 17.00**: So You Want to be a Golf Course Manager - Five Fundamentals for Golf Course Management Success .................. Member: £95 + VAT, Non Member: £190 + VAT
- **09.00 - 17.00**: Turf Managers’ Conference ............................................................... Member: £95 + VAT, Non Member: £190 + VAT

### Tuesday 18th January

- **09.30 - 12.30**: Basic Electrical System Maintenance ........................................... Member: £45 + VAT, Non Member: £80 + VAT
- **09.45 - 10.15**: Efficient Nutrient Technology ........................................................ Free
- **09.30 - 16.45**: Golf Club Marketing ............................................................................. Member: £95 + VAT, Non Member: £190 + VAT
- **09.30 - 10.00**: Update on UK Proposals for Implementing the EU Sustainable Use Directive ................................................................. Free
- **10.30 - 12.30**: Producing a Golf Course Policy Document ....................................... Member: £30 + VAT, Non Member: £70 + VAT
- **10.20 - 11.20**: STRI - Part of the Winning Team at the World Cup .............................. Free
- **10.30 - 11.00**: Wills and Estate Planning ................................................................. Free
- **11.15 - 11.45**: Improving Turf Quality ........................................................................ Free
- **11.35 - 12.35**: Update from The R&A ........................................................................ Free
- **12.00 - 12.30**: The Future of Turf Management ....................................................... Free
- **13.15 - 13.45**: Integrated Lake and Pond Management - Innovative Aquatic Solutions ................................................................. Free
- **13.30 - 16.30**: Introduction to Hydraulics ..................................................................... Member: £45 + VAT, Non Member: £80 + VAT
- **13.30 - 16.45**: Master Greenkeeper Certificate Workshop ........................................ Free - Pre Book
- **13.20 - 14.20**: Ryder Cup Cymru ................................................................................. Free
- **13.00 - 13.30**: Volunteers’ Workshop ....................................................................... Free - Pre Book
- **14.45 - 15.15**: Fulvic Acid the Biostimulant that Extends Early and Late Season Growth ........................................................................... Free
- **14.35 - 15.35**: Preparing the Old Course for the 2010 Open Championship ................. Free
- **14.00 - 14.30**: How Electricity Generation Makes Economic Sense For Your Business ................................................................. Free
- **15.30 - 16.00**: Floridoxinol Providing Innovative Disease Management and Application ........................................................................... Free
- **16.00 - 17.00**: Annual Awards Ceremony ................................................................. Free
- **16.15 - 16.45**: Bunker Erosion: A Sustainable Solution to an Age Old Golfing Problem ........................................................................ Free

### Wednesday 19th January

- **09.30 - 13.00**: Golf Club Management - Getting it Right in 2011. Hosted by the GCMA ........................................................................................................ £30 + VAT (or 2 for £50 + VAT)
- **09.30 - 10.00**: Linking Fuel Savings to Reel Maintenance ........................................ Free
- **09.30 - 12.30**: Protected Species and Habitat Considerations for Bees and Butterflies ... Member: £45 + VAT, Non Member: £80 + VAT
- **09.30 - 12.30**: The Rules of Golf and Course Set-up for PGA Events ......................... Member: £45 + VAT, Non Member: £80 + VAT
- **10.25 - 10.55**: The Three Steps to Transition ............................................................ Free
- **10.15 - 11.15**: The West Course at Wentworth .......................................................... Free
- **11.55 - 12.25**: Aeration on Golf Courses ...................................................................... Free
- **11.10 - 11.40**: Coated Seed Delivering Species Transition on the Golf Course! ................. Free
- **11.30 - 12.30**: Course Manager to Club Manager - The Challenge ............................ Free
- **12.55 - 13.25**: Green Up Your Greens ....................................................................... Free
- **13.30 - 16.30**: Basic Greenkeeping Techniques ......................................................... Member: £45 + VAT, Non Member: £80 + VAT
- **13.30 - 16.30**: Carbon Auditing for Business Advantage ......................................... Member: £45 + VAT, Non Member: £80 + VAT
- **13.40 - 14.10**: Environmental Management of your Golf Course with the Latest Technology in Chemistry ................................................................. Free
- **13.30 - 16.30**: Good Soil Chemistry and Biology the Answer to Practical SustainabilityMember: £45 + VAT, Non Member: £80 + VAT
- **13.15 - 14.15**: Integrated Management of Dollar Spot ............................................ Free
- **14.30 - 15.30**: Demystification of Synthetic Sports Surfaces ..................................... Free
- **14.00 - 16.00**: Development Seminar for Assistant Greenkeepers ................................ Free - Pre Book
- **15.10 - 15.40**: Turf in the Sustainability Era ............................................................... Free
- **15.45 - 16.15**: Working on Your Own at a 9 Hole Course ........................................ Free

### Thursday 20th January

- **09.45 - 10.15**: Sustainable Golf Course Maintenance; aligning golf course performance with the requirements of club members. Free
- **09.30 - 10.00**: Woodfuel Energy that Grows on Trees ............................................. Free
- **11.15 - 11.45**: Energy Efficient Irrigation ................................................................. Free
- **11.45 - 12.15**: Simplified Access Control for your Golf Club ...................................... Free
- **11.00 - 11.30**: Using Poliar Fertilisers to Optimise Putting Green Programming ......... Free
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9am-5pm except Thurs 9am-4pm

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Air-Seal Products Ltd .......... M28
Aitkens Sportsturf Ltd .......... A36
Amazone Ltd ..................... M3
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ASSA ABLOY UK .................. M20a
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Bai cropped
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Gambetti Barre UK Ltd .......... A41a
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Golf Club Managers' Association .... C9
GTC (The) .......................... C12
Groundsman Industries ........ A12

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Inscape...........................................B1b
Inturf ...........................................A37b
ITT Lowara ...................................A10

J Jex Silt Pumping .........................A25b
Job Shop - Personnel Development Zone ....C22
John Greasley Ltd ............................C41
Johnsons Sports Seed .....................A18

K Kessent Sports ...............................B29
Lastec UK Ltd .................................C43
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M MTS Group/Clubcar Golf Buggies ....M21
Myerscough College ..........................C11

N North Staffs Irrigation ....................B26

O Ocmis Irrigation ............................A21

P Penn State University ....................C7
Pinpoint Visualisation ........................A16a
Powakaddy International ..................B31
Progreen Weed Control Solutions .......A25a
Protea Mowers ................................M10
Rain Bird Europe SNC ........................A9b
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RECO ...........................................M15
Revaho UK Ltd .................................A35
Rigby Taylor Ltd ...............................C23
Rufford .........................................C40

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Harrogate Week is unlike any other event. It is your chance to meet and interact with decision makers 24 hours a day. After the show closes there are endless opportunities to network in the Harrogate bars and restaurants with fellow turf professionals.

As you can imagine, Harrogate Week proves a busy time for the pleasant spa town. With much to see and do, Harrogate offers fine cuisine and a lively nightlife along with a glamorous heritage, famous for its Turkish baths.

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Ali Raj ...................................... Tel: 01432 621627 ............ Indian
B.E.D. ....................................... Tel: 01423 568600 ..... Modern English
Bengal Spice .............................. Tel: 01423 502610 ............ Indian
Betty’s ...................................... Tel: 01423 502746 . Traditional English
Caramba Tapas & Bar ... Tel: 01423 505300 ............... Tapas
Cattleman’s Association ... Tel: 01423 561456 ....... Tex Mex
Chez La Vie ............................... Tel: 01423 560666 . Traditional English
Damn Yankee ............................ Tel: 01423 561424 ....... Tex Mex
Drum and Monkey ....... Tel: 01423 502650 ............ Seafood
Harrogate Brasserie .......... Tel: 01423 505041 ............ English
Hedley’s Wine Bar .............. Tel: 01423 562468 ............ English
Horoscope ............................... Tel: 01423 508144 ......... Chinese
Joe Rigatoni ............................. Tel: 01423 500071 ............ Italian
La Tasca .................................... Tel: 01423 566333 ............ Tapas
Thai Elephant ......................... Tel: 01423 530099 .......... Thai
Salsa Posada ......................... Tel: 01423 565151 ............ Mexican
William and Victoria ...... Tel: 01423 506883 ............ English

WHERE TO STAY...

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Old Swan Hotel, Swan Road .............. Tel: 01423 500055
Studley Hotel, Swan Road .............. Tel: 01423 560425
Grants Hotel, Swan Road ............. Tel: 01423 560666
Majestic Hotel, Ripon Road .......... Tel: 0870 1688833
Crown Hotel, Crown Place ............ Tel: 01423 567755
Cairn Hotel, Ripon Road .......... Tel: 01423 504005
Cedar Court Hotel, Knaresborough Rd .. Tel: 01423 858885
St George Hotel, Ripon Road .... Tel: 01423 561431
Kimberley Hotel, Kings Road ........ Tel: 01423 505613
White Hart Hotel, Cold Bath Road .... Tel: 01423 505681
Alexa House, Ripon Road .......... Tel: 01423 501988
Yorkshire Hotel, West Park .... Tel: 01423 565071
Travelodge, The Ginnell ............ Tel: 0871 9846238
Shannon Court, Dragon Avenue .. Tel: 01423 509858
Grafton, Franklin Mount ........... Tel: 01423 508491
Camberley, Kings Road .......... Tel: 01423 561618

For more information on accommodation and bookings visit: www.reservation-highway.co.uk access code “bigga” or Tel: 01423 525577.

THINGS TO DO AND WHERE TO PARTY...

Carringtons, Station Parade ............ Tel: 01423 525551
The Moko Lounge, Kings Road ........ Tel: 01423 525862
The Viper Rooms, Parliament Street .. Tel: 01423 520567
Odeon Cinema, East Parade .......... Tel: 0871 2244007
Harrogate Theatre, Oxford Street .... Tel: 01423 502116
UK Super Bowl, Tower Street ...... Tel: 01423 529191
How to get to Harrogate

Rail

Harrogate is served by the main line stations in Leeds and York. Trains run approximately every 30 minutes at peak time. Harrogate International Centre is a 10 minute walk from the station. Taxis are available outside the station and will cost around £3.50.

For further information on rail services to Harrogate contact National Rail Enquiries on 08457 48 49 50 or visit www.nationalrail.co.uk.

Air

Leeds Bradford International Airport
www.lbia.co.uk

Leeds/Bradford airport is approximately 12 miles from Harrogate. Taxis are available at the airport at a cost of approximately £18. You may wish to visit the following websites for flight information:

www.flybe.com
www.jet2.com
www.airsouthwest.com

The “Bus 2 Jet” 767 service links Leeds Bradford International Airport with Harrogate town centre. The service runs every 90 minutes between 0615 and 2245, with an average journey time of around half an hour. For further information on this service please contact Harrogate & District Travel Ltd on +44 1423 566061

Or visit www.bus2jet.com

Manchester International Airport
www.manchesterairport.co.uk

Manchester International Airport is situated halfway between London and Edinburgh, 75 miles from Harrogate. Public Transport links are available 24 hours a day offering services to Harrogate via Leeds or York.

Coach

National Express
www.nationalexpress.com

National Express is the UK’s largest scheduled coach network, offering several services a day to Harrogate from all over the UK.

Car

www.theaa.com

Directions

From M1: Leave at Leeds and take the A61 to Harrogate, approximately 15 miles. Harrogate International Centre is signposted.

From M62: Leave at Leeds and take the A61 to Harrogate, approximately 15 miles. Harrogate International Centre is signposted.

From the South A1(M): Leave the A1(M) at Wetherby and take the A661 to Harrogate, approximately 10 miles. Harrogate International Centre is signposted.

From the North A1(M): Leave A1(M) at junction 47 and take the A59 to Harrogate, approximately 8 miles. Harrogate International Centre is signposted.

From the East: Take the A59 to Harrogate. Harrogate International Centre is signposted.

From the West

Take the A59 to Harrogate. Harrogate International Centre is signposted.

Harrogate Town Centre Car Parks

MULTI-STOREY
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SURFACE LEVEL
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All town centre car parks are open 24 hours.

Charges apply all days at all times (including Public Holidays)
Free parking for Blue Badge holders and motorcycles
Pay and Display parking is in operation in most town centre streets in Harrogate.

Charges and restrictions apply on Sundays and Bank Holidays in all parking areas unless otherwise stated.

Sea

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Direct Ferries are part of Direct Ferries Ltd, an online travel provider based in the UK offering ferry crossings to the UK from the continent. Registered agents of the ferry operators are listed on the website, they sail to 14 Countries and 54 ferry ports on over 60 routes.

North Sea Ferries, from Rotterdam/ Zeebrugge to Hull, 59 miles from Harrogate.

Park & Ride

BTME & ClubHouse provides a FREE ‘Park and Ride’ service from the Great Yorkshire Showground (from the A1M: exit A59 towards Harrogate, follow the ring road to the Great Yorkshire Showground (A661)) to Harrogate International Centre on all three days of the conference and exhibition. If you are planning to drive to Harrogate, this service will help you avoid any traffic problems in town and save you looking for a parking space.

The shuttle service will run at thetimes:
• Tuesday 20 January 08.30 to 17.30
• Wednesday 21 January 08.30 to 17.30
• Thursday 22 January 08.30 to 16.30
HARROGATE WEEK 2011 PRESENTS...

THE BIGGA BEER FESTIVAL

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This is your opportunity to work at The Open Championship and assist the Royal St George’s team with the preparation of the course and be a part of the on-course team which accompanies each match ensuring bunkers are raked in a correct and professional manner.

It will be your responsibility to make your way to the team’s base for the week – University of Kent, in Canterbury - but after transport to and from the golf course, accommodation and meals will be provided for the duration of the Championship.

You will be expected to report for duty by 5pm on Wednesday, July 13, and be available until the close of play on Sunday – a meal and bed and breakfast will be supplied for the Sunday evening and Monday morning if required.

This opportunity is open to full BIGGA members only. Younger members, relatively new to the Association, will also be actively considered.

To apply please complete this application form and send to:
Scott MacCallum, BIGGA HOUSE, Aldwark, Alne, York, YO61 1UF.
For further information contact Scott on: 01347 833800 or email: scott@bigga.co.uk
Closing Date for applications for The Open Support Team is February 1, 2011, and you will be notified later in the month.

<table>
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<th>Name</th>
<th>Golf Club</th>
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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.

Should you be chosen you must send a passport picture of yourself to BIGGA HQ as the R&A now have photographic ID for all Open Championship workers.
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Preventing Winter Green Damage

Winter damage, aside from causing many a sleepless night, can be costly and time-consuming to repair. In preparation for a potentially harsh winter ahead, Jim Cook caught up with a man who has had a great deal of experience in dealing with such damage, but in a slightly more extreme environment.

Hauger Golf Club sits 13 miles north of Oslo, in Norway. For up to five months in the year it is common for the course to be buried under three to four feet of snow, with temperatures plummeting to a numbing -35 degrees centigrade.

Course Manager, Eoin Moroney, took the job of making one of the busiest courses in Norway presentable by spring each year in 2003. Since then, some of the harshest winters ever recorded in the country have allowed him to experiment with various methods to reduce damage come the melting of the snow and ice.

Eoin spoke of the problems caused by the weather in Norway and of how tried and tested techniques used by him to combat winter damage could be applied to golf courses which endure less extreme conditions, but might suffer the same symptoms.

He began by explaining how no two winters resulted in the same kind of damage to greens, although two types were typical every year.

“One is disease where you have an ideal environment under the snow to activate fungal habitat, where Typhula incarnata (grey snow mould) and Microdochium patch (pink snow mould) are the most common. This year was a typical example where we had severe outbreaks of grey snow mould when we had up to one metre snow cover on greens and a very mild climate under the snow. The other is ‘winterkill’ where ice sheets create a burning effect on the greens, killing off much of the grass plants in the low lying areas.”

Winterkill can also be caused by crown hydration, where ice crystal form in the crown of the plant rupturing cells; desiccation, where a plant dies after drying whilst dormant or semi-dormant; and low temperature kill, when ice crystals form at temperatures below zero degrees centigrade. The occurrence of this winterkill is unpredictable and as well as varying between different courses, can also vary across the same course.

“The surprising thing about this climate is that courses in our particular region always seem to encounter different problems every year which maybe lie only 15 km from one another. The other amazing thing is different areas of a particular course can differ greatly from other areas. Greens at higher or lower altitudes can differ greatly. Greens and fairways with low spots or holding points will suffer more winterkill than greens with good run-off highlighting the importance of good green design.”

In preparation for winter, the amount of nitrogen and iron applied to greens was crucial.

“We always try to harden up the plant going into the winter by applying iron late on in the autumn along with applications of preventative fungicide. We have found reducing the nitrogen in the plant going into the winter is also a key to combat any fungal activity.”

Over the years, Eoin has employed a number of techniques with a view to prevent or minimise damage caused during the snow-covered months. Several have emerged as being consistently successful.

“We try to keep the surface of the green dry going into the first...
frost period by dewing-off often. We have also invested heavily in snow removal equipment to enable us quickly to get snow removed when necessary. We often will have two 120hp tractors on the greens and tees in the winter, which is unheard of in the UK. We have also tried some trials with covering the greens going into the winter and I do have a lot of faith in this. It takes a lot of man-power though, which we do not have at this time of the season. We have also tried to install temporary extra drainage in low areas of the greens to help get rid of melt water underneath the ice at a faster rate. Spreading granular charcoal on the surface after snow removal is very useful to breakdown ice which can be anything from 1cm to 7cm thick."

Green design was vital, so as not to allow ice to form in lower areas, as was preparation.

"It is definitely about good preparation going into the winter, but it is always about timing it right to get rid of the snow. I feel the most critical aspect is at the construction stage, where the greenkeeper should be highly involved with the architects to design greens and surrounds to cope with the problematic areas such as good drainage and run-off. If a greenkeeper hasn’t got a good surface run-off, he or she is always going to be faced with an uphill battle for the future."

Seasons at Hauger are just five months long and because of long daylight hours meaning early morning and late evening play on the course, an intense working environment exists. Eoin explained how he coped with this.

"We have 24 hours of daylight in June and July and it is always a tricky task to get out in front of golfers no matter what the working hours will be. Having good planning and having a high quality of staff is definitely a bonus. Having sufficient amount of staff is always going to aid in helping get all daily tasks done. We are quite fortunate to have from 12 to 13 greenkeepers on a daily basis supplemented with a well maintained fleet of machinery. Saying that it never fails to amaze how fast grass grows and how keen the golfers are to get out in the morning and how late they want to play into the night."

"We have 24 hours of daylight in June and July and it is always a tricky task to get out in front of golfers no matter what the working hours will be” Eoin Moroney,

Techniques for dealing with winter damage in extreme conditions differ wildly from course to course and budgets are often the deciding factor for Course Managers.

“We are running on a medium end budget and we are four full time staff including a mechanic and up to 13 in the high season. We can manage to remove snow from greens and tees where as a lower end budget course might not be able to do this and will basically leave the snow to take care of itself. Saying this, there is no right or wrong way and many Course Managers work with their own feelings and local climate. High end budget courses would have the opportunity to work with winter covers and plough snow through-