strongly in Scotland it may not be blowing strongly in Germany but by linking wind turbine generators into the same grid we hope to achieve a more reliable, predictable source of power ".

We have helped one farmer obtain planning permission for an 800 kW horizontal axis wind turbine in the central belt. It was a prolonged struggle. Environmental Health Officers and Planning Officials work to protocol. The noise rules for large single wind turbines are based on the revised Planning Advice Note PAN45 which is a copy of ETSU R 96. It is 11 decibels more stringent than the PAN56 rules for industrial noise! PAN45 base the noise assessment on back ground sound levels, which as everyone knows, varies from minute to minute, hour to hour, week to week, month to month and season to season. Ten minute recordings of back ground noise could vary by 25 decibels in a 24 hour day. The graphical method of correlating actual sound measurements with wind speed and the specific noise of the wind turbine for wind farms is far too elaborate and expensive for a small number of large wind turbines.

We have submitted a new methodology for wind turbine noise testing and evaluation to Mr. Richard Lochhead MSP, The Scottish Government Minister for the Environment. A much better and more consistent and reliable way of preventing noise nuisance would be to eliminate the need for background sound measurements by zoning all areas into say five noise categories from NC 1 to NC5. NC 1 would be an area of outstanding natural environment with virtually no human made noise. NC5 would be a very industrialised area, or near airfields, motorways or railways. We believe this rational method will be fair for both developers and citizens who wish reasonable and strict control of noise pollution. We are confident that we can convince civil servants and elected representatives that our proposed methodology is infinitely better than the revised PAN45. This will make it possible for golf clubs, farmers and others to obtain planning permission for one, two or three large wind turbines provided the wind turbine noise complies with the NC category. The surplus electricity could be sold to the grid giving golf clubs an additional source of income while making a valuable contribution to saving our planet from a disaster.

There have been planning applications for small wind farms near where we live. There is a very active minority who campaigned against these planning applications. Their spurious statements include the effect of low frequency sound energy on health, noise nuisance, threat to birds of prey and so on. These campaigners were silent while living in relative luxury when most of our electricity was generated by coal fired power stations which spewed out sulphur dioxide and other poisonous gases, killing and making ill children and adults and causing acid rain which blighted vegetation and lowered the PH value of our reservoirs, lochs and rivers with disastrous consequences to angling and the tourist industry. Their real reasons for opposition to wind turbines are because they do not like the look of them and they fail to understand the desperate need for increasing reliance on renewable sources of energy. Beauty is in the eye of the beholder. When we see these majestic machines we are filled with admiration at the ingenuity of the Engineers who have devised and developed a means of converting wind power into electrical energy without polluting the environment and without causing the death of children. They have also made a significant contribution to reducing carbon dioxide and global warming.

We have had a sympathetic response from a well known Scottish bank which may consider favourable rates for lending money for such a worthy cause as installing wind turbines. Grants and subsidies may be available to help meet our national targets to reduce carbon dioxide emissions.

The main requirements for installing wind turbines are:

- Reasonably high average wind speeds
- Conveniently situated for connection to the grid
- A location such that noise and flicker would not disturb the neighbours

• Visual impact would not be detrimental to the tourist industry

There are four main ways that golf clubs, farmers and other land owners could benefit financially from installing a small number of large wind turbines:

- Greatly reduced electricity bills
- By selling surplus electricity to the grid
- When there is no oil you will still have electrical power
- Possibly in the future by selling your carbon credits (Refer to "What's your quota?")

OR

• Leasing some land to a wind turbine developer

We need to know how many golf clubs, farmers and small land owners are interested in finding out more about the installation of a small number of large wind turbines. If there is a sufficient number we would have more power to convince the Scottish Government to change the flawed noise rules. This first step is essential to make it possible to obtain planning permission at a reasonable cost and within an acceptable time.

Ian Watson is Proprieter of and Robert Hall Engineer/Acoustician of SNV Consultants. If you are interested in wind turbines and want to help to rectify the noise rules write or email SNV Consultants, 4 Kirkland Avenue, Blanefield, Glasgow G63 9BZ. snvconsultants@btconnect.com

WHAT'S YOUR QUOTA?

Fred Pearce in the New Scientist 17th November 2007

"Much of the carbon dioxide that is warming us today has been in the atmosphere for decades, even centuries. While developed countries only contribute about 50 per cent of emissions today, they are responsible for 80 per cent of the human made £0, that is already there.

"Cutting emissions needs to be done in as fair a way as possible, and since Earth has a limited capacity to absorb CO2, one equitable solution would be to divide the remaining capacity among the world's population. Many see an idea known as "contraction and convergence" as the best way forward. This idea has been kicking around for more than a decade, but is currently most associated with a British MOO called the Global Commons Institute. If implemented, it will mean that global emissions have to contract overall, while converging on a single per capita figure. Current emissions for a global citizen are about four tonnes of CO2 per year, on average. This figure will ultimately have to drop to below I tonne.

"The formula was initially dismissed as hopelessly idealistic, but it is now gaining new credibility. Most recently, the German chancellor Angela Merkel backed the idea of national targets based on per capita emissions. Earlier this year, the UK's then environment secretary, David Miliband, took the debate one step further. He said that within a decade we could all carry a card that recorded our annual carbon emissions entitlement. Every time we filled up our cars with fuel, booked a flight or made an energy intensive purchase, our card would be debited.

"Sure, the rich would be able to buy their way out of the limits. But they would have to buy the extra carbon credits they needed for that flight to the Maldives or to light their 20 bedroom mansions. The more energy efficient among us could make money by selling spare credits to them At the end of the day, there would only be a certain volume of emissions allowed. And the smaller that volume, the better for all of us."

www.newscientist.com

17 November 2007, NewScientist, pg 41



EMPLOYMENT LAW AND THE WORKING TIME REGULATIONS



In the last edition of The Greenkeeper we advised you of one change in the Working Time Regulations, namely the extension of paid holiday, which was effective from 1 October 2007. Those rights will be further extended in April 2009.

The Working Time Regulations also introduced the concept of the 48-hour week. In short, this means that employees, unless they have signed an Opt Out Agreement, are prohibited by law from working more than an average of 48 hours averaged over a 17 week period. Clearly this has serious implications for golf club employees, where relatively little work can be done in the winter months but conversely much more requires to be done in the summer when there is more daylight and the grass is growing!

Fortunately, the framers of the European Directive were aware of this problem and allowed member states to provide for a longer reference period in certain "special cases" in which case the reference period can be extended up to 26 weeks. One such special case occurs where, "There is a foreseeable surge of activity".

This, we believe, covers golf courses and therefore clubs can feel reasonably confident that, as long as employees do not work in excess of 48 hours over a 26 week period, they are not in breach of the Regulations. However, in some parts of the country, particularly in northern Britain, even that may not be a long enough reference period where daylight hours are considerably longer.

Where employees wish to work longer hours than the Regulations allow they will have to have signed an Opt Out Agreement, which requires to be carefully worded and legally compliant to be effective. An Opt Out will permit the employee to work longer hours without the employer facing legal consequences. It should be noted that the EU are planning to scrap all Opt Outs once they get the agreement of member states. However, no date has been set for their removal.

The Xact Group currently provide state of the art health and safety advice to golf clubs. We have recently added a similar employment law/ HR service, which can provide both advice and draw up the necessary documentation to assist in any employment law/HR issue.

For further information on this or any other aspects of our employment law/ HR service please feel free to telephone us on 0845 665 3006.







WHAT'S YOUR NUMBER?



Name: John Nicholson Position: Principle

Company: John Nicholson Associates

How long have you been in the industry?

"14 years, working on predominantly golf courses."

How did you get into it?

"I always had a love of the traditional British golf course and a passion for great architects, such as Harry Colt, and could see many of the wonderful courses from the 1920s and 30s were being destroyed by the ingress of scrub and woodland. I was aware no one was giving practical and achievable advice to golf clubs regarding woodland and heathland management. I therefore embarked on a mission to ensure clubs had the right trees in the right place rather than the wrong tree in the wrong place!"

What other jobs have you done?

"I also have a business that deals in 19th and 20th century art."

What do you like about your current job?

"It's great to see the results of the work, the effect on the design strategy is immediate and the following season the benefits to the playing surfaces become evident. It is always nice when you achieve results and go from being the enemy to the vector for improvement. I love working with Ken Moodie and Ken Brown doing the strategy

for golf courses, they are both very knowledgeable and we all have a love of the traditional British style course."

What changes have you seen during your time in the industry?

"The biggest change I've seen in the industry is the difficulties many clubs are having with finance and membership numbers. I strongly feel clubs that don't invest in their courses will find it increasingly difficult to compete as proprietary clubs are becoming increasingly competitive."

What do you like to do in your spare time?

"I play golf and love country sports and the arts. I should say I play at a links course, no trees!"

Where do you see yourself in 10 years time?

"Alive I hope."

Who do you consider to be your best friends in the industry?

"I hope most of my clients regard me as a friend, as well as a colleague, along with all my associates, Ken Moodie and Ken Brown and Mike Edwards."

What do you consider to be your lucky number?

"I don't really have one."

Pick a number "6"

John has picked Richard Campey from Campeys Turfcare



Greenkeeper International brings you 'In the Shed', a puzzle page to keep you entertained when the weather forces you in or for when times are slow.

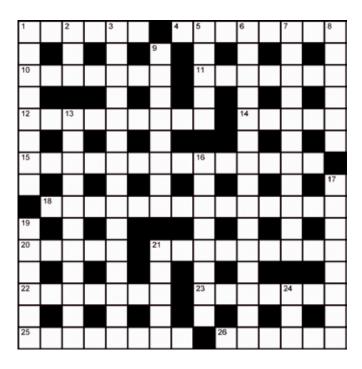
CROSSWORD

ACROSS

- 1 Gesture of respectful greeting (6)
- 4 Substance obtained through compound reaction (8)
- **10** Person (7)
- **11** Word made up of initial letters of other words (7)
- 12 Language also called the Taal (9)
- **14** Make improvements to text (5)
- **15** Birthplace of Pogues singer Shane MacGowan (9,5)
- 18 Mischievous or dishonest behaviour (6,8)
- **20** Provide (food) (5)
- **21** Greek philosopher who taught Alexander the Great (9)
- **22** Four-stringed Hawaiian guitar (7)
- 23 Kenya's capital (7)
- 25 Native of the main island of French Polynesia (8)
- 26 Familiar routine of e.g. comedian (6)

DOWN

- 1 Emergency treatment area of hospital (8)
- 2 Alcoholic drink distilled from fermented molasses (3)
- 3 Colloquial name for a wealthy residential area (11,4)
- 5 _-up, a warning that something is about to happen (5)
- 6 The spoken voice of Madonna's 1990 hit Vogue (7,8)
- **7** Hiding (11)
- 8 11th letter of the Greek alphabet (6)
- **9** The study of armorial bearings (8)
- **13** General suggestion of accuracy (4,2,5)
- **16** Voracious, extremely hungry (8)
- 17 Star-shaped symbol used in text (8)
- 19 Collectively, supernatural forces, beings etc. (6)
- 21 Sports venue, a Latin word meaning "sand" (5)
- 24 Japanese sash worn with a kimono (3)



IN THE SHED ANSWERS ON PAGE 60

QUICK 'NINE HOLE' QUIZ

- 1 Which TV character has sisters called Daisy and Rose?
- 2 What are the first names of the twin girls in Barts class in The Simpsons?
- 3 What do Germans do with a 'handy'?
- 4 Who won the Golden Boot at the 1986 football World Cup?
- 5 What is the capital of Mauritius?
- 6 Which football team has the nickname of the 'Bluebirds'?
- 7 With which sport would you associate Nick Skelton?
- 8 Which football team has the nickname of the 'Blades'?
- **9** How many faults does a competitor get if they knock a fence down in showjumping?

MONSTER SUDOKU

Fill in the grid so that every row, every column and every 3x3 box contains the numbers 1 to 9 and the letters A,B and C.

	5	2		7		3		
	7	6	3		8			2
				1			5	
		3						8
			1	2	3			
2						1		
	2			9				
9			2		7	5	4	
		5		4		8	2	

SQUIGGLY SUDOKU

Fill in the grid so that every row, every column and every 12 box shape contains the numbers 1 to 9.

	7				8			
	2			1				
			5		9			4
	6					တ		
9								6
		6					8	
7			З		5			
				2			1	
			4				5	



CREEPING SOUTH

Scott MacCallum meets up with Robert Hogarth who travelled from Scotland to meet the challenge of managing creeping bent greens at one of the finest new courses in the UK

Remedy Oak Golf Club, on the edge of the New Forest, didn't exist five years ago. It was then a mixed forest and the seed of an idea in the mind of Bill Riddle, a successful businessman and owner of the nearby pay and play 45 hole Canford Magna golf and conference centre.

If you visit Remedy Oak now you'll see fantastic golf holes cut through majestic woodland and you would happily wager a handsome amount that the course had been there for at least as long as the neighbouring clubs which help make the Dorset area such a fine golfing destination - Ferndown, Broadstone and Parkstone.

Remarkably, the project was carried out very much in-house with respected architect and former professional, John Jacobs, advising on the design alongside a local team which worked closely with $\operatorname{\mathsf{Bill}}$ Riddle. Between them they designed the course and create a very valuable golfing treasure.

"The people who worked on the construction of the course ought to be applauded for their sensitivity. It would have been very easy to have become carried away and cut down far too many trees," said Robert Hogarth, who has been Course Manager since February 2006, having travelled south from Cardrona H&GC, in Peebles.

No matter how well established the Remedy Oak course appears, having just being open for 18 months, just one step onto the putting surfaces immediately identifies it as a very modern golf development, with its immaculate set of creeping bent grass greens which immediately give us all the misguided belief that we'll start to putt like Ben Crenshaw.

Indeed, it was the opportunity of working with creeping bent which attracted Robert to the south coast.

"I'd been fascinated by creeping bent for some time having talked to people about it and read up about it on websites and it has long been an ambition of mine to work with the grass at some stage in my career," he said.

"I even remember Payne Stewart at The Open at Royal Birkdale in '91, when Tom O'Brien had such a terrible time with his greens, talking about how they should use Penn. It would have been completely unsuitable, and proves just how little pros know, but it does show that it was about then."

The decision to use creeping bent came after watching the success of the grass at Queenwood under the stewardship of first lan, and then Cameron McMillan.

"It was Ian who got me really excited about creeping bent. It is something completely different to what we've been used to working with."

But it's all very well having a dream, making it reality is the tough bit, but Robert is not a man who allows obstacles to stand in his way.

"I remember reading Greenkeeper International back in 1994 when I was at my nine hole course in the Scottish borders, Innerleithen, and the job adverts all said, 'Must have USGA greens experience'; 'Must have automatic irrigation experience' and thinking how the hell am I going to get that experience.

"By early 2000 I'd installed two irrigation systems, worked with John Soutar on redesigning new USGA greens and build an 18 hole championship course to USGA spec with a full irrigation system. That didn't happen by accident. I'm a positive person and I made it happen."

When the opportunity arose at Remedy Oak, and Robert was called to interview, he was immediately impressed by what he found.

"The moment I drove up to the gates there was a sense of anticipation and a feeling that there was something very special behind those gates. When I drove home, after the interview, I had a very good feeling about it."

And his experiences of working with creeping bent have lived up to all his expectations, both negative and positive.











Robert has a staff of 12 and he estimates that between four and five of his team are there purely because of the demands of creeping bent. "That's partly because of the size of the greens – we have 1.9 hectares of putting surface, which is the equivalent of two regularly sized 18 hole courses, With the high standards demanded we move between hand and triple cutting."

The team top dress fortnightly to counter the fibrous nature of creeping bent while they have had issues with Nematodes and Take-All Patch.

"I'm waiting for the greens to catch an STD as it's about the only thing they haven't caught!" he joked.

"We foliar feed because of the Nematodes and I do all I can, not to stress the plates.

"It's extremely challenging and you can never relax with these greens. If you think you've got it cracked something will come up and kick you. But there is an awful lot of good advice out there, more all the time, because more and more people are using them in Britain and Ireland," said Robert, who added that the club policy is to be cautious regarding the greens during the winter, moving to temporaries if there is any doubt, and he keeps the membership updated via website and email.

With so much work and worry associated with creeping bent, why do it?

"The upside is absolutely fantastic putting surfaces. We run average green speeds of 11.5 to 12 with no effort at all and we cut all year round at 3 mil – creeping bent doesn't like its height of cut to be altered. You really do get a very tight surface 12 months of the year," said Robert, who revealed that as part of test and after consultation with the membership they ran them at 14 for the Club Championship.

"We wanted to push them and we did it with no stress to the grass plant." $% \begin{center} \end{center} \begin{center} \begi$

"Obviously creeping bent does suit everybody but being on the south coast with limited rounds – somewhere between 15 and 20000 a year – and at a high end membership who are prepared to pay for the privilege we can do it."

As you would expect, poa infiltration is an issue and Robert uses both chemical and cultural controls to hold back the tide.

"This is poa country as it thrives in the shaded warm conditions so we use Primo Maxx which restricts the seed heads, while, culturally, we hand pick using our own staff, students and the clubhouse staff on quiet days.

"We won't win, we're just fire fighting, but we'll do what we can. Like Cameron at Queenwood we'll replace the collar turf to reduce the poa infiltration from it being walked onto the green but that will merely extend our period of not having poa."

The lifespan of creeping bent greens at a high standard is reckoned to be around six or seven years before poa takes over and replacing them is then the option.

"I know of people who are having creeping bent turf grown for them a year in advance but it will be very much for the members to decide if they want the high end surfaces. If they do they will have to pay for them via a levy."

One thing that Robert does point out with his, and any new development, is that while his tees, greens and surrounds are top quality the fairways are just a little behind.

"In an ideal world it would be fantastic to have the resources to maintain fairways to the same level as the rest but it terms of sheer area it's just not possible. We do still top dress fairways and are working on upping the nutrient level but they do take much longer on grow-ins and are always the last thing to come.

"In many ways we're the victims of our own success as everything is to such a high standard it shows up the fairways a little bit, but we're conscious of it and are working towards improving them."

Robert is absolutely delighted with the team he has assembled at Remedy Oak and is full of admiration for the quality and volume of work the guys get through.







"The standards they have produced over the last two years has been incredible and they should be applauded for that. The job couldn't have been done without them, especially Alan Magee my Deputy. I couldn't do without him.

"The club does recognised the skills of the greenkeeping staff but a lot of the members would be shocked at the amount of work they get through in a week to prepare the playing surfaces for them. But they do really appreciate what they are given."

The course itself could not be more tranquil and you don't come across any houses or car noise during a round. It is a real haven for wildlife with badger sets, otters, kingfishers woodpeckers, herons and deer. While I was looking out the clubhouse window a fox wandered across the 18th fairway.

For a red haired Scotsman how has Robert coped with his move south on a personal note.

"Well I miss the Rangers big time and I've had to come to terms with the fact that a pint was £1.60 in my local back home and here it's £3. But I've been made very welcome by the other Course Managers and made good friends already."

He's had to throw away his thermal vest with temperatures on average 10 degrees hotter than in the Borders.

"I struggled in the heat the first summer, we 'gingas' are not known for our ability in the heat and exhaustion is an issue as the woodland holds the heat in.

"Our staff are supplied with PP kit – suncream, insect repellant, sunglasses

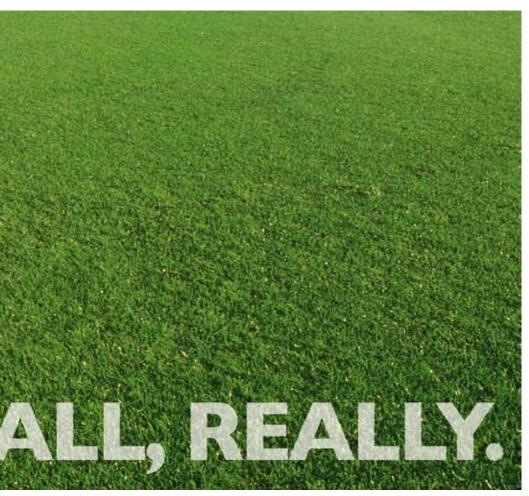


etc - and they are encouraged to take water out with them.

"Our brothers in Spain have a siesta but we don't. We batter on and forget that we are reaching temperatures which are the equivalent of the Mediterranean and don't rest up."

Indeed, but you can be pretty sure that Robert and Remedy Oak will not rest until it is as good as it possibly can be.

"Remedy Oak is very much Bill Riddle's legacy to golf," added Robert.



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ALL OF HARROGATE'S A STAGE, AND ALL THE MEN AND WOMEN **MERE PLAYERS...**

Scott MacCallum butchers Shakespeare just to get a heading for his Harrogate Week review...

Every Harrogate Week is different but at the same time every Harrogate Week is the same. It may sound silly but it's true. It's almost as though BIGGA provides the stage - Harrogate International Centre and the town itself - and the cast are the exhibitors and visitors. The subject of the play we put on is always centred around the fine turf industry but it is the variations each year which makes it all so compelling.

For many, Harrogate Week starts on the Saturday when they arrive in town ready for one of the Workshops which start on the Sunday. With many people still in town on the following Friday it is indeed a full Harrogate Week!

As Editor I leap into action on Monday morning, so I arrived late afternoon on the Sunday ready for dinner with some of BIGGA's Board of Management Members and the speakers who had conducted the Sunday workshops, and those who were about to start on the Monday.

A suitably early night followed - you have to pace yourself during Harrogate Week, a hard lesson learnt several years ago - and I was ready for action on Monday morning.

An early breakfast where the conversation was dominated by the weather - It was absolutely abysmal and made me exceptionally pleased that I'd travelled the night before and not that morning. The torrential rain was to have a major impact on what was the busiest day of the Show buildup and HIC staff did say that it was the worst set-up day they'd ever experienced. The build-up teams were exceptional, however, and over the course of the day the Show began to take shape, although it wasn't until extremely late into the night that everything was completed.

Travelling was also extremely difficult on the Monday with roads close to Harrogate, and in many locations beyond, flooding and making driving extremely difficult. Indeed even the main railway line between York and Harrogate was closed due to flooding for a period.









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