



# Supporting Your Course

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# WELCOME

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Y parents moved to run a golf club when I was young and I lived on site throughout my formative years. It's a modest course, but one the members are extremely



proud to be a part of, and where the greenkeeping team invest their careers into maintaining it to the best of their abilities.

The same, I have no doubt, can be said for any of the 2,500+ golf clubs scattered throughout the United Kingdom.

Growing up at the course, very early on in life I gained an appreciation for the work of the club's greenkeeping team. Indeed when I was old enough I joined them, in the school holidays, to earn some pocket money. I was quite rightly only given the most basic of tasks but I thoroughly enjoyed it during the summer holidays, albeit considerably less so in the winter!

I followed my father into the golf industry and after many years perhaps it was fate that brought me the opportunity to work for the UK's greenkeepers as chief executive of the British & International Golf Greenkeepers Association.

It has long been my aim, and an ambition of the wider association, to open up the dialogue between greenkeepers, golfers and the rest of the club management structure on a national scale.

This inaugural edition of Your Course is the first in what will become a biannual journal, giving a real insight into just what goes on behind the scenes in the preparation of the courses you love to play. Hopefully you will gain a deeper understanding of the education and experience required to be a modern greenkeeper, along with an appreciation for just how passionate our members are about the pieces of golfing turf they are responsible for.

It is the belief of our association that the opening up of new avenues of communication, between all levels of the golfing community, can only strengthen the sport and ensure a brighter future on the country's fairways for all.

I hope you enjoy the read, and if you have any questions about anything you find within this magazine, please don't hesitate to ask your greenkeeper. They'll be happy to help.





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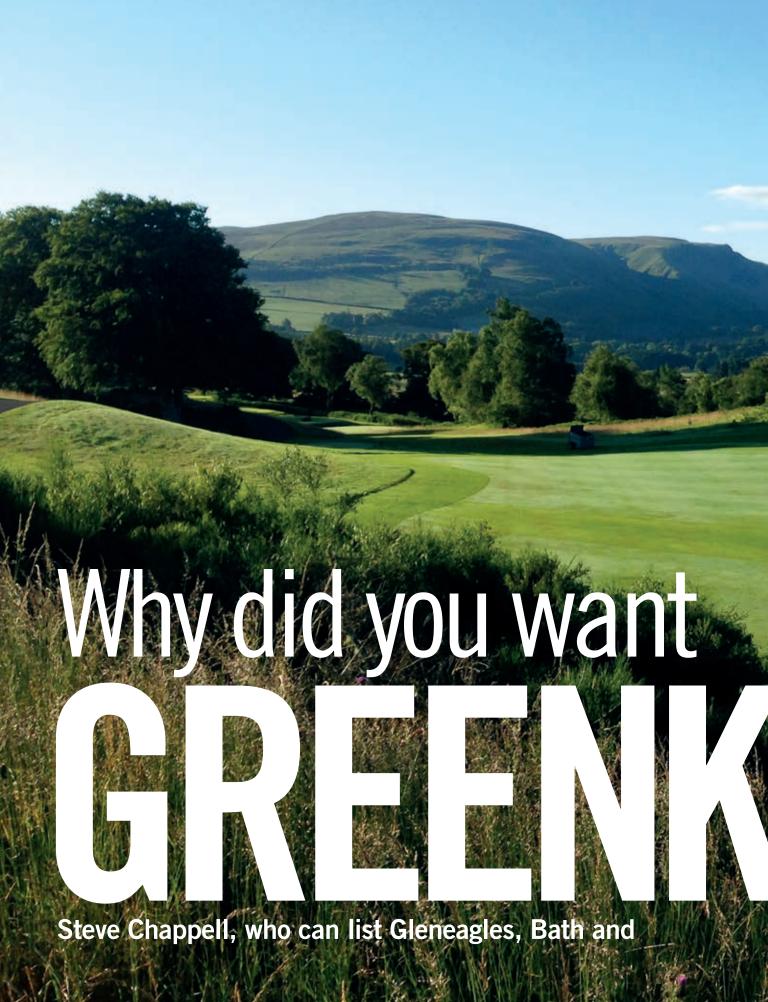
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How one ambitious groundsman made the journey to a golf course management position







# HY did you decide to become a greenkeeper?

I got into greenkeeping through groundsmanship, as much as anything else.

When I was younger, all I wanted to do was play cricket. But, like many young people who want to pursue a career in professional sport, I

just wasn't good enough.

A careers officer, and a games teacher I had at school who was a very good friend of mine, suggested 'what about looking after sports turf as opposed to playing on it?' If you can't play, then do the next best thing, and that's

If you can't play, then do the next best thing, and that's basically how I got into it. I got an apprenticeship place at Bristol Lawn Tennis Club, and lawn tennis and cricket are both very similar in their set up for a season.

I did that for a year and thought it was quite good. Then I was advised to look at golf because there were more options for a career in greenkeeping.

I got a four-year apprenticeship at Bath Golf Club and was put through college for City and Guilds. Within a couple of months of spending time on a golf course, I loved it and thought it was great.

# Did you play golf before you started the job?

I played golf, yes, but greenkeeping wasn't the sort of thing I'd really considered. Within a really short period of time, though, I realised it was great. I felt really comfortable. I enjoyed being outside.

# What is it you love about the job?

People look at it and think 'why would I want to become a greenkeeper?' I look at it the other way and think 'why wouldn't you?' You get to see the best part of the day because it's quiet. You get to see the sun coming up. You get to see all manner of wildlife and nature in their own natural environment, which most people just do not see. At a lot of clubs you start early and finish early, so you get the afternoon to yourself. You can then play golf or do other things like spending time with the family. The opportunities within our industry are now so vast that you can travel the world. I've been fortunate enough to visit pretty much all corners of the globe.

# What opportunities has it brought you?

I've had the opportunity for self-funded travel. Through going to conferences and meeting people within the worldwide industry, I've made contacts with superintendents from around the world. In 2000 I went out and spent a couple of weeks at Riffa Golf Club, in Bahrain. It was an amazing experience. During my time at Gleneagles I became friends with Curtis Tyrrell, who



was the superintendent at Medinah and went out and did the Ryder Cup.

Those kind of opportunities, through meeting people and making connections, have given me the chance to experience things I wouldn't normally have expected to.

# If I want to get into greenkeeping, what can I expect?

There are two things people really need to appreciate, I think, if they're going to consider a career in greenkeeping. One: we get up early in the morning. Two: There'll be an element of working at weekends.

They're the two things that people need to be quite open and understanding about when they first go into it. That's the reality of what we do. We do it in the morning and get up early to get out ahead of golfers. And we work weekends. Weekend mornings.

The variety of the job, and the variety of the different things you'll get to do and experience, is vast.





Above: A wonderful scene as the mowers go to work on the Centenary Course at Gleneagles

**Left:** Steve Chappell on site at Gleneagles

Everyday, and it's not just a cliché, will be different on a golf course. You can do a wide variety of things that you can take a lot of pride in – whether that's raking bunkers, cutting greens, cutting tees, cutting fore greens, cutting fairways, trimming sprinklers, fly mowing, changing holes, moving tee markers or emptying bins, and as you progress through your career it just gets better; construction, project planning, ecology, tournament preparation, the possibilities are endless.

You can set your own standards, you can have the standards that are set for the club, but everything you do you can look back on with an element of pride. \*

REENKEEPING | MISCELLANY |

How to... repair a pitch mark

Take the repairer and push the fork into the turf at the edge of the mark. Push that into the centre while using a gentle twisting motion. That helps air get into the soil, which helps the mots to grow stronger.





Next time you are in an argument with someone about climate change, send them down to their local golf course, where greenkeepers are bearing the brunt of some extreme weather, as Steve Carroll finds out

# RMATCHERS

**HYS BUTLER** reckons he spends "a good half an hour" every night poring over weather apps trying to work out the next day's forecast. It might be scanning the Met Office, or



running through variables on Weather Outlook, but the links manager at

Royal St David's' effort is for a very important reason.

Plans for the course depend on what his phone tells him each day. "I've got more weather apps than you can imagine," he admits. "I'm looking at the weather, at the golfing calendar, seeing who is playing, seeing when we can fit jobs in. Is it going to rain? Can we get a dressing down in front of it? Weather plays a massive role."

However, Butler doesn't need an app to tell him weather patterns are shifting. Climate change may still divide opinion, but at his North Wales links, he has seen it in action.

"Our main issue is that we are such a low-lying links golf course," he explains. "You don't tend to get those cold dry winters and dry summers. It just seems to be a lot wetter all year round. We have been working hard in the last two or three years on raising a lot of approaches, which tend to sit lower in the water table.

"We are having to re-contour a lot of bunkers to try and get them to sit a bit higher, which isn't ideal for links. It's either that or we have been filling some of them and recontouring them as slightly higher hollows."

Mark Mennell, meanwhile, has to think hard about the

time he last saw what he'd call a 'proper winter'.

The course manager, who started at York-based Fulford in 1975, has kept a diary for more than three decades. It tells him the seasons have altered.

"They definitely seem to have

moved," he states. "When I look back in the diaries, for the past three or four years the first dressing of our greens has been at the end of February and the beginning of March. If you go back 25 years ago, you wouldn't dream of dressing then because there wasn't any body or growth in your greens to take it in. You used to start top-dressing in mid-April. Now you have the opening to do it a bit earlier because of the climate. I'm one of those who still thinks that if we went back to 1685 or 1784, I'm certain the yearly seasons would largely be the same as they are today. But, in my 40-odd years, the weather has definitely changed. You are having warmer Novembers and Decembers and wetter Junes and Julys. You can have a bitterly cold March and April, that you would expect to find in December and January.

But we are finding that because of the climate, the end of the cutting season, or the fine-tuning, has gone from mid-September to mid-November. That's in the north of England."

At Royal St David's, Natural Resources Wales were interested enough in what's going on with the climate to install a weather station on the course.

That gives Butler vital information alongside the records he keeps himself. What they show is a general upward curve – for more rain.

"Our rainfall (in 2017) was 1,153mm. In 2012, it was 1,433mm and 2015 it was 1,441mm. Records here go back to 1988 and they are up and down - from 720mm."

The last five years, Butler adds, have seen a consistent increase in rainfall, but that on its own doesn't cause the major issue. It is how it falls.

"You used to see 8mm to 10mm of rain but, now, you have these absolute deluges of 25mm to 40mm.



That impacts the golf course quite bit. You get low lying pockets that water gathers into.

"We obviously try and aerate it as quickly as possible but the logistics mean you can't quite keep on top of it as you want to."

That chimes with Mennell's experiences - even though he's old school when it comes to following forecasts.

"I look at a forecast – like the BBC – but I don't look at an iPhone. Some of these apps, weather forecasting, don't do what they say they are going to do.

"They've stopped me doing what I want and it has affected my plans. The lads - they are all the other way. They look at charts and temperatures."

Think about a downpour of rain and the obvious effects of course flooding comes into mind. It has far greater impact on a course than just standing water, though.

"When you get out there, your fairways are about an inch high because they've grown that much," Mennell explains. "You are trying to cut it clean, you don't and it's leaving grass cuttings all over."

Warmer winters bring other pressures. Higher soil temperatures put turf at greater risk of disease. Ensuring the playability of the course has been Butler's over-riding concern at Royal St David's.

"You're trying to improve that soil surface drainage, that water infiltration, as much as possible. Because of the high water table, aeration is the absolute key thing for us. We Verti Drain three times through the winter and we solid tine monthly. If need be, we can go almost every week. We have superb methods of aeration and you can go with 6mm tines now and the golfer can't even see it."



Even though the changing weather patterns have brought significant challenges, it hasn't all been negative.

Mennell takes the opportunity to get his greens better at an earlier point in the season, while Butler can carry out more overseeding because of the greater soil temperatures that exist throughout the year.

But just as you think you're set into a pattern, Mother Nature has her say again – leaving Butler unable to predict what the weather might do. "It's all too uncertain. We thought we'd never see cold weather again and then we had a spell where I struggled to get out of the house to go to work. That was something I hadn't seen in a long time." •

# FREAK GOLFING WEATHER

# Muirfield 2002

Tiger Woods described a "wall of blackness" as he warmed up on the range ahead of the third round of the 2002 Open at Muirfield. He was on the hunt for the Grand Slam, having won the Masters and the US Open, and was in contention.

"No one had prepared for it," he said. Woods described competitors paying spectators for jackets, while Colin Montgomerie had to try and survive with only a wool jumper for protection. He shot 84. Woods shot 81.

Amid horizontal rain and strong winds whipping in through the East Lothian coast, Ernie Els, who has played for a few Claret Jugs and won twice, said it was some of the "toughest conditions" he'd ever experienced in the tournament.

Des Smyth said: "It was basically survival in a two-hour period."

# **Royal Lytham 2012**

The Lancashire links turned heavy after seven hours of rain saw spectators advised to delay their arrival for the second round of play.

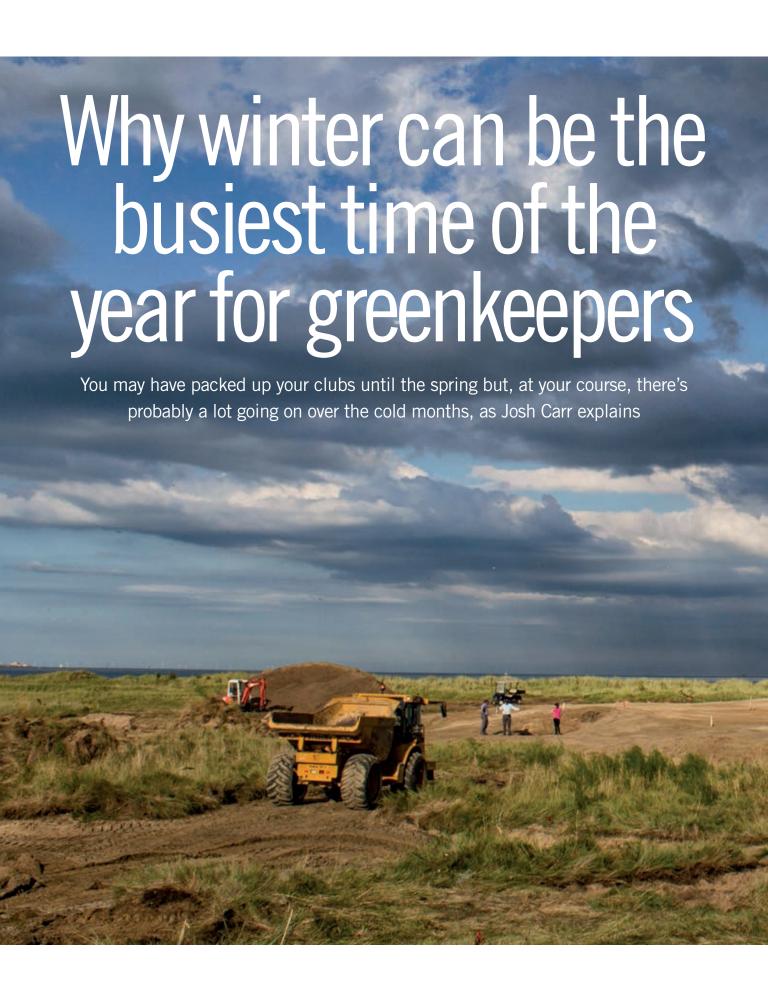
The tournament wasn't halted but spectator walkways become almost like a quagmire and there were pockets of casual water on the course when the first players teed off at 6.30am. With bunkers flooded by the heavy downpour, BIGGA's Open Support Team were summoned in the middle of the night to help get the course ready for play.

# Deeside 2015

The Scottish parkland – and courses all over the United Kingdom – took a battering from Storm Frank at the end of 2015 when the River Dee flooded the two courses.

Parts were left under 12 feet of water but, even when the water subsided, the huge amounts of sand, clay and silt that were deposited caused just as much disruption.

Debris had to be removed by hand and it was June before the 27 holes had reopened. Bunkers remained out of play for another month. "Some areas of the 27 holes were like beaches, others had a colossal amount of debris but, worst of all, virtually every hole had a three to six-inch layer of mud silt covering vast areas," said club manager Debbie Pern in the aftermath.







Left: The team at Carnoustie Golf Links have been hard at work over the winter rebuilding bunkers on the Championship course ahead of the Open's arrival in July

CRAIG BOATH, HEAD GREENKEEPER ON THE CHAMPIONSHIP COURSE AT CARNOUSTIE GOLF LINKS, HAS BEEN REBUILDING BUNKERS AHEAD OF THE CLUB HOSTING THE OPEN IN JULY...

# Why choose the winter to do your rebuilding work?

We are very busy with members and, more so, visitors from April until October.

In the winter months, there is little growth of grass on all areas so we have time to do other jobs.

We have a winter improvements programme, which runs from November to March each year. This allows the staff to get on with rebuilding tees, aeration work, returfing areas and, this year especially, bunker rebuilding.

# What does rebuilding a bunker entail?

We revet our bunkers here at Carnoustie and let the grass grow on the face.

A bunker is revetted by layering sods of turf on top of each other and using sand as backfill to keep the turf in place.

A general rule is to keep two fingers width from the first row to the next row until you reach the required height.

All bunkers on the course are built to the same height each time. Some bunkers also have cameras added in for filming during the Open.

If anything, we are dropping the bunkers slightly in height due to build up caused by sand splash from golfers playing shots.

The bunkers at Carnoustie are pretty demanding if you land in one - there is no need to make them deeper.

# Did you decide to do that work, or are the R&A involved?

All work on the course is done in collaboration with the R&A whether we are in an Open year or not.

We always like to tell them what we are doing on the course. We work with the R&A, and vice versa, to make sure any changes that are made are in keeping with the course.

# What else has been going on over the winter?

We have added a few more spectator vantage points, in the way of mounding, and we have taken out a lot of gorse for grandstands, spectator movement and to save some of the heather from being trampled by spectators.

We are also rebuilding our Golf Centre this year so we will have to be on hand for re-turfing around it – not to mention helping out with new roads and fibre optics work around the course. It's a busy time!

# Does the planning for the grandstands begin during the winter or closer to the event?

Grandstand positions are planned for well in advance by the R&A and construction of them will begin around the middle of April.

We roughly know from the last Open where they are situated so we like to keep the area clean of gorse. This is mainly to ensure there are no tripping hazards.

# How much would the winter weather affect what kind of maintenance is carried out during the off-season?

It's the same as through the summer months. You just have to plan your day, week, and month, around the conditions – whether it is solid with frost or glorious sunshine.

You always have to keep an eye on the weather and take advantage when you can.

# What is the most frustrating thing about winter

#### maintenance?

The lack of daylight and the change in staff hours. We go down to a 35-hour week from the end of November to the end of January. It's a short day but you have to try and get as much out of everyone as possible.

# Carnoustie is busy throughout the year. How does this affect the changes you can make in the winter?

We are a good bit quieter in the winter period with fewer visitors. This, I would say, is our busy time - bunker building, tee alterations, cutting back of roughs, mounding and so on. We don't do a lot of drastic changes, just little bits here and there if needed.

# Carnoustie is one of the driest places in the UK. Does it affect your work at this time?

It's not too bad. We can get on with work in most conditions. There is not too much growth through the winter, so that takes care of itself.

You just have to plan your work around the weather as you would in the summer.

I always make sure I have a secondary job in mind for the guys just in case conditions change during the day with rain or snow or during the week, with frozen ground, and so on.

# You will be very proud when the Open arrives and the course is shown all over the world. Is getting it ready nerve-wracking or exciting?

I'm not too excited yet, but that will probably change nearer the event. I am very proud of the work the guys have achieved this winter.

A lot of the staff here have been involved in working at an Open and we have had a lot of other events through the years. Keeping everyone calm will be key.

We just need to focus on giving the best players in the world the best conditions and try not to get too distracted.

# UNDERSTANDING THE ELEMENTS, AND YOUR LIMITATIONS, ARE KEY TO THE WORK NAIRN DUNBAR COURSE MANAGER RICHARD JOHNSTONE DOES DURING THE WINTER...

# You're based in the North of Scotland, what are the biggest factors you have to take into account when looking at winter maintenance?

We will experience temperatures of around five degrees and below from November right through until April. This means there is very little growth to aid recovery.

Through these months, we experience cold north winds, freezing temperatures and snow, which affects the amount of work we can get completed.

We aim to start our construction work – such as bunkers, tees and re-turfing worn areas – in October to give these the best possible chance to knit together before the season starts at the end of March.

Historically, the worst months for inclement weather are January and February so, during these months, we have a gorse and tree management plan in place to focus on.

# What have you been doing this winter?

This year's winter projects include adding five new revetted bunkers to the 60 we already have on the course.

They will improve strategy on our weaker holes, help engage golfers more and improve aesthetics throughout the course.

We aim to reconstruct another eight, which we normally do on a rotational basis, with the most used lasting only five years.

Our biggest project is new tees at the 10th hole with a new championship and men's tee being constructed among newly uncovered dune systems with views over the Moray Firth.

We are reconstructing the 3rd and 16th teeing grounds to give a level-playing surface.

Out of season rough management and tree and gorse management will all help restore Nairn Dunbar to unveil its original links-like characteristics.

# What is the most frustrating thing about winter maintenance?

The inclement weather - which can change your plans from day-to-day - and staffing levels, which play a big part in what we can achieve.

With only five staff looking after our Championship course it can sometimes be difficult to carry out as much as we would like.

With holidays usually being taken out of season, we are understaffed most of the winter months.

# Why does this work take place during the winter?

There is less competitive golf and visitors playing the course, meaning there is less disruption to play and it allows us to leave projects as ground under repair until the season starts in the spring.



The low temperatures during winter also mean there is less cutting to be done and more time to focus on winter projects.

# What can golfers do to help you get the course into top condition in time for the season?

It is essential golfers respect the course throughout the year by repairing pitch marks and replacing divots but, during the winter period, we also ask if they follow appropriate signage used throughout the course to spare wear and tear.

We have forward winter tees in use from November until March, with artificial mats placed on the four par 3s and a fairway mat system used where golfers have the option to play the ball from a mat on the fairway or lift and drop in the rough without a mat.

This system has been in place for a number of years and has been essential to the condition of our fairways and tees going into spring.

During construction we also have various forms of ground under repair in place where we ask members to respect these areas by lifting and dropping outside the roped off areas.

# How would what you do compare with a course in the south of England? Do you have to do more?

I think most courses go through a similar process with winter maintenance where weather allows.

The South of England will have a higher average temperature than we receive in the North of Scotland throughout the winter months, which will allow more



construction work to be carried out.

Other maintenance such as over-seeding and thatch removal/dilution works can be carried out later or earlier in the season where the higher temperatures will aid recovery. 💠





# SOMETIMES ANOTHER WAY OF LOOKING AT THINGS CAN MAKE ALL THE DIFFERENCE, AS THIS GERMAN CLUB HAS DEMONSTRATED...

CCTV is often called the eye in the sky but, for more and more golf clubs, it's a camera of a different kind that's changing the way winter work is carried out. We're all aware of drones being used to show off a layout at its best – there's videos all over social media. But at St Leon-Rot, which hosted the Solheim Cup in 2015, Craig Cameron, superintendent at the German course, has utilised the technology for a very different means. He uses them to digitally record work happening around the course, such as drainage installations and bunker renovations, as well as surveying.

He began using drones while at Aldeburgh, in Suffolk.

"I started using my drone to take photographs of the course and then moved up to using it for behind the scenes – what we do on the course - in short videos," he said. "I did a behind-the-scenes greenkeepers' video at the BMW PGA Championship and one for the Solheim Cup. From there, it progressed to drone surveying. That is surveying the whole area so you can measure any part of the course - bunkers, fairways, tees, and greens. "That helps us when we're doing construction because, if we have work to do, and we need to order turf, then I can take the drone out and do a quick survey and know exactly how much turf to order. It's great if you're working with external firms because you can let them fire on ahead, and you can be sitting behind them measuring as you're going along and order turf as and when you require it. And it's fairly accurate, so there's no wastage." Providing videos for customers and members has been one of the major benefits. Cameron added: "You fly all the sites in one video and then edit it together. You get one video saying exactly what you did over the winter, which helps a lot because we've done loads of work and people come back from the winter holiday and don't realise."



caps lock

greenkeeping, I was pulling gang mowers with a tractor, or walking around behind a wheelbarrow, and many golfers think that's still the case. However, it couldn't be further from the truth, and you'd be surprised about how much of my job

takes place within the office, away from the course.

# **LEGISLATION**

The massive increase in legislation, across so many areas of golf course maintenance, now means we need to ensure we have the correct paperwork and records are kept efficiently. Take health and safety, for example. A course manager is usually also the health and safety officer, dealing with the implementation of policy and completion of forms. He must risk-assess things such as the tasks carried out by the greenkeeping team, the areas golfers will go, and the actions a golfer will take that may affect the staff or other players.

COSHH assessments are also required for every

greenkeeping department, from fertilisers and pesticides all the way down to the air freshener in the toilet.

# **KEEPING DATA**

When your greenkeeping team is out spraying a chemical on the course, whether to make it healthy or to make it grow, records must be kept by law. Keeping records of fertiliser inputs is considered good practice, in addition to being a legal requirement.

As the job has become more scientific, collecting measurable data on a regular basis has become the norm. Soil moisture, green speed, volumetric water content, clipping yield, soil temperature and surface firmness, smoothness and trueness can all be measured, recorded and analysed. In years gone by, this may have been done annually with a visit from an agronomist who provided a technical report. However, the modern course manager is highly-qualified and more than capable of collecting and analysing the data and producing a technical report.

# **BUDGET**

Whether a small 9-hole course with two staff, or a



Les Howkins MG is course manager at The Richmond, in south west London. He also holds the coveted Master Greenkeeper certificate and is chairman of BIGGA



54-hole complex with 50 staff, every course manager has a budget that he must work to. In increasingly testing times, these budgets are often being squeezed at courses all over the country, and a course manager must keep track of any expenses, while considering efficiencies and deciding which aspects of course maintenance and improvement can be prioritised.

Take water for example, just one of the many regular expenditures that go into the preparation of a course. When asked, a course manager will be able to give you a very precise answer as to what has been used and how much it cost – water can be one of the biggest expenses on a course, especially if it is drawn directly from the mains network.

But a course manager will also be able to tell you how much water is already in the soil profile and what the weather will be like over the coming weeks, as they will spend hours each week analysing data and records that have been kept for a number of years.

# **PLANNING WORK AND SPECIAL PROJECTS**

Whether you have a two-man team or dozens of staff, the most important part of the job is planning all the work that needs to be done so the golf course is at its best as often as possible and specifically for all the key events in the calendar. Alongside general work plans, it is vital to properly plan renovation, improvement and construction projects, often for the winter months to ensure the course continues to improve year on year.

# **MACHINERY & FLEET MAINTENANCE PROGRAMMES**

Mowers, tractors, utility vehicles, grinders, aerators and sprayers are all expensive pieces of equipment that need to be maintained. In addition to ensuring they are maintained to the correct standard and at the correct intervals, your course manager will keep records of the work being carried out. Keeping service records up to date is an essential way to ensure equipment is kept in full working order and will maximise the lifespan of any machinery. The ordering of parts and keeping an inventory of necessary stock is also important to reduce any machine down time, without wasting money.

These are just some of the things your course manager will be dealing with in the office, without even taking into consideration the management of individual staff, sickness and holidays, writing reports, time-keeping and attendance and meeting with members and officials. •





"I was in at 6am and out working on the course. They were building some steps up to the 17th tee so every time I'm there I think of that week"

Right: The dad-of-one spends a big chunk of his time at the club where he grew up and will be preparing for the new season there

**Below:** With friend and course manager James Braithwaite

**IFE** on the European Tour and your home club on the outskirts of Bristol must seem poles apart – but Chris Wood has never forgotten his roots.

The Ryder Cup player joined Long Ashton at the age of 10. His dad was a member before him, he did his work experience there as a teenager, he still uses the club for practice and he is now a life member.

Chris is quick to point out the huge role that the club has played in his development and is equally ready to point out the efforts of the greenkeeping staff there – and, in fact, all greenkeepers around the globe.

In short, the 6' 6" former BMW PGA Championship winner gets it. He's not got even slightly carried away by himself and all the successes that he's had, instead retaining a close connection to the course where it all began.

We spent a day with Chris and Long Ashton's course

manager James Braithwaite to get the tour star's hands dirty and hear his views on the world of the British greenkeeper, the way courses are set up on tour, and how the latter can often lead to unreasonable expectations of the former.

# YOUR WORK EXPERIENCE WHILE AT SCHOOL INVOLVED WORKING AS A GREENKEEPER. HOW DID THAT GO?

I was about 14 and you get asked at school what you want to do career-wise. I said something to do with golf so I had one week practising and playing and the other spent working with the greenkeepers at Long Ashton.

I was in at 6am and out working on the course and I really enjoyed it. They were building some steps up to the 17th tee so every time I'm there I think of that week.

I always had an interest in how a course is managed and, when you played as much golf as I did as a junior, you get to know all the greenkeepers at the club pretty well. It's been the same guys pretty much since I joined when I was 10.



Hilto

I'm a big fan of stripes down a fairway. Even my garden has some nice stripes.

# DO YOU HAVE ANY EARLY MEMORIES OF GOING TO A TOUR EVENT AND BEING ENAMOURED BY THE LOOK OF A COURSE?

A memory of mine was at Wentworth when I was about 14 and, when you cross the fairway and look down the hole, you would think to yourself 'oh my god' and that was a big incentive to make it on to the tour. I would always picture myself hitting a wedge off that type of fairway.

On tour you get used to things being impeccable and we are very spoilt. In Europe I would say we are slightly behind the standard in the States but that is down to time, money and staff. They have all these big resorts



with these million-dollar houses around it, so they can afford to have up to maybe 30 members of staff. Here at Long Ashton we have five or six on the greenkeeping staff, which is about average – some 18-hole courses have to manage with even less!

# GREENKEEPERS GENERALLY GET A LOT OF CRITICISM FOR HOLLOW TINING THE GREENS OR PUTTING TEMPORARY GREENS INTO PLAY—HOW KNOWLEDGEABLE DO YOU THINK THE AVERAGE CLUB MEMBER IS. MARKS OUT OF 10?

When you have 700 members you cannot please everyone and the more I've got to know James, the more I've got to understand his frustrations.

I would say the average golfer's knowledge is no better than about two out of 10.

The problem in the UK is that everyone watches the Masters in April and the course there is absolutely immaculate. I have played in three Masters and there really isn't a weed on the course.

Everyone thinks the Masters marks the start of British summertime and the start of the golf season but it isn't really, it's still bloody cold. They've not had any growth and, in truth, it is probably time for a bit of course work. So everyone has a late Sunday night watching Augusta and turns up to their club the following weekend and the greens have been hollow tined and it is a long way from what they've seen on the TV.

It is all about understanding that a course in the UK will be in its prime from June to maybe October. But you have to realise that you are going to get five months of decent conditions and the rest will be a bit of a struggle.

# MEMBERS' PERCEPTIONS CAN INCLUDE THE GREENKEEPERS DOING THE GREENS, RAKING THE BUNKERS AND BEING BACK IN THEIR CARS BY 9AM. IS THAT FAIR ENOUGH?

I think some do think like that, yes. Our lads have their



coffee break at 11am after they have already done five hours and they won't finish until maybe one or two o'clock. I have sat down with them on their break and they come in from all corners of the course.

If you are teeing off at 9am it would be quite easy to miss them. The lads might be two holes ahead and then jump across to another part of the course.

# HOW DO YOU MAKE YOUR PRACTICE WORK HERE AT LONG ASHTON TO PREPARE YOURSELF FOR A EUROPEAN TOUR EVENT?

We are spoilt on tour, where the greens are hand cut. I have asked whether that would be possible (at Long Ashton), but obviously it's not with the limitations on time and money. In the summer I will spend four or five hours on the putting green so I will send James a text and he will roll and double cut it for me, which gives a lot of members a shock when they get on there and all the putts are rolling three feet past! All of a sudden I can practise putts

that are 12 on the Stimpmeter rather than eight or nine – he doesn't have to do that and it takes around 40 minutes to do so, so it really is a big help to me.

#### AND IN THE WINTER?

We travel so much that I do like to come home and switch off and not see an aeroplane for a couple of months.

We've built an indoor studio at the other end of the range so I can lock myself away and nobody knows I'm in there. I can set my TrackMan up and have it to myself. Putting-wise I've got a Huxley green at home. Failing that, I just use the carpet in my living room.

I'll then go out to Dubai the week before the season starts to get up to speed with conditions out there.

# WHAT IS THE BEST-CONDITIONED COURSE ON TOUR?

In the Middle East it is fantastic, you cannot fault them

and the greens are just phenomenal. Also, most of us are coming out from Europe, so you get to Abu Dhabi and you think it is even more unreal.

A lot is down to the tournament itself. Over the years they might have changed hands promoter-wise and they might not have as much money as before so the standard will drop a bit but it is still to a high enough level.

That said you will still get 50 per cent of the field having a good moan!

# WOULD YOU LIKE TO SEE MORE RUN-OFFS RATHER THAN THE USUAL THICK ROUGH THAT AUTOMATICALLY CALLS FOR A LOB WEDGE?

I'm a big fan of run-offs, some of my favourite short-game shots are where I can get a 6-iron out and run it along the ground.

A lot of the shots on tour are just a lob wedge from four inches of rough and you are just a few yards from the pin.

You don't really play a chip-and-run shot on tour these days and I would always practise that as an amateur, even down to a 4 or a 5-iron. There is no need these days. It is only at an Open where you might play it and even then you might just putt it. I am a big fan of bunkering around the green, it can really transform the look of a hole.

# HOW RIGHT DO WE GET THE OPEN SET-UP?

I always feel that the R&A get it pretty close to spot on with the set-up. Last year's venue, Royal Birkdale, is always one of the very best. With links courses the greens always putt better than they look, they roll perfectly true.

They are sand-based and are easier to maintain but they still get it so right. It is my favourite event of the year and the way the course looks and is set up is a big part of that.

The US Open has gone too far the other way in recent years. At Erin Hills they were cutting the hay down the day before because the players and press were moaning and it was just unplayable. You don't get that in Europe, so perhaps we're a bit more in touch with golfers.

# IS IT TOO ROMANTIC TO THINK THAT SOME OF THE OLD CLASSICS. LIKE SUNNINGDALE, WILL REAPPEAR ON THE EUROPEAN TOUR?

I would love that but I don't ever think that is ever going to happen as the courses aren't long enough any more. Justin Rose has announced that Walton Heath will stage the British Masters and that is closer to that old type of course.

A lot of it is about bunkering. If you have somewhere like a Sunningdale, where they have upgraded the bunkering, then they are still a challenge.

They played Fanling in Hong Kong recently and that is a great course, it is under 7,000 yards but if you are slightly out of position you will have no shot.

If you are in double figures under par you will be very









close and that says it all. This year Wade Ormsby won it at 11 under.

Another factor that I hate is how long it takes to get round, it will take 40 minutes longer than a 6,800-yard layout with all the walks between holes as well. I have played Doral and it is a terrible place but 20 under wins and it is nearly 8,000 yards. Brandel Chamblee says we need these lengths of courses but I think that's rubbish.

# WHERE WOULD YOU LIKE TO HOST A TOUR EVENT?

Long Ashton isn't long enough and it doesn't have the space necessary for all the infrastructure, so I'd love to take it to a Sunningdale or Little Aston. I've always been a fan of those old-style heathland courses.

# DID YOU PREFER THE COURSE SIDE OF IT AS AN AMATEUR RATHER THAN AS A TOUR PRO?

If you got into the England set-up then you would be sent off all round the world as amateurs. I went to places like Argentina, Russia, Australia, Mexico and that really does set you up for being a professional.

Then you play the Lytham Trophy, that was one of the first events of the year and it was always brutal. You would be stood on the 1st tee with a 3-iron in your hand with the wind into and off the left. I don't think I have ever hit it on the railway, touch wood. Then the next two are the same.

The South of England was at Walton Heath, the British Amateur was always amazing, then you had the St Andrews Links Trophy. You are forever on world-class courses and all these Open venues. I think that had a lot to do with me getting on the tour and staying there.

#### WHAT WOULD YOUR TOP THREE OPEN COURSES BE?

Birkdale and Turnberry would be my first and second and both are places where I've had some success. I haven't played Turnberry since the changes.

Then Muirfield in third, I was really underwhelmed in my practice rounds but, by the Sunday I understood it, it was a slow burner.

# James Braithwaite, course manager at Long Ashton, is firm friends with Chris Wood. He tells Karl Hansell why he's thrilled that Wood is championing the cause of greenkeepers

AMES BRAITHWAITE has been at Long Ashton ever since Chris Wood first picked up a set of golf clubs. He can remember when the clubs were bigger than the youngster – Chris now measures 6' 6" – and he recalls the future European Tour winner being out in all weathers, such was his dedication to the game.

With a shared commitment to being the best, it's no surprise that Chris and James have since become firm friends.

Early in his career, Chris also spent a week working with James and the team, and it created an appreciation for the efforts of greenkeepers that has never left him.

"I'm really delighted that Chris has agreed to champion the cause of greenkeepers everywhere," said James.

"For years BIGGA and the association's members have been shouting about the professionalism and passion of those within the industry.

"However, without being too derogatory towards certain aspects of the golf industry, from my personal point of view, there's only two types of people golfers will listen to; one's the R&A and the other is professional golfers.

"BIGGA is seen as greenkeepers working for greenkeepers, so we are biased. We need other people to get involved to champion our cause."

Once flippantly thought of as mere grass cutters by golfers, the modern greenkeeper must work hard to have his voice heard within the clubhouse.

In improving communication channels between the greenkeeping team and the committee structure and membership, there is a belief that a better understanding of what goes into the production and presentation of the golf course will help to ease the pressure on greenkeepers, who find themselves under scrutiny with sometimes unreasonable, and yet completely avoidable,







pressure.

James added: "I spoke to Chris about how we are losing a lot of talented greenkeepers from the industry because of pressure from above.

"Expectations have gone up phenomenally within the past 10 years. For example, (around Bristol) we have 15 golf courses within a 10-mile area and the competition is immense, so the expectation of the standard they want to play on is higher.

"They see perfect golf on the television week in, week out, but it's not a practical scenario to have six to eight months of the year.

"I will to talk to people and they will always say 'I didn't realise there was that much that goes into a course'. The sad thing is they still think we are just grass cutters.

"They don't understand we are educated professionals with years of training underneath our belts.

"My guys are well educated and we are always looking to improve, with new techniques and new machinery,

"We do a weekly update to members and a report to the committee about what's going on around the course. I do open forum presentations.

'It was one of these presentations that I did four years ago that convinced the committee that we needed to redo our greens.

"But there's still the problem of the lack of knowledge about what we do, and I hope that more people like Chris will get on board and champion the work of the nation's hard-working, educated and passionate greenkeepers."

And so say all of us. So when you're out at 8am and you don't see a greenkeeper for the first nine holes, the likelihood is that they are working away on the back nine so as not to interfere with your day out or, even more likely, they have been working away since 6am and the front nine has already been tended to.

# GREENKEEPING

# How do would-be greenkeepers enter the profession and

HE greenkeeping profession has become highly-skilled and training takes many years. But the opportunities available are life-changing, and greenkeepers can find themselves travelling the world, helping out at golf's largest events and coming face-to-face with top golfers.

There are a variety of ways to become a greenkeeper. Some take a purely vocational route, others follow an academic path. However, most use a combined approach to their education and training within the industry. Here is what a typical career path would look like...

# TRAINEE

The entrylevel position. Trainees will be working towards greenkeeping qualifications.

# APPRENTICE

An alternative route is to undertake an apprenticeship under the guidance of an approved education provider.

# GREENKEEPER

A fully-qualified greenkeeper carries out an extensive range of course maintenance responsibilities.

# **FIRST ASSISTANT**

Carries out routine course maintenance tasks in addition to supervising the greenkeeping team, as directed by the course manager or their deputy.

"A successful greenkeeping career is underpinned by a commitment to continuing professional development. This

can take the form of pursuing formal qualifications all the way up to Masters degrees and/or informal learning taking

# CONTINUING PROFESSIONAL DEVELOPMENT AND RECOGNITION WITH BIGGA



for – the Toro Student

Greenkeeper of the Year awards



Attending BIGGA regiona



Being part of the BIGGA Open Championship Support Team

# A CAREER PATH

what does a typical career path look like?

# DEPUTY HEAD GREENKEEPER / Deputy course manager

Taking on additional management responsibilities, often including the day-to-day management of the greenkeeping team. Usually assists in planning work and deciding on agronomic programmes. Also assumes full responsibility in the absence of the course manager.



# HEAD GREENKEEPER / COURSE MANAGER

Departmental head with overall responsibility for the greenkeeping team. Working with general manager/ secretary and club board/ ownership to achieve agreed course standards and presentation. Organising staff and their duties. Planning work activities and agronomic programmes. Budgeting costs and controlling expenditure. Communicating with staff, employers, suppliers.



# DIRECTOR OF GOLF, HEAD OF ESTATES AND COURSES...AND BEYOND

Greenkeepers can go on to fulfil roles including director of golf, head of estates and courses, or club management positions. They can move to golf clubs all over the world, or make the transition into trade or roles in golf industry bodies.

advantage of the very many opportunities provided by BIGGA and utilising the enormous network of knowledge

within the greenkeeping industry"

Dedicated to the continuing professional development of members

# **TEXTRONGOLF**





Participating in the Future Turf Managers Initiative Being part of the BIGGA

Delegation to the Golf Industry
Show with Bernhard & Company

Attending – or being nominated for – the BIGGA Awards

# HOW DOES MY COURSE GET READY FOR THE NEW SEASON?

There's no one size fits all when it comes to preparing a course for the start of club competitions. It actually depends on all sorts of different factors, as Steve Carroll discovers

HAT first weekend in April is a special time for many golfers.

Some of us might be getting the clubs out of the garage for the first time since

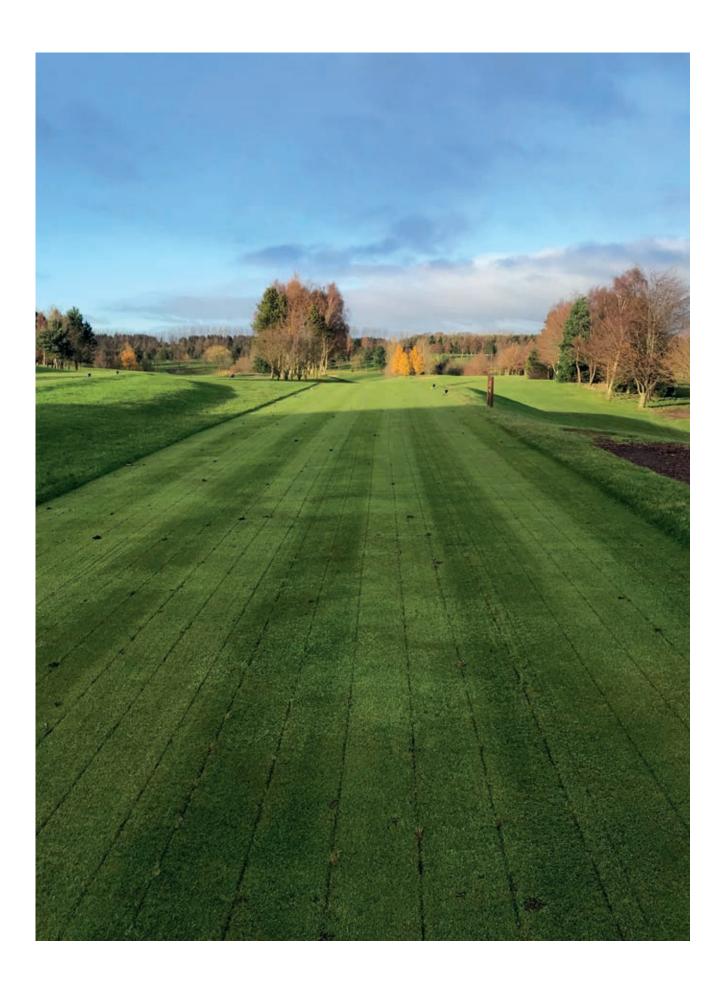
out of the garage for the first time since the winter nights drew in, some of us might have been watching for those initial signs of spring with a keen eye.

But when that day dawns and the new competition season finally gets under way, who can fail to be inspired by the

sight of a freshly mown medal tee and a well hit shot onto a lovely green?

Have you ever stopped to wonder how that happens? What do greenkeeping teams go through – during the harshest conditions of winter – to make sure everything is as ready as can be for that first fixture of the year?

We asked the course managers at four very diverse layouts – parkland, heathland, links and downland – to explain how they went about the job.





He adds: "You are really waiting for soil temperatures to come up to double figures before you go and chuck all your fertiliser on. You want to get that on, get everything going and push that growth. Then you can get out and start cutting, get your shaping done and your different types of grasses growing.

"That probably won't happen until the middle of April, so the season is already going. If you start to look at feeding in the middle of April you've then got two or three weeks until things really start kicking in.

"So the middle of May is probably when we're looking at saying 'we're in full cutting cycle and ready to go and prepare the course properly'."

That should be an eye-opener for any golfers who turn up in April and wonder why the perfect course they've watched on the TV isn't what they see in northern England. But the planning, to realise what members see then, goes back into the previous autumn.

Matthews spends hours in budget meetings, sorting out finances with committee chiefs, before building his programme around what he has to play with.

"It's a good six weeks of intensive office planning work," he explains. "Then you are relying on the spring giving you a hand for those plans to fall into place.

"There's a lot we can do now. There's better technology, the guys are better educated and there's better products.

"But the big thing, for the spring, is getting that renovation work done."

This year brings an extra challenge, as the club is hosting a EuroPro Tour qualifying event at the end of March. That means bringing the programme forward to produce a tournament-standard course for professionals with spring having barely begun. Can he do it?

Matthews confesses: "The greens will be good, and the tees will be fine, but then you are in the lap of the gods as to what you can get out and do elsewhere.

"We'll hold off the pre-season renovation work until after that event, which changes the way we'll look after the greens through the winter. We'll use different machinery – trying to keep things as firm as we can going into that event. We'll do a bit more top dressing than we normally would and we'll cut and iron the greens a lot more."



HAT I hear a lot is members saying 'well, you'll always be a couple of weeks behind here'. That's about as scientific as it gets," says Walton Heath course manager Michael Mann.

"I live in Chertsey, which is a 25 minute drive away. It's pretty much a steady drive

all the way uphill and the temperature gauge in my car might be two or three degrees colder by the time I get up (to Walton Heath).

"We sit 190 metres above sea level and the site itself is very open and exposed. You get the wind blowing and it is quite a harsh environment.

"People might start to notice the grass verges growing down in Epsom, for example, but then when they get to Walton Heath there might still be snow lying on the ground.

"When we get snow up here, it tends to hang around. But you can drive a couple of miles down the road and there will just be nothing. It's quite a unique position up on the north downs."

Walton Heath is on every golfer's bucket list. The wonderful heathland layouts, the Old and New, both feature strongly in top 100 lists.

The club will host the British Masters in the autumn – another notch to a fine heritage that stretches back more than a century.

Close to the M25, and surrounded by trees, you would think there's plenty of shelter. But in fact the open heathland, combined with the elevation, brings a wind chill factor and makes temperatures a couple of degrees colder.

That can bring challenges in the New Year when Mann and his team start to prepare for that April D-Day.

"Our spring renovations are generally in March," he says. "What might happen is that, if you get a cold and dry period, you may get no growth on the greens. You may get very little recovery.

"So we have to be mindful that we might not get the recovery we want.

"We tend to do fairly non-aggressive spring maintenance and keep the aggressive stuff for August when we know we get the recovery.

"The composition of the greens – there are all sorts of grass out there. There's bits of Yorkshire Fog. There are



all sorts in the greens but they roll well, and that's the main thing.

"But what can happen is you get different grasses growing at different rates when you come into the spring.

"The bent grass might start to kick into life and start to grow but the meadowgrass – the poa – is sitting there doing nothing.

"So you get uneven surfaces and throwing fertiliser at it – to try and kick things on – is a waste of time really because the grass is dormant.

"You might have bumpy greens for a period going into spring until you get consistent growth across the whole surface."

Mann aims to have his winter projects in the books towards the tail of February, leaving the end of the month, and March, to concentrate on presentation before the growth finally arrives.

Before then, while the work is ongoing, the emphasis is on protection.

"Through the winter, you may take height of cuts up on greens. We have got greens that are over 100 years old and need a certain type of looking after.

"It's making sure wet areas are not getting mown consistently. You might miss areas, use hand mowers or

take heights of cut up.

"You sacrifice green speed a little but the most important thing for me is to have coverage on the greens coming into spring so that once the growth does kick in you've got something to work with.

"It's trying to avoid bare areas on greens, basically. It can be tempting to carry on mowing at low heights, really shaving things through the winter, to try and keep standards up."

Key to the whole exercise, Mann believes, is keeping golfers up to date with how the winter is progressing and being ahead of the curve in getting ready.

"We've got a reasonable sized staff to cope with most things.

"But I think it is about being proactive in your management - making sure you are protecting at the right times, making sure you're pushing at the right times.

"It is patience, sometimes, coming into spring and communication is important with members. It's always good to inform them of anything – good, bad and ugly so there are no surprises for them.

"In my mind, I need – come February and March – to make sure everything is in place so when the growth does come it's a case of presentation and touching things up."



MAGINE a season that never really stops.

"I try and keep out the summer furniture all year round because I want people to come here. If they are coming all the way from London, from a clay parkland course to come and play our course, I want them to feel like it is summer," said James Bledge, whose drive towards April is utterly different to any other type of layout you might play.

A true links, on pure sand, Royal Cinque Ports' course manager isn't "fire-fighting" when the spring starts to poke its head above the parapet.

It's not muddy. The team isn't running round repairing walkways. The only things you might notice on a trip to Deal, to give you a clue that you might be in winter, is the roping and traffic management to stop areas getting worn.

And, of course, the temperatures.

"We don't have to do as much hardcore thatch management in the autumn or the spring," Bledge says. "Parklands and heathland have got the big machinery out, we are very subtle with ours. We will just keep applying six to 11-tonne top dressing to dilute thatch. There's very little disruption, to be honest with you. But people treat this as the summer and I like to treat it as the summer.

"That's maybe why links courses have got this reputation. You'll often see a lot of parkland courses have got their old plastic hole cups out and their thin pins and their worn flags. I try to keep the attitude for as summery a feel as possible."

You might think that a coastal location, and the



harsh sea air, would cause some problems but a sea wall, built in the 1970s, keeps the salt at bay.

Bledge adds: "If we have a long spell of northerly wind, then the wind is a problem to get growth going in the spring. For that reason, I have sown some bent grass into the greens this year – some Arrowtown fine bents – just so we've got a better cover coming into the spring."

"We don't seem to lose grass cover and have too much of a problem with a lack of growth," he continues. "Actually, it works the other way. We've got some bad grass in the greens. We've got Yorkshire Fog and, during the winter, that thins out and we can keep speeds up just as easily."

That summer feel pervades everything Bledge's team will do. Mats are avoided if possible. With a

fairway renovation to remove unwanted grass types having been done, and grown back in time for Christmas, players might have to drop in the rough in three or four roped off areas. That's it.

So what's there to do as the season approaches? "We focus on colour and, if we are coming out of a harsh winter, we'll spray some iron. It's more – turf grass-wise – about using preventative fungicides to make sure, at the start of the winter and the back-end of the autumn, we don't get any disease that will lead to scarring. Otherwise we'd be on the back foot all winter and chasing our tails. That's a big thing. This winter there was a big focus on deep aeration and sanding. I don't layer the sand on, it's little and often. I am very pro-aeration and top dressing throughout the season as well."



CTOBER, November, December – three months where we are probably thinking of anything but the start of the next golfing year.

But if Temple course manager Ben Kebby wants his chalk downland course to be ready for the dawn of a new season, it's the autumn that is absolutely crucial.

"The most difficult time for us is October through to December because we start our winter projects in October," he explains.

"The team goes down to winter work hours – it's nine hours a day in the summer and seven in the winter.

"We have got leaves falling and the grass is still growing.

"So we are trying to do far more from October to December than we did in the summer period but with fewer man hours and the additional leaf clearance and construction work. Then, when we get into January, we've got our woodlands work that lasts from January to March.

"All of a sudden, it's March aeration and we are into the season again."

Two other pressing issues make life harder for Kebby.

"The members have qualifying competitions all year round. We cannot put hole stabilisers in the greens. We have to change holes more than we would actually like to - to make sure the holes are crisp all the way through.

"We have to use our medal tees so we don't lose that vardage across the course and make them non-qualifying competitions.

"You would like the main medal tees closed for the winter, so they are perfect come April. We can't do that.

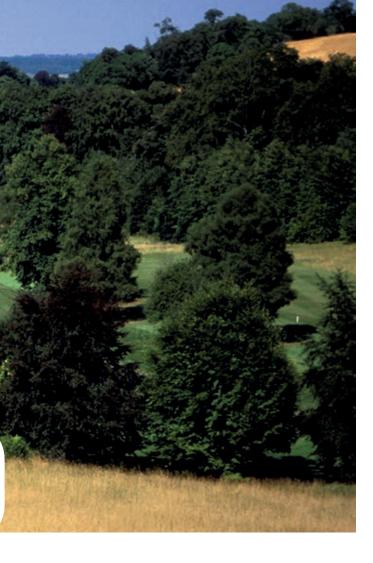
"What makes it even harder for our site is that we are north facing. We don't get warm, or see true growth, up until late May. That's where we are actually feeling that the soil temperatures are high and we are getting growth daily and we are back into our cutting programme.

"We have to be really careful to make sure the course doesn't get too torn up through the winter, because it will then take until June to repair.

"The most important time, from a fertility point of view, is October through until December.

"We make sure that all surfaces across the course are healthy going into winter – they all have full coverage.

"So when we get into December, we've put the fertility programme in place to make sure we have got full



coverage for the wear and tear."

Being a downland course also proves a double-edged sword. While it drains particularly well, and Kebby won't be dealing with standing water, those superb conditions prove a magnet for visiting golfers.

So the increased green fees bring challenges if the course is to get into April intact.

"What we see is damage through wheeled vehicles," Kebby says. "We have to control wear and tear with ropes and posts and these go out really early – in October. We know that because we stay open, when others are closed around us, the golfers will migrate to us to play.

"We get an increased amount of play against other claybased parkland courses, which then can cause more wear than we would get if it was just members."

Add in the prospect of disease – "the pressure has been as much as I've ever known" Kebby says of last autumn – and what you get is a greenkeeping tightrope.

"If we do not control the scarring before Christmas then we will see that in March and it won't be fully repaired until possibly April. We are really on the edge of our limit. The important time for us is our October through to December period." \*

### **MOOR ALLERTON**

The Leeds club was founded in 1923 but moved to its current 27-hole complex, designed by Robert Trent Jones Senior, in 1970

Former Ryder Cup players Howard Clark and Peter Alliss, the voice of golf, have both been attached to Moor Allerton.

They aren't the only famous faces to have walked the fairways, either. The European Tour was once a regular visitor and Seve Ballesteros, Greg Norman and Nick Faldo are among the greats that have played it.

### **WALTON HEATH**

The host of this year's British Masters, the Surrey club was founded in 1903 and consists of two courses – the Old and the New.

Both were designed by Herbert Fowler and the heathland club can look back at four prime ministers as members – David Lloyd George, Winston Churchill, Andrew Bonar Law and Arthur Balfour.

The club played host to arguably the greatest Ryder Cup team of all time in 1981 when an American outfit containing 11 major champions hammered Europe 18.5-9.5.

### **ROYAL CINQUE PORTS**

Two Opens, in 1909 and 1920, have been held on this Kent links, which got its name from Deal's membership of an ancient group of trading towns granted special privileges by English kings.

Founded in 1892, the championship course is regarded as one of the finest of its type and continues to stage the largest true amateur tournament in the world – the Halford Hewitt Public Schools Championship. Sixty-four schools currently take part.

Royal Cinque Ports' two Opens were won by JH Taylor and George Duncan.

### **TEMPLE**

Twice Open champion Willie Park Jnr is responsible for this 'inland links' in Berkshire, which was founded in 1909.

Temple is built on land once owned by the Knights Templar, the famous warriors during the Crusades, and three-time Open champion Sir Henry Cotton was appointed professional in 1954. The chalk downland course is set out over the picturesque Thames Valley.





# ARE YOU DIGGING UP OUR GRENS AGAIN?

Aeration is one of the greenkeeper's most powerful means of improving turf quality – but it makes the golfer's heart sink. Steve Carroll finds out the method behind the apparent madness

ET'S be honest, most of us would have to look the word up. For golfers, the first time many of us become acquainted with the practice of aeration is when we play a competition and find a green covered in holes or, perhaps, draped in sand.



How many of us, instead of moping into the bar to complain about the bobble on that

putt that was definitely going in, have stopped to ask our greenkeeper why they do the work and what its purpose is?

Never fear. With the help of Ringway course manager Richie Stephens, we've asked all the hard questions for you.

### Why do you need to aerate?

The main thing you are trying to do is create air down to the roots. Because the soil is a lot more tightly packed (in greens), roots and moisture find it difficult to move through. If you can create as much air space as possible then roots, water, nutrients – everything can congregate in those areas and lead you to better strength of grass.

### Why would you aerate greens and how often?

We like to do something every month to the greens. Whether it's from the smallest hole right up to something that's a bit more visible.

It's mainly to keep the airflow going into the base of the greens and into the roots. It's not too deep or invasive in the summer. We do one main, what we call, renovation in August and we do a second in the autumn. It's normally any time in October. That's where we are quite aggressive and put a lot of sand down behind it. That's mainly to help with drainage and infiltration.

It's vitally important you aerate. If you seal the surface, you end up reducing the chances of your grass to grow. We need lots of grass on there to keep the playing surfaces nice and tight and rolling smoothly.

### Does it happen elsewhere on the course?

We try to do one wall-to-wall aeration every two years. That's with a slitter – a deep tine slitter goes in anywhere

from seven to 12 inches. We try to do it every year but at least every two years.

We also use a Verti Drain on the fairways, tees, approaches and some carries. We try and aerate as much of the land as possible.

The only other aeration, except for greens, is that we would hollow tine tees and approaches occasionally to try and reduce thatch areas and help moisture through the top.

### Has the timing of aeration changed?

At our course, we used to do a lot of our renovations traditionally in April.

But you're just getting into the start of the season and the temperatures, certainly over the last few years, have not been good enough to grow grass - not new grass and especially the types of grass we are trying to encourage, which are the finer bents.

We've moved away from that idea of going in spring and waiting two months for the grass to grow.

What we now do is lay off a little bit in spring. A lot of us have moved to August where we can almost get a threeweek turnaround in grass growth.

For the member, the less time they are playing on secondary surfaces the better.

### Is another reason you do it in August to keep the greens playable all year round?

Yes. We try and operate our greens all the time they are available. The only time we would close them is when we're working on them or when we have a prolonged period of frost. If we can't move the holes on a five-day period we will move to our temporary greens.

It simply wouldn't be possible without aeration. We've got better at doing it as well. We know where to target and when. It's absolutely vital we aerate. There's no getting away from it. You've just got to do it.

### Technology has changed a lot. How has the practice evolved in the time you've been doing it?

When I started it was mainly slitting, hollow tining and solid tining. The Verti Drains came into their own just as I started greenkeeping. The availability and variability has all increased now. There are things like star slitters and slight changes to those machines.

The Air2G2 has come in and sub surface aeration has been fantastic. It hardly makes a mark on the top surface but, in the summer months, can provide a lot of air, and a lot of cooling air, to the roots.

That really helps stimulate growth and keeps things going during those really hot periods as well as allowing drainage in the wet periods.

The other machines that have got better over the years are things like the scarifiers. They reduce thatch but also help



with infiltration as well. The quicker you can get that water off the top, the drier the surface, the better the grass, and the longer in the year you can play on that surface.

### It's an inconvenience for golfers but you say it's vital for the health of the greens?

One of the key combinations is the top dressing side of it. We're trying all the time to get better at getting it into the ground and getting the surface playable as quickly as possible. But golfers do have to play their part, especially at a members' club where they have got an investment in that golf course being open for as long as possible for as many years to come as possible. They have got to back their greens staff into doing as much aeration and as much top dressing and as much drainage as they can put into it — especially at our type of site, which is clay.

### What does the sand do in top dressing? Is it just filling holes?

The practice has changed over the years. We used to use a sand/soil mix so what we were putting back in would match as closely as possible to the surface that we were taking out. A lot of clubs, mainly though expense,

have moved to pure sand. The sand you pick tries to be identical to the top mix you've got and the reason for that is so that the water moves easily through the surface as well. If it starts to move in spots you get spotted growth and a lot of speckled grasses. You are reducing the quality of your playing surface quite a lot if that happens.

It's important that the actual sand you pick is right as well. I've seen when it's been cheap sand, or the wrong sand, and you end up with a sealing of the surface.

That does the opposite - it doesn't help drainage, it discourages it.

### This sounds very technical. We just see you chucking sand down and making holes?

We've got a couple of good research institutes in this country that have brought through new technologies. It's not just 'we'll try this and see how it works'.

The STRI (Sports Turf Research Institute) are trialing all kinds of aeration and different ways of top dressing - even the way the sand is introduced into the top layer. There's a lot of technology and science and research that's going into these things.

We do try and keep on top of it and keep going forward.



TILL confused? Stuart Green, BIGGA's head of member learning, is on hand to help you understand all the jargon surrounding aeration...

The greenkeepers' dictionary definition of aeration is: to replace soil air with atmospheric air.

To understand why aeration is critical to healthy turf, it is essential that the golfer understands that the roots of grass don't grow in soil. They actually grow in the air spaces between the soil particles.

On putting greens, the aim is to move water away from the surface as quickly as possible. On soil greens, that can be quite difficult but the requirement is to keep the surface in contact with the sub surface.

That means aerating at all different depths. The more that can be done, the more effectively water can be moved away from the surface.

Keeping the surface dry has the benefits of better quality grass, reduction in disease and disorders, such as moss, and increased all year round playability.

### What are the benefits of aeration?

- Compaction relief and improved surface performance
- Better penetration of water and air
- Fertiliser/nutrients delivered into the root zone
- Improves soil structure
- Improves rooting capacity
- Longer use of the surface increased playability all year round
- Releases toxic gases from the soil
- Increases shoot growth

### What is solid tining?

A solid tine is a piece of cylindrical metal that punches down into the soil and makes a hole. Depending on what machines these are attached to – such as a Verti Drain machine – it can be adjusted to produce 'heave'.

So instead of going straight in and out again – which will provide minimum surface disruption – it can be adjusted so it lifts the soil, fractures it and opens the ground up underneath as it comes out.

They can be micro tines, which are thin needle-type tines (8mm) that produce lots of holes over the area, to 24mm tines that can make sizeable holes and will generally go a lot deeper.

### What is hollow tining?

A hollow tine is a round tube that penetrates into the ground, collects a core and when the tube penetrates the ground again, the core is pushed out through a hole.





This allows greenkeepers to remove material, such as poor quality soil and thatch and allows water and air into the root zone.

When a core comes out, it needs to be replaced with something.

So when thatch is removed, top dressing is usually applied behind it to fill up the holes.

Think of it as a soil exchange programme. Thatch and soil is removed and quality sand is added to aid water movement through the surface and drainage. That makes it a lot easier for the plant to grow.

### What is slit, or knife, tining?

On a drum, a series of blades rotate through the soil as the machine moves forward.

They slice through the surface and create fissures and cracks in the ground.

They allow for lateral water movement through the soil and aid root development.

### What is air-injection?

A device, such as the Air2G2 machine, will punch a spike into the ground and a compressor will blast a massive amount of air into it.

The air pressure causes the soil to lift and fracture, thus breaking up compaction by fracturing the soil and improving drainage and root growth.

### What is star tining?

Similar to slit/knife tining, a Sarel Roller – a machine with a number of spikes – runs over the surface.

There is minimal disruption to that surface and it allows it to breathe as well as take in water.

Particularly effective during the summer, a star blade is around an inch long at most.

### What is an Ecosolve?

Also known as a 'drill n fill', the machine sits on the surface and drops down a series of drills as far as two feet into the ground.

It removes material like a drill, which is then back filled with sand or any material, which helps to aid drainage. \*

P DRESSING...

Top dressing sees a layer of sand, or a mixture of sand and other materials, spreadly across the green. There are many different ways of applying it and, depending on the course, greens teams could use it little and often or heavy and maybe only once or twice a year.

The aim is to dilute the thatch that sits between the surface and the soil, improve the quality of the soil and drainage and maintain a smooth and true putting surface. All of this promotes a better grass plant and means a better putting surface. We talk about top dressing alongside aeration because they can take place at the sam time. If the greens have been hollow tined then whatever is in the top dress mix car be integrated into the soil. Through the holes in the surface.

What happens when you get greenkeepers round a table and ask them to speak freely on some of the big issues in their jobs? We gathered a trio of turf managers to do just that...

Do greenkeepers really want to give presentations to members? How do they find dealing with committees and golfers? Who should have priority on the course?







O YOU HAVE TO BE A GOLFER TO BE A GREENKEEPER?

**CHRIS SHEEHAN:** It would help if you could play golf, certainly, but I don't think it's essential. There's some great greenkeepers out there who don't play golf at all.

JAMES PARKER: I would concur with that. I think it's important to some degree to play the game to understand the

playability of it. For me, when you play the game you understand that performance criteria a lot more – of what we look for when we play. But I would also agree that there are some very, very good greenkeepers out there who don't play the game. My course manager, where I was a deputy, doesn't play the game and does an absolutely outstanding job.

JACK HETHERINGTON: It does help but I also believe you don't have to be a golfer. If you're passionate about something, I think you want to know everything about that. So, you

will learn everything you can about the golf, as well as the greenkeeping, aspect. I am not a great golfer. I do play, but because I am passionate about my job I then want to learn about that aspect of it as well.

JP: Different things drive different people. When I came into the industry, I was driven by the fact I played golf first. That was the thing for me and my judge of whether the golf course was good was on a Friday evening. If I had that itch to take the clubs out and play I knew the course was in a good condition. That's what it is for me.

**CS**: It's especially (about) learning the rules of the game of golf. That's essential. If you've got a big competition coming up your course has got to be right – all the GURs, all marked and your out of bounds.

JP: Socially, within the club structure it can help as well. A lot of the things you'll be invited to within the club structure revolve around golf. So, if you are invited to play Captain's Day, or the open – I used to get invited to play in the mixed open with one of the lady members when I was in Scotland – it does help you integrate socially.



Left: Pannal's James Parker and Alnwick Castle's Jack Hetherington have their say while, above, West Derby's Chris Sheehan makes a point

JH: I used to work at Ponteland and a member of the team was a really good golfer. He was really well respected among the members because he was a plus two handicapper and what he said carried a lot of weight because of the fact he was a good golfer. It comes back to the social aspect.

**CS:** Some golf clubs look to the pro for advice on the course when, actually, just because he's a good golfer doesn't mean he necessarily knows anything about greenkeeping. You have got that side of it as well.

### DOES THAT CUSTOMER-FACING ROLE COME EASILY TO YOU?

**CS:** It comes easily enough to certain people. There are still a lot of greenkeepers out there where it doesn't and they are not happy speaking in front of members, or even a small group of people. Maybe even at a greens committee they struggle a little bit. Obviously BIGGA, through their education programmes, can help with that. **JH:** I feel I am much better on a one-to-one level as opposed to giving a presentation but I realise it is

**MEET THE PANEL** Chris Sheehan, head greenkeeper at West Derby, in Liverpool James Parker, head greenkeeper at Pannal, in Harrogate Jack Hetherington, course manager at Alnwick Castle, in Northumberland

going that way. I am trying to throw myself into that environment, so I will be better at my job. To be good in this role, you have to keep adapting and you have to keep up with the way it's going.

JP: I love presenting. It's one of the best parts of the job. I love educating our members on why we do what we do. I believe an educated member is a good member. At Pannal we've started doing presentations and social media because that's what we believe in. I also believe that we have quite a lot of big projects that need doing. A lot of this would meet quite strong member resistance, so I have to sell them a dream of what their golf course could be like.

**CS**: It does become difficult at times when you have a vision or you see the way the weather is going, for instance. At West Derby I said some years back the biggest problem we are going to have is drainage. Sometimes the drainage gets lost in the bigger picture, when a committee wants tees and greens rebuilding instead. You may convince them something needs to be

"You can literally kill someone with a golf ball. There have been serious injuries and our fear is that it won't be long before somebody gets killed." - Chris Sheehan

Right: James Parker gets stuck into another issue while, opposite, Chris Sheehan discusses the challenges facing greenkeepers



done, but then you have a change of committee and new captains and it goes out the window. Your greenkeeper is your consistency. He knows where he wants the course to be in three, five and 10 years' time.

JP: The structure of golf courses is becoming out-dated, I would say. You need a level of consistency and you don't always have that because committees change every few years. You have got new ideas coming from left, right and centre. That makes it very, very hard, as Chris talked about, to get a focused plan for any long-term period. Within that, it's very difficult for a committee to see past the emotive side. A lot of people are emotional about their golf club. They feel attached to their golf club, rightly so. It's part of their family. It's an extension of their family. When you get outside of that, if you look at general managers, boards and proprietary-owned clubs, they can see the actual business side. They can take the emotive out of it and see that, for the good of the golf club, we

need to do this. And it costs this.

### WHO SHOULD HAVE PRIORITY - GOLFERS OR GREENKEEPERS?

**CS:** Most golf clubs that I know, if not all of them, have a policy where the greens staff have priority at all times. But, despite this, greenkeepers sometimes still find themselves in the firing line. That is the worst scenario and it not only hurts them from a mental point of view, it hurts them if the golf ball hits them. There have been many instances of balls hitting greenkeepers and causing serious injury. It has happened to me, and when you go up to the golfer and say 'did you not see me?' They say 'oh no, I didn't' or 'I didn't think I'd hit it that far'. When you are on a machine, you can't hear them shouting fore. As far as I am concerned, don't play while the greenkeeper is on the green.

JH: Greenkeepers should have priority at all times. It's easier for me to educate my three members of staff than



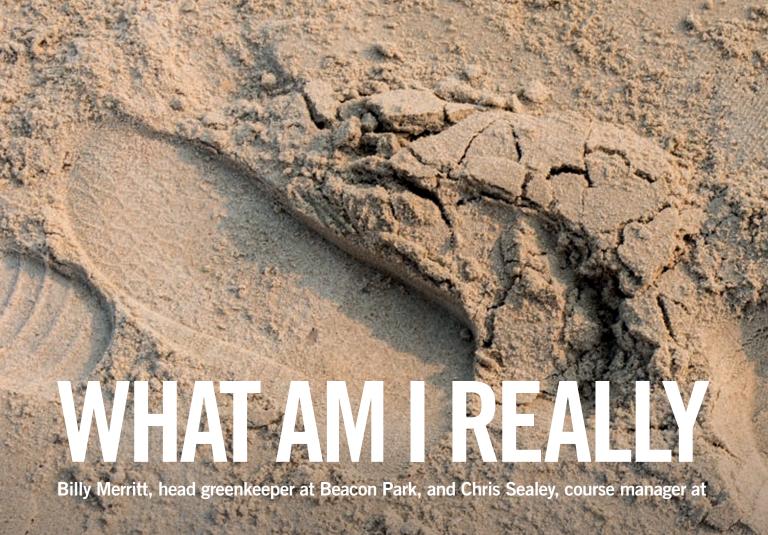
it is to educate all of my members and say 'right, you must give way at this time, but at this time we'll give way'. It's easier for golfers to give way at all times and for me to educate my staff when it's acceptable to make them wait and when it is not.

JP: If you've got somebody cutting a green then golfers should wait. Conversely, if the greenkeeper feels the task is going to take too long and hold up play, then by all means move to the side and let people play through. The difficulty is that the more we squeeze our tee sheets, which every club is doing now as we want to cram on as much golf as we can, then the fourball who are stood in the middle of the fairway feel under the same pressure as the greenkeeper on the green. They've got people on the tee behind them wanting to play. It's difficult from all points of view. But as long as the member and the greenkeeper can work together, I don't really see that it should be a huge issue.

**CS**: We had a health and safety expert in and he said 'I think all the greens staff should wear a helmet and hi-vis jackets when they are working on the golf course, so the golfers can see them and they know it's a member of the greens staff'. I said 'well, don't you think the same applies to visitors or any member?'

JP: We had a health and safety advisor that said completely the opposite. I mentioned about bump caps and hi-vis – I'm firmly against it – and he said he thinks it makes golfers more lazy if you give out bump caps and hi-vis, and the beauty of not wearing them is that golfers should then be on the lookout for greenkeepers. Safety gear doesn't stop golfers from hitting their ball, because they just say 'he's got a bump cap on. I'm going to hit it anyway. He'll be fine'.

**CS:** You can literally kill somebody with a golf ball. There have been serious injuries that have been caused and our fear is that it won't be long before somebody gets killed.



### ...WHEN I SEE UNREPAIRED PITCH MARKS

We get lots of pitch marks on our course with it being a pay and play and, to be honest, we have people practising all the time. They're the type of people who don't repair their pitch marks. In general, a lot of our golfers don't.

I think their attitude is 'oh that's the

greenkeeper's job'. Nobody likes pitch marks on the green, and divots are even worse, but we have a problem with both.

Here, we just assume that people won't repair them and that we need to do it, whether it's pitch marks or whatever. **BM** 

Obviously, there's a huge impact on the putting surface, from a golf point of view.

From an agronomic point of view, if you don't repair the pitch mark quickly it kills or damages the root of grass as well.

It's not good for the golfers, it's not good for the green, from a putting point of view or agronomic point of view.

They look horrible if you don't repair them quickly. You get blotches everywhere. **CS** 

### ...WHEN GOLFERS ASK ME WHY I CUT GREENS DURING THE DAY

When else should we do it? It's more of a problem in the winter because, in the summer, we start at 6am and golf doesn't start till 7.30am. Tees, greens, changing holes – we can keep in front of golfers. It's much more of an issue in the winter because of the light. We still do try to cut in front of them where possible. **CS** 

### ...WHEN I SEE A BUNKER THAT HASN'T BEEN RAKED

You can imagine what we're like up here. We have, the same as everybody else, rakes in the bunkers and you have footmarks around the rakes.

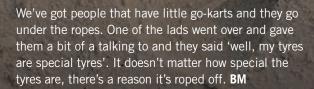
Again, we experience the same attitude; 'it's the greenkeeper's job' and we have to live with that. We're pay and play so the course gets abused quite a lot anyway. It's just the mentality of a pay and play golf course. **BM** 

We had one the other week. We actually had footprints almost underneath a rake and alongside it. Then we had one, at the end of last summer, where somebody wheeled their trolley through the bunker. It takes a bit of doing to get it out, actually, but they managed it. **CS** 



### ...WHEN I PUT ROPES OUT TO PROTECT AREAS AND GOLFERS IGNORE THEM

They think it's a new Olympic event where you limbo under them or jump over them. We get people with hedgehog wheeled trolleys actually go round the inside of the rope and wheel them across the edge of the green. As I keep telling the members, the reason we put rope up is to protect the members' club for the members. **CS** 



### ...WHEN I SEE A DIVOT THAT HASN'T BEEN REPLACED?

A lot of the time they (golfers) do replace them but the birds, magpies and crows lift them up.

At my previous course, we had to go round re-seeding and replacing all the divots but, in general, I think they put them back. We just accept it's going to happen. **BM** 

### ...WHEN A GOLFER TELLS ME THE COURSE IS IN GREAT CONDITION

It does happen quite often at Chippenham and it's much better than anything anyone can give you materially.

If people say 'that's a great effort', that's a huge positive. I always make sure it is passed on to the boys. I am the person that gets the bouquets and brickbats but it's the boys that have the huge impact on it. It's really nice when people come up to you and say the course looks great. **CS** 

### ...WHEN GOLFERS EXPECT THE GREENS TO BE GREAT ALL YEAR ROUND

If you live in this country and expect that, you must be crazy. It's just unrealistic expectations. Our climate is one of the worst things to deal with, especially in winter

The biggest stress of any greenkeeper is the weather. Our whole life revolves around the weather. If it changes, we've got to try and deal with it. The golf course is our baby. We look after it and we don't like to see any abuse – no matter what it might be.

We take it personally. BM &





# How the removal of pesticides will alter the way your course looks

Chemicals that have routinely been used to keep our courses perfectly presented are being withdrawn. What will the impact be? Steve Carroll finds out



E golfers have been spoiled. Those perfect, rolling greens we putt on in summer, those pristine fairways and tees? They've nearly all been given a little helping hand now and then.

Imagine a golf course is like a human being. If you get sick, a doctor will give

you antibiotics.

It's not much different with grass. If it became infested with pests, or picks up a disease, there was a medicine that could nurse it back to health.

Except that isn't necessarily true anymore.

In recent years a whole host of chemicals, that the greenkeeping industry has utilised to help ensure we have these wonderful playing surfaces, have been taken off the market. And in some cases, now they are gone, there's no longer any guaranteed way of treating the ailment. What does that mean? Maybe we should all start getting used to some different course conditions when we go out to play. Stuart Green, BIGGA's head of member learning, takes us through some of the irritants that might have more of an impact from now on...

### **LEATHERJACKETS**

### What are they?

Leatherjackets are the larvae of the crane fly, which is commonly known as the daddy long legs.

### What chemical is no longer available?

Chlorpyrifos. The insecticide was withdrawn due to changes in the authorisation of use.

### What will we see on the course?

Leatherjackets sit just under the surface and they will chew and eat away at the roots of the plant.

The main damage you will really see is what the predators coming to get them do on the surface.

Crows and badgers will pull the surface up to get at the grubs, causing huge damage. But regardless of this, the leatherjackets will sit there and chomp away at the roots – like sheep grazing the turf but in reverse. So if you didn't have crows coming in to eat them you would start to see, particularly at stressed times such as when it gets hot, those areas of turf dry out and die off a lot quicker than other areas.

The turf has lost the root structure to keep it healthy.

You may now see more damage on the course, areas have been ripped up and will have to be returfed. You might have more areas of ground under repair. Some parts of fairways may be roped off.

Golfers may have to accept this is going to become a

more common sight from now on. It is going to become more difficult, and in some cases impossible, to produce the pristine surfaces that golfers have come to expect.

### Can anything be done?

Crows should be discouraged as they go in with their big beaks and just rip the turf out to get to them. Badgers are a protected species, which makes discouraging them tricky. However, you can attempt to do so by setting up feeding stations away from the course.

### **CHAFER GRUBS**

### What are they?

Chafer grubs are the larvae of the chafer beetle. They have stout, white, bodies, which curve into a C shape and can grow to 3/4 of an inch long.

### What chemical is no longer available?

It's Imidacloprid, which is a neonicotinoid. These chemicals have been linked to reductions in bee populations. That was withdrawn recently by regulators.

### What will we see on the course?

It's very similar damage to leatherjackets, but chafer grubs generally prefer a sandier, moist soil, so they can dig down and dig through it. It's the secondary damage



from birds and badgers that causes the major issue on golf courses.

### Can anything be done?

From a greenkeeper's point of view, there are other things they can do to try and discourage these pests. The leatherjacket and the chafer grub are laying their eggs at around the same time – around July and August.

Greenkeepers can avoid doing major aeration work at that time, so the surface is not being opened up. If you do that work, you've just created the perfect place for them to pop their eggs. They don't actually have to do any burrowing to get down into the surface.

From now on, you are going to have to look at thresholds. How much damage are you willing to accept? With the chemicals, it was: 'we can stop that damage immediately'. Now we've got to work around that. But we are going to have a certain amount of damage, because it's natural. Reducing your organic matter is certainly a way forward and there is evidence to say if you roll the surface heavily you will kill off chafer grubs.

There are a lot of cultural methods you can use, particularly to get leatherjackets up. Putting tarpaulin down on a surface sweats them out and they come to the surface and you sweep them off.

The other one that's pretty good for getting rid of

leatherjackets and chafer grubs is flooding, but this clearly has some other downsides.

There are two other options available to the greenkeeper that have a licence to be applied to control chafer grubs.

They are a biological product that uses nematodes and a garlic-based product. Both products have shown to be effective. However, they must be applied at the right time of year and during very specific environmental conditions, as this will greatly impact their efficacy. The garlic-based product is also effective on leatherjackets.

### **CASTING EARTHWORMS**

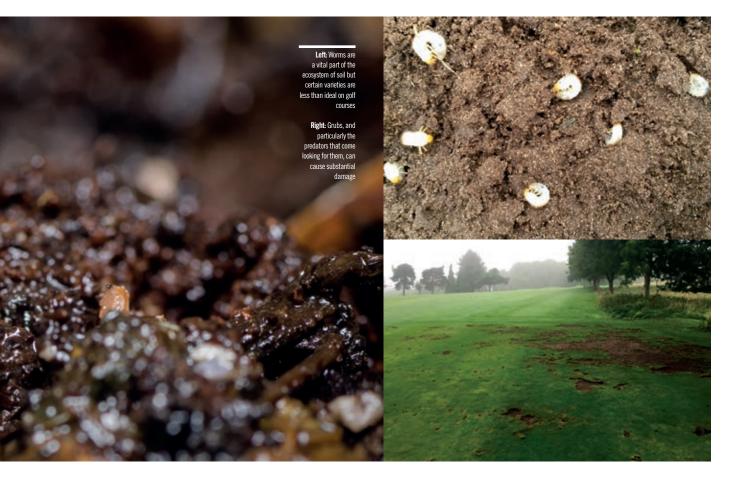
### What are they?

We have about 10 to 12 varieties of worm in this country and only three of them do any casting damage. The cast is caused by the worm coming to the surface.

Worms are fantastic in the soil and you want them there because they help to aerate the soil. They digest organic matter and they are really helpful within the ecosystem of your soil. Unfortunately, there's always a minority that spoils it for the majority. Worm casts are soil and worm dung that gets deposited on the top of the surface.

The worms particularly like moist, heavier soils that have got a large amount of organic matter, such as you find in walk on and walk off areas around greens and tees.

When you have many worm casts on the surface, you



are going to end up with a mudbath.

### What chemical is no longer available?

Carbendazim. It was a fungicide and it was discovered it had a side effect of controlling worms. Because worms are deemed a useful creature within the ecosystem of the soil, the fungicide was reclassified as a biocide.

It meant you couldn't use it to control worms. Worms, to not put too fine a point on it, are now a protected species. They have been deemed a beneficial creature within the soil. You have got to apply this to agriculture and the amenity sector as well. In agriculture, you want worms in your soil. You need them.

### What will we see on the course?

The mud on the surface chokes the plant, causing it to die. What golf clubs have to realise now is that there's not that magic bullet in the chemical store that will sort the problem out. What clubs might have to do is invest in a bit more manpower, possibly some more equipment, because if you've got worm cast problems you need to get that cast off.

If you've got casts on the surface, you can't really mow because all the soil gets stuck on the rollers and into the blades. It will dull the blades, which will cost money to get them sharpened.

When you get mud on the rollers, it raises the height of cuts and you don't get as good a cut on your surfaces. If you are cutting greens and tees, you should switch and brush all the worm casts off.

### What can be done?

Worms generally don't like acidic soil conditions. In theory you can start to acidify your soil but that takes a long time and it's not always successful.

You also want to increase the sand content as well, to dry that soil out. You will reduce the ability for the worm to move through the soil because it becomes like concrete.



Replacing grass clippings, particularly on fairways, also makes a difference. They are full of moisture, nutrients and organic matter, which is the perfect wormfood. So when you take them off, you are denying them this foodsource.

### **MICRODOCHIUM PATCH**

### What is it?

You might know it as fusarium. It's the most prolific disease in the UK and causes the scarring you might typically see on greens during winter.

### What chemical is no longer available?

The active ingredient that is gone is called iprodione. It was a contact fungicide – very much like an antiseptic cream.

It was a case of 'there's disease out on the golf course, I'll go and hit it with this and we'll kill it off'. What you have to understand about the pathogen itself is that once you've seen the disease, the plant is already infected and is being killed.

What greenkeepers do is use that and a curative fungicide to kill it and stop it spreading. It's very effective and very easy to use and it's going to be gone by the summer. There are still fungicides available for controlling



disease but they are a little more systemic. You have to apply them before disease is visible and they work from the inside out. They protect the plant from the inside. You have to be proactive with these and have a plan in place for applying them.

When you apply a fungicide, you are not just killing that bug, you are killing others as well – beneficial bacteria and fungi and, when you start to look at the ecosystem within a putting green, we know about 0.1% of what's actually in there. We are using these fungicides and we don't really know how they are affecting the rest of the bug population within our greens.

### What will we see?

You will see more scarring. You are still going to see it but we won't have that sticking plaster or antiseptic when it appears. Instead you are relying on what was put on before an outbreak to do its job.

### What can be done?

Some greenkeepers are using biological controls and increasing their fungi and bacteria content within the soil to help them combat disease.

If we get ill, we are generally run down. We are out of balance, out of sync. That means our body's immune system is low and it allows disease to attack and take hold. It's the same with grass. We do something incredibly alien to that plant.

We are putting it under an immense amount of stress every single day. A grass plant wants to grow strong and tall and put seed heads out.

It wants to procreate. But we shave it to 3mm or 4mm in height, which means it is under an immense amount of stress and more vulnerable to attack.

The loss of these products, and many other tools from the greenkeepers' arsenal, is restricting our ability to fight back. Lower standards of turf quality may be the inevitable result.



### **CASE STUDY**

Brough course manager Rob Clare has suffered infestations of chafer grubs at the East Yorkshire course and the results have been demoralising...

### What damage have you had?

Chafer grubs. There are five types of chafer grub, and we have Welsh chafers. What we've seen, in a pattern over the last six years, is that we'll have a year of very heavy damage – usually starting in August and running right through the winter and into early spring. On average, there has been about 4,000 square metres of damage scattered around the course and it has made it look very unsightly.

Predators maybe start pecking in August and, when you get into October/November onwards, they usually stop because it gets cold and the grubs burrow down.

But, over the past few years, the pattern has been for very mild winters. The grubs have never bothered burrowing down. They have fed all winter and the crows have been tearing up and we've had no respite from it. This has had a tremendous effect on our club because it has been a lot more than the cost of repairs. The costs of repairs are relatively manageable but it has cost us members.

We're a premier club in this area and you are talking August, September, October, November, January, February – it's six months of the year, nearly seven months – where the course looks like a bomb site. There is just this damage everywhere.

It has been very demoralising for us. It is bad for the members. We have tried our best to educate them but they are frustrated and occasionally they have taken it out on us and inadvertently blamed us, if you like.

People have spoken with their feet because we've lost a lot of members. There's three major clubs in our area – us, Hull and Hessle. Hull and Hessle don't have sandy soil so they don't have chafer grub problems.

The five species have five different life cycles. Some of them are one, two or up to three years depending on the species. We've got grubs under the ground now. They were this year's eggs, but they are very tiny. So the crows don't go after them until they are a size to interest them. That will be coming into this year and, until they pupate and become beetles, they will be interesting for the crows.

## Greenkeeping PROFILE

Sam Bethell reveals his career highlights and what he would do as Prime Minister

### SAM BETHELL

Role: Course manager Club: Chipstead Golf Club

**Age:** 33



### HAT'S the best thing about greenkeeping?

Working with nature and the landscape to present playing surfaces you can take pride in, especially when the developments you've planned and carried out improve the course.

### What's the worst thing about it?

Unhelpful criticism. I love constructive criticism and I've no issue with feedback and people giving their ideas and so on. But unfounded criticism drives me mad.

### What most surprised you about the profession?

Where it can take you. When I first started I thought it was working on one course, cutting grass. But when I started to get involved with BIGGA events and meeting other greenkeepers, I've realised there are a lot of opportunities to experience tournament golf and, if you like, travel all over the world.

### What has been the highlight of your career so far?

I'm torn between getting my first course managers position and earning a place on the BIGGA Delegation to Orlando in 2017. I tried for five years to be a delegate

on the programme, which is sponsored by Bernhard & Company, but I had worked towards being a head man on my own course for 13 years, so it's tough to choose. Orlando was an unbelievable experience and my career as a course manager has only just begun, but I'm on the right path.

### What has been the key for you in progressing in your career?

There have been two for me, first I made a big decision to commit myself to education, I have worked very hard in and out of work to get all the correct qualifications to demonstrate I have the credentials. Second has been a willingness to take risks and move jobs to gain a wider experience. Many people in the industry spend a very long time at one club but I think employers are keen to see that you are flexible and adaptable.

### What's the strangest thing a golfer has said to you while you were working on the course?

When I first started at The Richmond, my previous club, I was doing bunkers in the summer. I had my short sleeves and my shorts on and a lady member came up to me and asked me if I was on a prison release programme. It's funny how people judge you on your appearances.

### What's your guilty pleasure?

Christmas music.

### If you were Prime Minister for the day, what would you do?

Something to do with pensions for old people, heating and stuff like that. They've given a lot to this country.





### BIGGA

### British and International Golf Greenkeepers Association

An association committed to the continual professional development of its members, working with the leading bodies in golf for the good of the game

Serving the needs of BIGGA's Members

Supporting the health and growth of the game and industry of golf

Providing leadership and direction in greenkeeping to the golf industry

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