



BIGGA

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Greenkeeper

International

LYNCH CLINCHES IT

James Lynch gets his hands on the BIGGA National Championship trophy as Enville hosts the association's largest annual tournament

The Spurs Way

What can golf learn from the billion-pound Tottenham Hotspur Stadium?

Pine Ridge

Surrounded by famous neighbours, this Surrey pay-and-play holds its own

Enville

Andy Wood shows us around this outstanding Midlands 36-hole venue

Silicon alley

Exploring the vital role of silicon in promoting healthy plant growth

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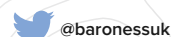
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The magazine for BIGGA members

Greenkeeper International exists for you, our members. Since 1987 BIGGA has helped thousands in golf greenkeeping to progress their careers, find inspiration and get involved in our varied and vibrant community. This magazine aims to reflect the passions and preoccupations of our members and we'd like you to be involved. Please drop us a line, send us a picture or post on our social media pages (the details are listed below).

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BIGGA Photographic Calendar 2022: November's image was taken by Joe Simpson, Ipswich

WELCOME

There have been many references in this magazine and at various BIGGA events in recent years to The R&A's Golf Course 2030 project.

I welcomed this project when it was first mooted and remain convinced it can have a huge and positive impact on golf in the near future.

It was gratifying, therefore, to be invited to make a presentation during The R&A's Sustainability Symposium alongside many of the researchers who have contributed to the first wave of projects designed to help build the 'roadmap' to a sustainable future for golf.

An audience from all across Europe was present to hear results from projects focussed on topics such as water management, course quality standards and grass species selection.

I am delighted that within



Chief Executive Jim Croxton

the scope of the GC2030 project is a significant focus on the workforce that is critical to the future of the sport. A key project has taken place focussing on education standards for greenkeepers and the findings reaffirmed our belief that a professional, educated and committed workforce is absolutely critical to the sport's future. I was able to bang that drum to the assembled audience alongside our friends at The R&A, England Golf and

others. All readers of this magazine will appreciate the importance of greenkeepers but it is encouraging that the message is permeating into the upper echelons of golf.

We know that a number of things need to improve within golf clubs if we are to recruit and retain the workforce of the future; salaries must be competitive, welfare conditions conducive and the management and governance of golf facilities fit for purpose.

We are on the right path but there is still a way to go.

I am confident we will get there and the recent round of interviews for the BIGGA Delegation sponsored by Bernhard and Company was an inspiring opportunity to witness the talent, passion and commitment of so many of our members. The industry is in excellent hands, if only it would recognise it.

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INSIDE THIS ISSUE

Editor's Notes

Greenkeeper International editor, Karl Hansell



During October we contributed to an article that was published in Scotland's biggest daily newspaper and posted on their website, which gets around 2 million monthly views.

The article highlighted the issues of staff retention in greenkeeping and how it could be an incredibly attractive career choice, if only conditions such as fair pay and greater understanding in the clubhouse are achieved.

The journalist could have written about anything sport-related, but he came to BIGGA and put together the piece out of a genuine respect for the greenkeeping profession, and that is heartening and reassuring.

In their words, the journalist is banging the 'drums, cymbals, the whole set' on behalf of you all.

Could it be that the tide is finally turning? I'm fairly confident that I would be the BIGGA staff member who speaks most frequently with the mainstream golfing media and I'm of the belief that the message really is getting through, to those who want to hear it.

But it can't be said enough that while we work on a national level, the responsibility for achieving improved relations locally sits with every greenkeeping professional. Let's push that turning tide into a tidal wave of positivity in support of the sports turf profession.

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The BIGGA National Championship was held at Enville and we've got all the highlights from the event. We also had a chat with Course Manager Andy Wood about life at the heathland venue.

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THE PEOPLE BEHIND YOUR MAGAZINE



Wayne Billing

Stadium grounds and transition manager at Tottenham Hotspur Stadium, Wayne is also a UEFA pitch consultant and sports turf science and management graduate from the University of Central Lancashire.



Phil Helmn MG

Master Greenkeeper Phil Helmn continues his conversations with some of the leading names in the sports turf industry, this time stopping by Wentworth Club to meet courses and estates manager Dan Clarke.



Laurence Pithie MG

The first BIGGA member to achieve Master Greenkeeper certification, Laurence continues to keep his finger on the pulse of the industry, this month taking a visit to the wonderful Pine Ridge in Surrey.



Andy Wood

Times are busy for Andy as he is course manager and interim general manager at Enville, so we're grateful that he not only oversaw course preparation for the BIGGA National but also stopped to chat about life at the club.

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DOWN HOTSPUR WAY

As the World Cup gets underway, we learn how the Premier League’s leading grounds team is redefining sports turf

Karl Hansell, BIGGA

What can a golf club learn from a multi-billion-pound Premier League stadium?

Earlier this year, Greenkeeper International joined volunteers from BIGGA’s South East Region as they were given a behind-the-scenes look at the world’s most ambitious natural playing surface.

Wayne Billing is grounds manager at Tottenham Hotspur Stadium and is responsible for a football pitch that is redefining what can be achieved in the sports turf industry.

“The stadium is unique, so you could never be taught what we have learnt in the four years that we’ve been here,” said Wayne, whose team was named Premier League Grounds Team of the Season for 2021/22. “It’s constantly evolving and this is new technology that we are pioneering.”

As the World Cup gets underway in Qatar this month, the work will continue for the UK’s Premier League groundsmen. It’s unlikely that any of them will be undertaking a project on the scale of the Tottenham Hotspur Stadium team, though, as they set about installing a new American football pitch underneath the grass playing surface.

The stadium is the largest Premier League ground in London and the second largest in the UK, with a

“You could never be taught what we have learnt in the four years that we’ve been here

capacity of 62,850. It includes Europe’s largest single tier stand, with 17,605 seats, but behind the seats there’s also an on-site micro-brewery, Europe’s longest drinks bar and the most innovative pitch construction you’ve ever seen. Tottenham’s is a living Premier League-standard playing surface that can be removed from the stadium and stored in a car park, where it is kept in near-pristine condition until needed. And, frankly, it has to be seen to be believed.

The playing surface is the first hybrid carpet pitch in the Premier League and comprises of a Desso Playmaster carpet system that has interwoven polyethylene plastic fibres to aid stability, player traction and performance.

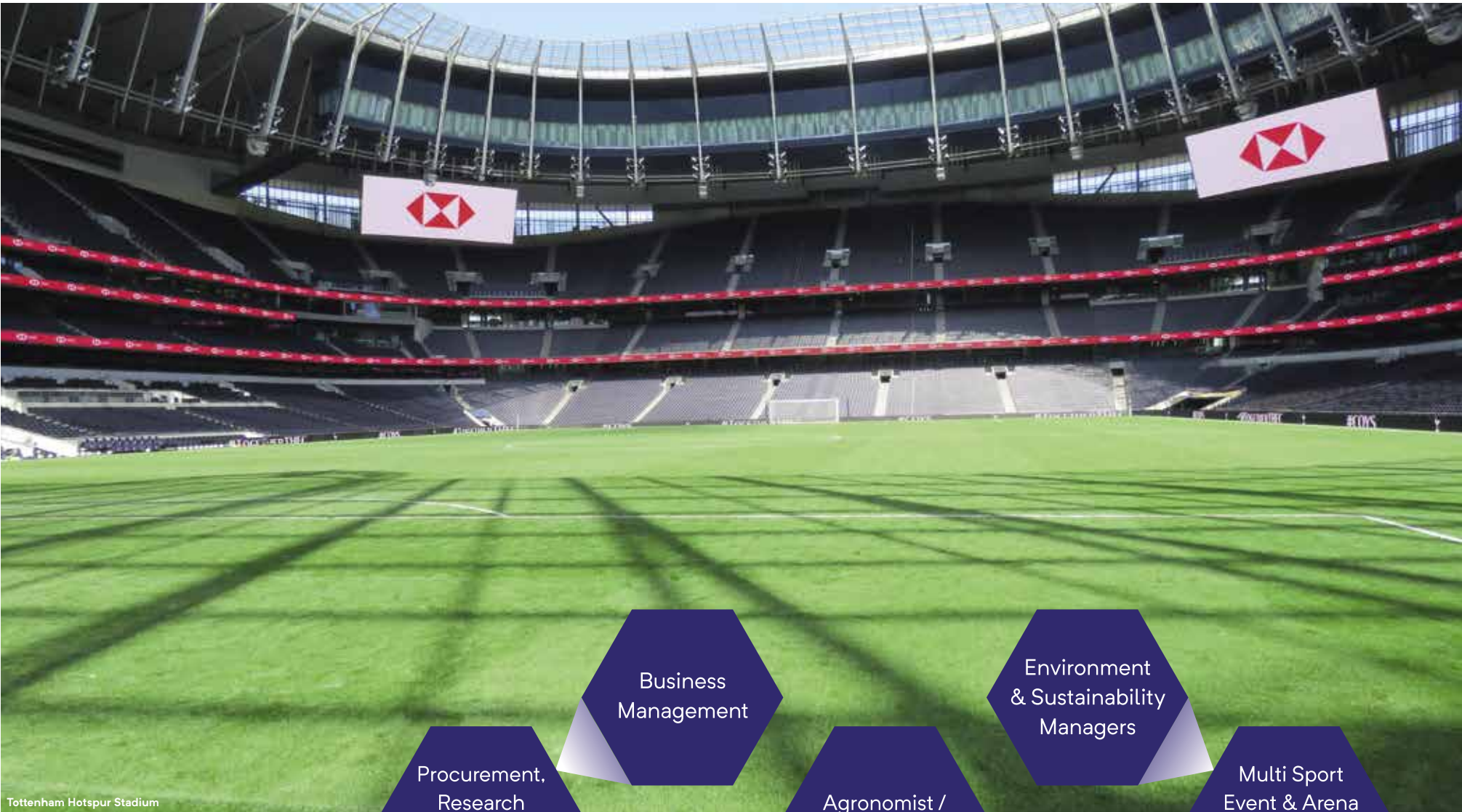
Each year in early March, 9,600m² of turf is laid by Hewitt’s Sportsturf and Tiller’s Turf in Lincolnshire. Under the supervision of Wayne and his team, the pitch is grown for around 12 to 16 weeks before being transported to the stadium as 735 individual rolls that are installed over three days. This season, the turf was laid just two days before a match was due to take place.

“That’s a tight turnaround from our perspective,” said Wayne. “But it’s due to the business model of the stadium to generate maximum

revenue. While a regular renovation can take six weeks, we can have a concert one week and a Premier League game the next weekend. It’s pretty challenging from a groundsperson’s perspective, but it is rewarding when it all comes together.” »



Wayne Billing is stadium grounds manager



Tottenham Hotspur Stadium

GREENKEEPERS' TOOLBOX

The Team

- / Wayne Billing, stadium grounds manager
- / David Cox
- / Ollie Deeming
- / Tony Sayers
- / Jake Messenger
- / Ten other staff members form the matchday squad



Looked at in profile, the surface is 40–45mm of hybrid turf comprising 100% ryegrass. Below that is 125mm upper rootzone above 175mm lower rootzone. There are then undersoil heating pipes at 300mm intervals and a 150mm permavoid crate above a waterproof membrane.

This membrane protects a 63mm Turf Nation synthetic carpet, which is the NFL-grade playing surface used for two American football games each year.

That sits above a sand and black SBR infill layer, a 17mm Mondo shock pad, a layer of open texture tarmac, an 85mm permavoid crate and then a concrete slab.

You have to believe that at some point, much of this technology will filter down into other levels of the game and even into other sports. But until that happens, Wayne said Tottenham Hotspur Stadium can be used for another, inspiring purpose.

“We should be using these types of venues to attract kids to the industry,” he said. “If you brought kids here, what is not to love? I would find it hard to believe you wouldn’t instantly be drawn into wanting to learn more.

“We put together a brainstorm of what the 21st Century groundsperson does because we’re struggling to attract people into the industry, but we’re not really telling them what the role is.

“The perception is we just cut the grass, but until we get the information out there and get the kids to this type of venue to see what we actually, do, you’re never going to achieve anything. There are so many people who are passionate about what we do, but as an industry we don’t engage with an audience.”

And it is easy to see why Wayne and the team would be so inspired by their working environment. Come matchday, with the Champions League anthem ringing out around the



When in storage, the pitch fills this car park

stadium, having prepared the most incredible playing surface using traditional expertise combined with the latest technology, it must be an incredible feeling.

The Tottenham team are better than many at giving an insight into the creation of a modern football pitch, due in part to the tremendous publicity the new stadium garnered. But come matchday, most of the hard work is — by necessity — hidden from view. For example, when you step out onto the pitch, those massive stands are breathtaking, but they also rob the pitch of any natural light. Even in

mid-summer, less than 40% of the pitch is exposed to natural light, making the stadium one of the most shaded in Europe, and so the grounds team supplements the turf with the world’s first fully integrated grow light system. Each grow light weighs 20 tonnes and spans the full 70m width of the field, but nothing actually touches the turf. The pitch is also divided into 36 areas and the 864 lights can be adjusted to ensure all 7,525m² of pitch receives the appropriate level of light. In total, approximately 1,000,000 $\mu\text{mol/s}$ of light are applied by the SGL system each year (the sun produces

1,700 $\mu\text{mol/s/sqm}$ on a clear summer’s day).

“For five months of the year, we’re essentially in darkness in the bowl, so we’re not getting any natural light whatsoever,” said Wayne. “[If there wasn’t any artificial lighting] we wouldn’t have much grass left.

“If you go back 20 years to when we didn’t have artificial lighting, there wasn’t much grass kicking around at all on football pitches.”

Scan the QR code to watch a video of the lighting in action:



There are other challenges presented by the microclimate of a massive stadium. Even though the grass is ‘outside’, the lack of wind can cause stagnant air and reduce evapotranspiration, leading to severe disease pressures.

Wayne said: “The disease pressure inside the bowl is huge. As soon as you irrigate you’re into a world of pain if you get it wrong, so we always err on the side of caution.”

The pitch is constantly monitored, with PitchCam offering a livestream of the pitch and daily quality scans of the entire surface using GrassFocus, a camera system that can identify problems four



A cross section of the pitch construction



Goal line technology requires the goalposts to be placed with exquisite precision

or five days in advance of what can be seen by the human eye.

There is an integrated preventative turf disease programme and UV-C light treatment can prevent fungal diseases by killing bacteria and other pathogens.

All this is simple, though, compared to the challenge of managing the turf and preventing diseases when the pitch is in storage, which it can be for more than two weeks at a time.

In advance of being placed into storage, the team will undertake a full IPM programme and apply preventative fungicides. At that point the clock is ticking because the efficacy of products will drastically reduce after 14 days. Inputs such as fertilisers are reduced and plant growth regulators are applied.

The height of cut is reduced from 23–25mm to 17mm and the pitch is heavily irrigated.

There are 150 tasks to tick off before the pitch can be moved, but when it does, the turf splits into three and its holding trays are revealed. Weighing a combined 10,000 tonnes, the pitch runs on 594 wheels over 2km of steel rail and is moved by 112 hydraulic cylinders.

When in storage, there is

1.3m of clearance between the pitch and the car park roof so mowing can continue, although products cannot be applied.

The temperature is kept at 6–8°C and two dehumidification units help prevent disease and minimise leaf wetness while keeping the turf as close to dormant as possible — although etiolated growth will begin to occur after two weeks. There’s also the world’s largest indoor stadium LED system, helping keep the plant healthy but without creating additional heat.

The transition from a football pitch to an NFL pitch

takes about 54 hours at present, and you can watch a video here:



“It’s a full-time job to manage the pitch while it’s in storage,” said Wayne. “You’ve got 1.3m headroom across the surface, so we do hand readings and our own reports to make sure the turf quality isn’t dropping.

“My job is purely data gathering, analysing process and working out logistics and I enjoy the challenge. When we came to the stadium a lot of people, even industry experts, said we would fail and

wouldn’t be able to deliver it, but we have just won pitch of the year.”

In the 2021/22 calendar the stadium hosted 19 Premier League games, two NFL matches, a major boxing event, three Women’s Super League games, four Champions League matches, a Betfred Challenge Cup match, three Carabao Cup matches, two FA Cup matches, one Gallagher Premiership Rugby match and nine live music concerts, in addition to first team training, U23s matches and corporate events.

Whether on the artificial turf or the natural playing surface that Tottenham Hotspur’s players enjoy, the enjoyment for Wayne and his team is the same as any other groundsman or greenkeeper and comes from providing the stage upon which exciting things will happen.

During a match, Wayne will be stood in the tunnel in case an urgent situation arises, but he gets the goosebumps the same as any other when, for example, the Champions League anthem begins to play.

“That’s the biggest buzz,” he said. “The buzz for us is delivering the event, not the event itself. The reward of hosting a successful event with everyone coming in happy afterwards and saying the pitch looks good, that’s the name of the game.” »



The view for the players as they head out onto the pitch.

THE SPURS WAY:

Building a high-performance culture

These are the guidelines upon which every member of the Tottenham Hotspur team works each day as they seek to build a high performing workplace culture. Could you adapt this template to inspire your greenkeeping team?

DARE

Thinks ahead, generates ideas, takes risks, flexible, bold, considers alternatives, challenges the way things are.

Don't want to see:	Want to see:	Role model
<ul style="list-style-type: none">/ Resists new ideas or ways of working. 'It'll never work', 'We've always done it this way'/ Sees problems but doesn't try to find a solution/ Makes changes to own area without considering impact on others/ Unwilling to consider alternative perspectives/ Not willing to re-plan if things change/ Treats alternative views as criticisms or a personal challenge and gets defensive/ Constantly negative or pessimistic about plans.	<ul style="list-style-type: none">/ Creates different ideas and ways of doing things/ Doesn't go to someone with a problem, but tries to find a solution/ Sees the bigger picture./ Explains why something needs to happen, not just what needs to happen/ Collects relevant data to make informed decisions based on facts/ Adaptable and responsive to change/ Talks optimistically about the future and shows pride in the club/ Plans ahead and manages the unexpected	<ul style="list-style-type: none">/ Not afraid to challenge the status quo/ Spots strategic opportunities and finds innovative solutions/ Plans ahead — thinks long term/ Looks at the bigger picture and considers the impact of actions inside and outside the club/ Shows flexible thinking — weighs up pros and cons before making decisions/solving problems/ Has regular dialogue with others so that everyone fully understands the situation from all angles/ Supports people when things are uncertain/in tough times so they keep faith in the club's future

/

Creates different ideas and ways of doing things

/

Doesn't go to someone with a problem, but tries to find a solution

/

Sees the bigger picture.

/

Explains why something needs to happen, not just what needs to happen

/

Collects relevant data to make informed decisions based on facts

/

Adaptable and responsive to change

/

Talks optimistically about the future and shows pride in the club

/

Plans ahead and manages the unexpected

/

Not afraid to challenge the status quo

/

Spots strategic opportunities and finds innovative solutions

/

Plans ahead — thinks long term

/

Looks at the bigger picture and considers the impact of actions inside and outside the club

/

Shows flexible thinking — weighs up pros and cons before making decisions/solving problems

/

Has regular dialogue with others so that everyone fully understands the situation from all angles

/

Supports people when things are uncertain/in tough times so they keep faith in the club's future

RESPECT

Values and trusts others, builds relationships, collaborates, works well in groups and as part of the wider team.

Don't want to see	Want to see	Role model
<div><div>/</div> Doesn't listen — too busy talking about themselves or distracted</div> <div><div>/</div> Interrupts or talks over others</div> <div><div>/</div> Talks about a team mentality but doesn't act that way</div> <div><div>/</div> Undermines others — only sees own area/agenda as important</div> <div><div>/</div> Rude, aggressive or dismissive towards others</div> <div><div>/</div> Complains constantly when things don't go their way</div> <div><div>/</div> Has a 'them and us' mentality</div>	<div><div>/</div> Listens and asks questions to understand and build relations across teams</div> <div><div>/</div> Values others' contribution — trusts others</div> <div><div>/</div> Gives praise and thanks so people know they're on the right track and are appreciated</div> <div><div>/</div> Is supportive of others' efforts even when things go wrong</div> <div><div>/</div> Finds out what other people and teams do in the club — and how each are connected</div> <div><div>/</div> Treats others with respect</div>	<div><div>/</div> High degree of openness and honesty</div> <div><div>/</div> Brings people together from other departments to plan the best way forward</div> <div><div>/</div> Discusses issues as a team to get everyone's input</div> <div><div>/</div> Recognises when others have done a good job — expresses confidence in self and team</div> <div><div>/</div> Builds relationships across the club — not just in own area</div> <div><div>/</div> Has a win-win approach — makes sure own plans work for others too.</div>

/

Listens and asks questions to understand and build relations across teams

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Values others' contribution — trusts others

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Gives praise and thanks so people know they're on the right track and are appreciated

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Is supportive of others' efforts even when things go wrong

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Finds out what other people and teams do in the club — and how each are connected

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High degree of openness and honesty

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Brings people together from other departments to plan the best way forward

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Discusses issues as a team to get everyone's input

/

Recognises when others have done a good job — expresses confidence in self and team

/

Builds relationships across the club — not just in own area

/

Has a win-win approach — makes sure own plans work for others too.

DRIVE

Gets things done, delivers high standards, takes responsibility, proactive, continuously improves.

Don't want to see	Want to see	Role model
<div><div>/</div> Doesn't do things when they say they will or only when prompted</div> <div><div>/</div> Muddles through. No clear process or structure</div> <div><div>/</div> Blames others for own shortcomings</div> <div><div>/</div> Doesn't take responsibility for anything outside of job role — has a 'not my job' mentality</div> <div><div>/</div> Not meeting basic standards — eg misses deadlines or late into work</div> <div><div>/</div> Doesn't tackle underperformance. Makes excuses for low standards.</div> <div><div>/</div> Unwilling to confront issues head-on or hopes they go away</div>	<div><div>/</div> Has a 'can do' attitude — always tries to find a way</div> <div><div>/</div> Is proactive — plans ahead and in detail, with clear goals</div> <div><div>/</div> Willing to tackle underperformance</div> <div><div>/</div> Takes responsibility when something's not working — and sorts it out</div> <div><div>/</div> Ask others for feedback to improve own performances</div> <div><div>/</div> Communicates regularly with others so people know what's happening</div>	<div><div>/</div> Finds a way around obstacles even when things are difficult</div> <div><div>/</div> Sets high standards and constantly looks to improve</div> <div><div>/</div> Sets ambitious goals, regularly reviews and tracks progress</div> <div><div>/</div> Encourages others to take initiative so problems are dealt with quickly</div> <div><div>/</div> Puts in new processes to standardise procedures and streamline operations</div> <div><div>/</div> Builds systems to ensure clear communication and action</div> <div><div>/</div> Sets clear parameters so others can make decisions and get the job done</div>

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Has a 'can do' attitude — always tries to find a way

/

Is proactive — plans ahead and in detail, with clear goals

/

Willing to tackle underperformance

/

Takes responsibility when something's not working — and sorts it out

/

Ask others for feedback to improve own performances

/

Communicates regularly with others so people know what's happening

/

Finds a way around obstacles even when things are difficult

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Sets high standards and constantly looks to improve

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Sets ambitious goals, regularly reviews and tracks progress

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Encourages others to take initiative so problems are dealt with quickly

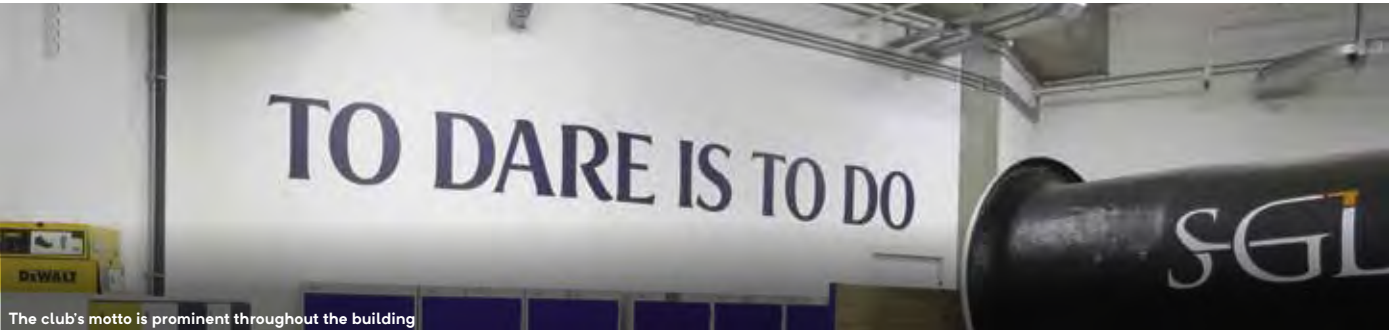
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Puts in new processes to standardise procedures and streamline operations

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Builds systems to ensure clear communication and action

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Sets clear parameters so others can make decisions and get the job done

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ACROSS THE BOARD

Gordon Moir | BIGGA President

This will be final column as BIGGA President and as my year draws to a close, it has been great to attend different events and meet so many of my fellow members.

It has been encouraging to be reminded that there are still so many people out there, all working together to improve the profession.

You can't fail to be aware of the issues with recruitment and retention that we face, but on the other hand it's clear that there are still plenty of people who are looking to continually improve and who see their career being in greenkeeping.

It was wonderful to be a part of the BIGGA team at The Open in St Andrews back in July, but the highlight of the year for me was the Toro Student Greenkeeper of the Year Awards in September.

I saw the candidates having the same enthusiasm for the industry as I had 40 years ago. They were willing to step up and look to the future and it reassures me the industry is in good hands.

On several occasions this year I've met someone who has reminded me that for many, the passion for greenkeeping remains. These are the BIGGA members who want to be the best and are aware of the opportunities that are out there —



“Walking into a room of people is always intimidating, but the more you do it, the more comfortable you will become in that environment.

opportunities that didn't exist when I began my career.

When I speak to up-and-coming greenkeepers, I can tell them in good faith that this is a wonderful career because there is so much you can gain from greenkeeping, if you have the passion for it.

To anyone who asks for advice, I tell them to step out of their comfort zone, work on their weaknesses and don't be afraid to ask for help.

I'll be attending all five BIGGA Conferences in the coming weeks and I hope to see many of you at those

can be at any level. By looking around and seeing how people conduct themselves, you'll prepare yourself for the day when you do take that step up.

Walking into a room of people is always intimidating, but the more you do it, the more comfortable you will become in that environment.

Simply by being observant, you'll get to know people and learn how to act. If you strike up a conversation with other attendees, then, if you go for an interview in the future, perhaps someone on the panel will recognise you and remember how engaged and interested you are.

As my term as BIGGA President comes to an end, I'll be settling down to (proper) retirement, but I'll continue to attend as many local and regional BIGGA events as possible. If you see me at one of these days, don't be shy about saying hello. I'm there to speak to people and I always enjoy hearing about what's happening in the industry.

Thank you to everyone associated with BIGGA for allowing me the incredible privilege of being your president for 2022. My best wishes go to my successor, Andy Smith and to all those who contribute towards our wonderful community.



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THE CUT OF TRUST AT TOURNAMENT TIME

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The BIGGA National Board is comprised of the following members who volunteer their time to support the association: Stuart Ferguson MG, Jack Hetherington, Andrew Laing, Antony Kirwan, Lucy Sellick, Iain Macleod and Richard Whyman
BIGGA President Gordon Moir, BIGGA Vice President Andy Smith, BIGGA Chairperson Steven Lloyd

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We are committed to the continual professional development of our members, working with the leading bodies in golf for the good of the game.



BIGGA's activities are underpinned by the generosity of our industry partners and supporters. BIGGA's various activities, initiatives, learning and development opportunities and member benefits are made possible due to the ongoing commitment shown by these companies, organisations and individual donors. From our supporters all the way up to our premium partners, our thanks go to all of them for their dedication to BIGGA and its members.



Individual Contributors: Steven Tierney MG | Andrew Campbell MG CGCS
Richard McGlynn | Jaey Goodchild | Frank Newberry | Greg Evans MG | Jon Kiger



CELEBRATE YOUR TEAM'S SUCCESS

Get noticed, boost team morale, claim bragging rights

The BIGGA Awards are firmly established as the most prestigious awards in the greenkeeping industry and you're invited to get involved.

By nominating your team, you'll mark them out as one of the industry's most talented group of greenkeepers.

Most awards events cost money to enter, but BIGGA is here to celebrate the achievements of its members and share these with the wider golfing community, so we don't ask for an entry fee.

Instead, we're encouraging as many greenkeeping teams as possible to get involved by entering today.

- / Showcase the impact of your industry leading work
- / Gain global recognition from the UK's leading association for greenkeepers
- / Raise your profile within your club or golfing facility
- / Give your team a well-deserved morale boost

Greenkeeping Project of the Year

This award recognises those greenkeepers or greenkeeping teams who have undertaken a specific project, completed within the past year. However, projects can be long-term, beginning in a previous year. This can be construction, renovation or repair and the possibilities are endless.

Championship Greenkeeping Performance of the Year

This award isn't just restricted to those clubs who host majors or European Tour events. A team may have done incredible work to get the course fit for professional events such as the EuroPro Tour or Ladies European Tour, or amateur events such as national or important local events. All nominations will be considered on merit.

Outstanding Contribution of the Year sponsored by Baroness

BARONESS
Quality on Demand

In recognition of the growing number of members who undertake voluntary work

each year for the betterment of the association or any number of charities. The winner may be someone who has raised significant sums for charity or given fantastic support to greenkeepers or the industry.

What's in it for me?

- / Nominating your team is a wonderful way to recognise their hard work throughout the year to produce a fantastic playing environment for your golfers. An awards nomination identifies your golf club as an industry-leading venue.
- / Even if you don't make it to the finals, just the act of nominating your team shows that your golf club values hard work and acknowledges the team's contribution to the business' success.
- / Being shortlisted or winning gives teams a massive amount of pride and that can lead to a big push in motivation, so they deliver even better results.



ENTER ON THE BIGGA WEBSITE TODAY



BIGGA
TURF
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EXHIBITION



INDUSTRY-LEADING LEARNING OPPORTUNITIES



DISCOVER THE LATEST TURF TECHNOLOGY



TAKE YOUR TEAM TO THE NEXT LEVEL



REGISTER NOW AT **BTME.ORG.UK**

BTME: 24-26 JANUARY 2023

CONTINUE TO LEARN: 22-25 JANUARY 2023

AROUND THE GREEN

BIGGA Delegation unveiled

Ten members selected for US experience

National

Following a record-breaking number of applicants, BIGGA and Bernhard and Company are proud to reveal the 10 association members who have been selected to represent the best of British greenkeeping at the world's largest gathering of sports turf professionals.

A BIGGA Premium Partner, each year Bernhard and Company invites 10 BIGGA members to attend the Golf Course Superintendent Association of America's Conference and Trade show.

Steven Nixon, managing director of Bernhard and Company, said: "We are once again excited to take the successful applicants on this incredible educational experience. We are passionate about giving back to the industry we love so much and, in collaboration with BIGGA, we are able to offer 10 of its members this potentially career-defining opportunity."

The BIGGA delegation sponsored by Bernhard and Company is one of the most respected and revered educational opportunities for BIGGA members.

The members selected for the 2022 BIGGA Delegation are: Alex Brougham, assistant course manager, Trentham; James Bruder, head greenkeeper, Walton



Heath Old Course; Michael Budd, course manager, Shirley Park; Scott Corrigan, deputy course manager, R&A Lethamhill; David Edmondson, head greenkeeper, Prestwick; Andrew Kerr MG, course manager, Surbiton; Steven Thomas, deputy head greenkeeper, Prestonfield; Brian Toall, course manager, Baberton; Jeremy Ward, course manager, Renishaw Park; Bradley White, senior greenkeeper, Wentworth Club.

Chris Whittle

Northern - North West



A special event was held at Royal Birkdale to mark the retirement of Course Manager Chris Whittle.

Famously publicity-averse, Chris leaves behind an incredible legacy at Royal Birkdale, where he hosted three Open Championships.

Earlier in his career, Chris worked at Formby, St Annes Old Links, Royal Lytham & St Annes and Muirfield, before spending 28 years at Royal Birkdale.

BIGGA CEO Jim Croxton attended the event on behalf of the association and said: "Speaking to Greenkeeper International on the eve of hosting the 2017 Open, Chris told of his belief that he had lived a charmed life. For someone who loves the game of golf, few people have ever enjoyed a more sparkling career than Chris. His legacy lives on not just in the outstanding condition of Royal Birkdale, but also through Chris's sons Jamie and Chris, who are fine course managers in their own right."

Chris Carpenter and Peter Allam

South East - London

Verulam course manager Chris Carpenter MG has retired after 17 years in the role.

Chris (64) previously worked at Potters Bar and spent 14 years as head greenkeeper at Brookmans Park, before returning to his home town of St Albans to take up the head role at Verulam.

Verulam claims to be the birthplace of the Ryder Cup, as Samuel Ryder was a member at the club when he conceived of a match between American and British professionals.

In 2017 it hosted the 30th anniversary of the BIGGA National Championship and speaking at the time Chris said: "I love the job. It's a fantastic lifestyle, helped by the better education and the money is improving. The structure is also now there for juniors to move up and there's a real clear career path."

Chris has been succeeded by Peter Allam, who is taking up his first course manager role following a move from the deputy position at Gerrards Cross.

Peter said: "This is definitely a new challenge and something very different



with this step up.

"My previous managers were superb, enabling me to take on responsibility and make a success of it, showing me what I needed to look out for and not make the mistakes they might have made earlier in their careers. I was able to work with the London Section committee for the last couple of years, meeting different people and bouncing ideas off them, giving me a great insight into how other people operate, which has been brilliant."

Emyr Price

Northern - North Wales



Emyr Price, greenkeeper at Royal St David's was guest of honour at a lunch reception in recognition of his 47 years of service to the club.

Emyr took retirement earlier this year due to health issues and was presented with a gold pocket watch and lifetime membership of the club.

Speeches were given by colleagues past and present, including Course Manager Rhys Butler and Arthur Roberts. Emyr's first course manager when he joined the club as a school leaver in 1974.

Ray Cotgrave

Northern - North West

Ray Cotgrave has been awarded a Jacobsen Higher Education Scholarship as he studies towards a foundation degree in Sports Turf Management at Myerscough College.

Ray is deputy course manager at Pleasington.

DOGS ON COURSE



Name: Tilly
Breed: Labrador
Owner: George Grimes

Location: Garon Park

Favourite treat: The staff's leftover lunch

Favourite spot on the course: Sat next to me on the Gator

Naughtiest moment: A member of staff had the day off, I left the dog in the hut and she chewed their boots!

FTMI learners gather as programme gets underway

National

Class members and mentors gathered at Ransomes Jacobsen in Ipswich as the 2022 edition of the Future Turf Managers Initiative got underway.

The BIGGA members will undertake a programme of hybrid learning, with the first and final sessions taking place in person and other learning opportunities being hosted online, giving the class more education than ever before.

Each month there will be two online sessions, building up to two days of in-person education at BTME 2023.

FTMI is open to BIGGA members who are not yet course managers or head greenkeepers, but aspire to that role.



The FTMI Class of 2022 in their mentorship groups

WHAT'S ON NEAR YOU?

Scotland and Northern Ireland

- 1 BIGGA Conference**
Date: 15 November
Location: Stirling Court Hotel
- 2 BIGGA Scotland Awards Lunch**
Date: 7 December
Location: Stirling

Northern

- 1 BIGGA Conference**
Date: 17 November
Location: Elland Road (Leeds United Football Club)
- 2 Yorkshire Christmas Golf Day**
Date: 24 November
Location: Huddersfield
- 3 BIGGA Sheffield Section Christmas Golf Day**
Date: 8 December
Location: Coxmoor

Central England

- 1 BIGGA Conference**
Date: 10 November
Location: Villa Park (Aston Villa Football Club)
- 2 BIGGA Midlands Turkey Trot**
Date: 24 November
Location: The Chase
- 3 East Midlands Christmas Golf Day**
Date: 1 December
Location: Longcliffe

South West and South Wales

- 1 BIGGA Conference**
Date: 8 November
Location: Somerset County Cricket Club
- 2 BIGGA South Coast Turkey Trot**
Date: 28 November
Location: Royal Winchester

South East

- 1 BIGGA Conference**
Date: 9 November
Location: Wentworth Club
- 2 BIGGA London Section Workshop - 'Art of Application' by Syngenta**
Date: 29 November
Location: Mill Hill
- 3 BIGGA Sussex Section Turkey Trot**
Date: 1 December
Location: Worthing

CHAMPIONSHIP PERFORMANCES

BIGGA has teamed up with Leaderboard Photography to celebrate the greenkeeping teams that are hosting England Golf events this season



WELCOME NEW MEMBERS

Key to membership

A	Affiliate Member
AGK	Assistant Greenkeeper
AHG	Assistant Head Groundsperson
APP	Apprentice
ATP	Approved Training Providers
BA	Business Affiliate
CA	College Assessor
CM	Course Manager
DCM	Deputy Course Manager
DHGK	Deputy Head Greenkeeper
FA	First Assistant
GK	Greenkeeper
G	Groundsperson
HGK	Head Greenkeeper
HG	Head Groundsperson
I	International Member
L	Life Member
M	Mechanic
S	Student Member
SUP	Superintendent
R	Retired Member

SCOTLAND & NORTHERN IRELAND

Kieran Harper, Falkirk Tryst, GK; **Ross MacRae**, Tain, HGK; **Neil Mitchell**, Aquatrols, BA; **Callum Morrison**, Tain, AGK; **Cameron Neilson**, Western Gailes, AGK

NORTHERN

Andrew Birchall, Hindley Hall, CM; **Gareth Brown**, Brough, DCM; **Joe Doolan**, Lee Park, AGK; **George Haig**, Heaton Moor, DHGK; **Daniel Hardman**, Hurlston Hall, APP; **Paul Henderson**, Ponteland, AGK; **Kieran Hill**, Warrington, APP; **Ben Jackson**, Heaton Park, APP; **Stefan Jones**, Leeds United Football Club, HG; **Stephen Maylor**, Baxenden & District, AGK; **Graham Oxley**, Knarborough, AGK; **Christopher Poole**, Brough, AGK; **Ryan Stafford**, Stockport, APP; **Jordan Stevenson**, Brough, GK; **Colin Welsh**, Lee Park, G; **Karrhys Woodcock**, Cleckheaton & District, AGK; **Ryan Worthington**, Hurlston Hall, APP

CENTRAL ENGLAND

Ben Clay, Worcestershire (The), AGK; **David Holling**, Rothley Park, M; **James Insull**, Stourbridge, AGK; **Jayden Ley**, Trentham, AGK; **Ruaridh Marshall**, Sunningdale, AGK; **Scott Neumann**, Sunningdale, AGK; **Mark O'Meara**, John Deere, BA; **Charlie O'Toole Oliver**, Trentham, AGK; **Thomas Poole**, Coventry Hearsall, AGK; **Andrew Pooler**, Stourbridge, AGK; **Philip Richardson**, Worcestershire (The), AGK; **Samuel Ridgway**, Market Drayton, GK; **Scott Webber**, Coventry Hearsall, AGK; **Alexander Woods**, Worcestershire (The), AGK

SOUTH EAST

Steven Bacon, Millers Barn, APP; **Thomas Gribble**, The Warren, AGK; **Dene Hey**, The Lensbury Club, G; **Mark Honey**, Sunningdale, GK; **Billy Huggins**, Stoke-by-Nayland, APP; **John Ingham**, Reigate Hill, AGK; **Corbin King**, Barnham Broom, APP; **Farran Leeks**, Millers Barn, APP; **Brendan Margetts**, The Drift, AGK; **Sian Mulcahy**, Sunningdale, AGK; **Michael Myerscough**, Stoke-by-Nayland, APP; **Ben Palmer**, Reigate Hill, AGK; **Matthew Pennock**, Hurts Hall, HG; **Jay Seaman**, Eaton, GK; **William Seaward**, Royal Norwich, GK; **Gregory Strudwick**, The Drift, GK; **Thomas Vass**, Potters Resorts Five Lakes, AGK; **George Wall**, Stowmarket, APP; **James Wilson**, The Warren, AGK

SOUTH WEST & SOUTH WALES

Samuel Byrne, Yeovil, GK; **Tom Cowley**, Hampshire Cricket Ground, AHG; **Thomas Fayers**, Carmarthen, AGK; **Steven Fugatt**, Ferndown, AGK; **Daniel Hughes**, Llanishen, GK; **Jacob Ide**, Yeovil, AGK; **Anthony Kinman**, Glamorganshire, GK; **Samuel Kynoch**, Avington Park, AGK; **Luke Packard**, Dartmouth, AGK; **Lewis Pattison**, Dudsbury, APP; **Thomas Rogers**, Dartmouth, AGK; **Daniel Smith**, Dartmouth, AGK; **Christopher Stewart**, Dartmouth, DCM; **Philip Taylor**, Newquay, AGK; **Andrew Turnbull**, South West Agronomy, A; **Keven Williams**, Tacit, A; **Max Wilson**, Machynys Peninsula, AGK; **Liam Wilson Carroll**, Ferndown, AGK

INTERNATIONAL

Danny Burnell, Royal Dublin, I; **Elizabeth Guertal**, Kansas State University – SIIL, I; **Stefan Schmeitz**, John Deere, BA; **Jan Schonberg**, John Deere, BA; **Peter Scotley**, Diamond Country Club, I; **Richard Wing**, Noordwijk, I



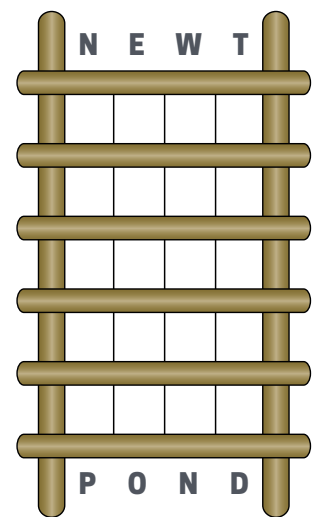
ENTER THE BIGGA AWARDS 2023,
SCAN THE QR CODE TO FIND OUT MORE



TEE BREAK

WORD LADDER

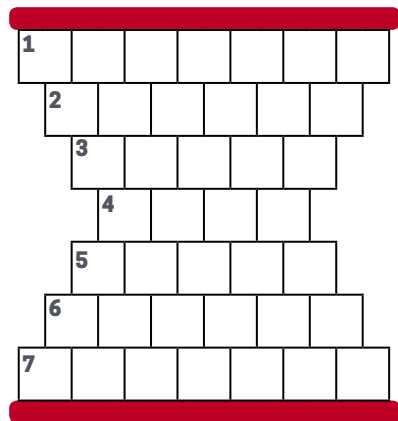
Change one letter at a time (but not the position of any letter) to make a new word – and move from the word at the top of the ladder to the word at the bottom using the exact number of rungs provided.



EGG-TIMER

Can you complete this puzzle in the time it takes to boil an egg? The answers to the clues are anagrams of the words immediately above and below, plus or minus a letter.

- 1 Sincere, fervent
- 2 Feel bitter or indignant about
- 3 Go in
- 4 Small slender gull with a forked tail
- 5 Photocopier ink
- 6 Elaborately decorated
- 7 One more



CRISS-CROSS: Citrus Fruits

Fit the listed words into the grid below, one letter per square.

4 letters

UGLI

5 letters

LEMON

6 letters

KINNOW

KIYOMI

LARAH

ORANGE

POMELO

PONKAN

TANGOR

7 letters

KEY LIME

KUMQUAT

RANGPUR

SUDACHI

TANGELO

8 letters

CITRANGE

MANDARIN

MINNEOLA

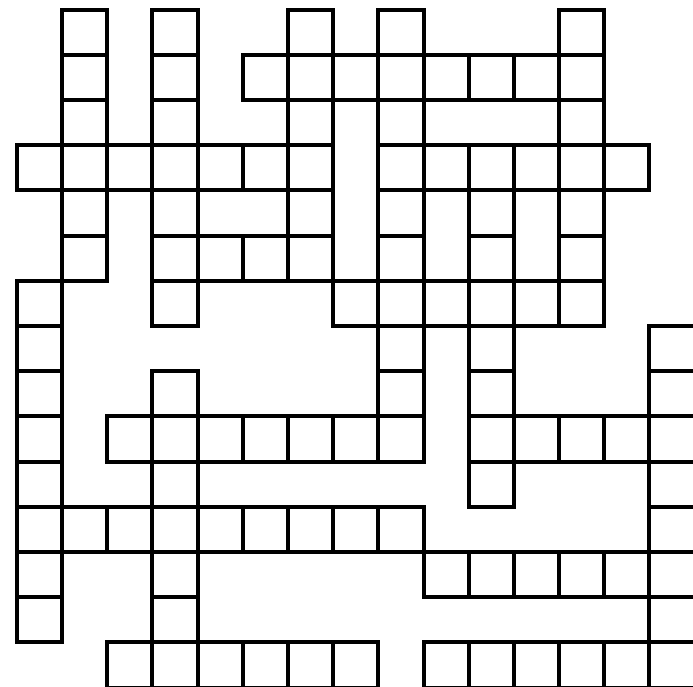
SHADDOCK

9 letters

ORTANIQUE

10 letters

GRAPEFRUIT



FIND THE ANSWERS ON P67

THE SAVINGS SOON ADD UP

BIGGA Xtra Benefits: Here to help you save time and money



MEMBER BENEFIT

Xtra Benefits

Get 15% off with Charles Tyrwhitt*

BIGGA members can receive 15% off on their wide range of menswear, including their new casual and loungewear collection. Available online and in-store. Offer ends at midnight on 19 November 2022.



Save 50% on 12 luxury wines

Virgin Wines are offering BIGGA members a generous half price saving on 12 bottles of delicious luxury wines – yours today for just £59.88, complete with free express delivery direct to your door.



Fantastic discounts on 350 brands online and on the high street

If you become a one, two or three year Totum Pro cardholder, you will also receive a free tastecard* (worth £29.99 per year) for the duration you're a cardholder. Tastecard gives you access to two-for-one dining at thousands of restaurants and much more.



10% online discount at foyles.co.uk

With nearly a million books available for home delivery, Foyles is the home for book lovers on the web. Their site boasts a wealth of author interviews and blogs to help you choose your next read. Plus sign up to their Foyalty card to earn points on every purchase*.



To take advantage of these and other fantastic deals log in to the BIGGA website and click on Xtra Benefits or scan the QR code

Are you looking to develop your professional abilities and broaden your network?

In the face of economic uncertainty, it's important to build your personal resilience by making the most of professional development opportunities and by developing a network of industry peers who can help you if times get tough. This winter BIGGA is offering an outstanding programme of learning opportunities that will help you take another step towards achieving your career ambitions.

OPPORTUNITY 1: ATTEND THE BIGGA CONFERENCES

Hosted in each of BIGGA's five Regions, our conference programme is an affordable, single day way to meet your peers and listen to some of the most influential speakers in the industry today. We'll be talking about the topics that matter to you and together we'll share ideas that will help everyone take their golf course or their career to the next level. Tickets cost just £35 for BIGGA members for a full day of high-quality speakers and the opportunity to network with fellow turf managers. If you've never been involved with a BIGGA event before, our conferences are a fantastic and affordable place to start. You'll learn about what the association can do for your career and hear about how the BIGGA community is striving to

improve the working lives of greenkeepers everywhere. To find out more, head to www.eventbrite.co.uk/e/bigga-conferences-2022-tickets-406412208857?aff=webcar



The BIGGA Conferences will take place on:

- / Tuesday 8 November, Somerset County Cricket Ground
- / Wednesday 9 November, Wentworth Club
- / Thursday 10 November, Villa Park
- / Tuesday 15 November, Stirling Court Hotel, University of Stirling
- / Thursday 17 November, Elland Road

OPPORTUNITY 2: DISCUSS ATTENDING CONTINUE TO LEARN WITH YOUR MANAGEMENT TEAM

Continue to Learn will take place at the Harrogate Convention Centre from Sunday 22 to Wednesday 25 January. Whatever the challenges you face at your golf club, the Continue to Learn education programme will provide the answer. The BIGGA team has tailored an outstanding programme of learning, with input on the final line-up from your fellow BIGGA members, to ensure today's most important topics are all covered. Most golf clubs will offer a training budget to help their team develop and improve. Have you spoken to your management team about what opportunities are available? The entire Continue to Learn programme is available to view at www.btme.org.uk and you'll have received the brochure in your October edition of Greenkeeper International. The Classes element of the programme offers specific guidance on many of the challenges faced by today's greenkeeper. The following is just a couple of the highlights. Places are limited so don't miss out and book your spot today:

Throughout my 42-year career in greenkeeping, I loved to attend days like these as I always thought they were important for my development and progression. Whether that be learning about new research or simply talking to your colleagues and peers and discovering they have the same problems as you, perhaps that way you may come up with a solution or they have already.

Gordon Moir, BIGGA President and former St Andrews Links director of greenkeeping

Is poor governance affecting the greenkeeping industry in the UK? If so, what can we do about it?

Presented by Jerry Kilby CCM, Kanda Golf

Over 60% of golf clubs in the UK are run by committees and boards of volunteers, many of whom have little or no experience in greenkeeping. This class will look at examples where a club has made a change to their governance structure that has resulted in improved working conditions for the greenkeeping team.

Surveying trees, assessing risk

Presented by Ged Collins, Global Tree Vision

This IOSH-approved class covers trees and the law, parasitic tree fungi, tree defects, health and safety when surveying trees, assessing works required, priority of action and risks. Candidates who attain the required standard will be awarded an IOSH certificate.



Head to the BIGGA website to see the full programe and book your place today

Non-pesticidal disease management

Presented by Dr John Dempsey, Independent Turfgrass Research

This class will explore how it's possible to suppress turfgrass disease in the absence of, or with limited, fungicide availability. Using the 'disease pyramid', turf managers will be able to target factors that influence disease incidence. The class will provide research data showing how rolling, topdressing, mowing and irrigation all contribute.

Building a fertiliser programme for beginners

Presented by Kelly-Marie Clack and Geoff Fenn, Origin Amenity Solutions

Aimed at first assistants, deputy heads and newly-appointed course managers who have never built a fertiliser programme, there will be a teaching session on the role of nutrients and soil tests followed by the opportunity to build a bespoke fertiliser programme.

Introduction to soil microscopy and microbiology

Presented by Dr Jennifer Ings, laboratory technician, and Simon Parfey, Soil BioLab

Gain a sound introduction to the principles of microbiological management and a basic understanding of the vital role microorganisms play in a soil's health. Learn how to use a microscope and identify the key groups of microorganisms.



Congratulations to the following members who achieved CPD Approved status this month:

- / Jake Austin, Royal Wimbledon
- / Peter Pattenden, Carden Park
- / Steven Thomas, Prestonfield
- / Mark Reid, Leathamhill
- / Peter Allam, Verulam
- / Patrick West, Sweetwoods Park
- / Paul Connolly, Sandyhills
- / Neil McLoughlin, Deeside
- / Scott Corrigan, Leathamhill
- / Toby Long, Broadstone
- / Andrew Bate, The Hesketh
- / Tom Pattison, Blyth
- / Richard Johnstone MG, Nairn Dunbar
- / Steven Tierney MG, Golfpark Zurichsee
- / Stefan Carter, Wentworth Club
- / Daryn Curtis, Shirley Park

Congratulations to the following members who achieved their CPD Milestone this month:

- / Robert Wells, Ellesmere
- / Peter Allam, Verulam
- / Jeremy Hughes, Symbio, Origin Amenity Solutions
- / Neil McLoughlin, Deeside
- / Lee Sayers MG, The London
- / Tom Pattison, Blyth

Keep your CPD record up to date: www.bigga.org.uk/member-homepage/continuing-professional-development.html



Congratulations to the following BIGGA members who have achieved their Level 2 Certificate in Golf Greenkeeping:

- / Louie Allen, Chigwell
- / Stuart Coxhead, Singing Hills
- / Adam Turpin, Crondon Park
- / Joshua Wilks-Hanley, Witney Lakes
- / Jamie Beattie, Formby
- / Matthew Harding, Gathurst
- / Stuart Lear, Cooden Beach

APPRENTICE CORNER

BROUGHT TO YOU BY THE GREENKEEPERS TRAINING COMMITTEE

Measuring soil moisture

Traditionally, testing for moisture took place in subjective ways. The surface was sliced open using a knife or a greenkeeper would walk the surface looking to see evidence of foot printing or colour changes in the grass.

While these methods were to a degree successful, they do not allow for accurate prediction. In contrast, the use of soil moisture meters can be used to determine turfgrass management/maintenance issues and enable playing characteristics to be assessed. For example:

- / The surface firmness
- / Areas of stress due to over/under watering
- / Poor drainage
- / Irrigation uniformity
- / Localised dry areas that require spot treatment
- / Areas of hydrophobic soil perhaps from localised dry patch or localised dry spot

Soil moisture probes are an increasingly important part of the greenkeeper's armoury and in many cases allow for considerable savings to be made in water use.

The amount of water that

Figure 1a

3m x 3m sampling grid

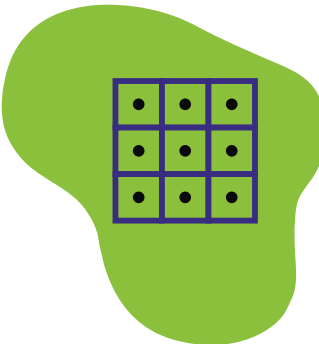
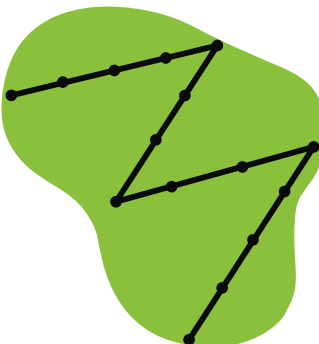


Figure 1b

W sampling pattern



the soil can hold is dependent on its texture and structure.

For a golf green, a typical construction will be either a sand-dominated rootzone or traditional push up green constructed from native soils.

Sand-based greens will typically range from around 15-30% moisture. However, many years of maintenance, not least topdressing with sand on soil-based greens, will affect the moisture levels.

Any figures initially measured should be treated only as a starting point and with caution until sufficient data has been collected —

only then will the true picture be known.

Accurate measurement is only possible with a soil moisture meter. Designed to monitor the amount of available moisture in the soil at a specific depth, they use electrical resistance to measure the moisture content, which is a measurement of the volumetric water content in the soil.

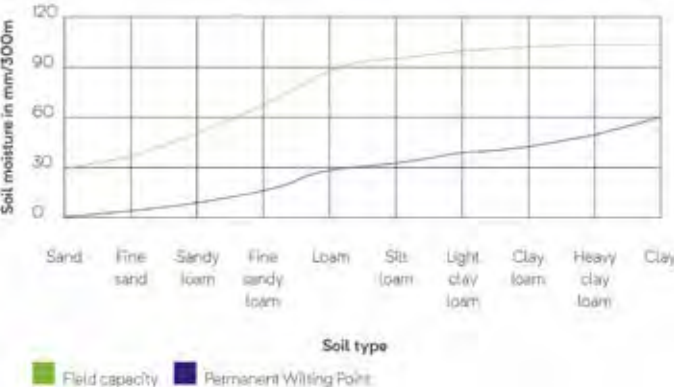
The depth of the reading is dependent on the length of the rods that are inserted into the soil and many devices offer interchangeable probes with a range of depths, as well as a mapping/GPS capability, which may enable more rigorous data collection and understanding of the soil moisture behaviours.

Whatever system is being used, it is unlikely that one reading will give the manager a true picture.

To get the best picture of the whole green, wide sampling is recommended. STRI suggests nine readings should be taken in a 3x3m grid. Should this be insufficient, a W sampling pattern could be used.

Figure 2

Typical water holding capacities of soils



This information is taken from the GTC's Level 3 Learning Materials, available to purchase on the GTC website. The GTC produces Learning Materials to support apprentices with the knowledge required to achieve their qualifications. These materials are not exclusive to apprentices and are available to all golf clubs to help with best practice.



BIGGA CONFERENCES 2022

The BIGGA Conferences bring members together from all corners of the association to access excellent education and networking opportunities.

- 8 November Somerset County Cricket Ground
- 9 November The Wentworth Club
- 10 November Villa Park
(Aston Villa Football Club)
- 15 November Stirling Court Hotel
- 17 November Elland Road
(Leeds United Football Club)



Scan the QR code to book your place



James Hutchinson,
Membership Services
Manager (Ecology &
Sustainability)

It is exciting times at The
Rolls of Monmouth, where
a humongous oak tree has
been nominated in the
Woodland Trust's tree of
the year competition.

The tree in question is
pretty much impossible to
age, given the centre
section has decayed away
and it has probably been
hit by lightning at some
point in the past – perhaps
even 500 years ago. This
means we can't carbon
date it or count the growth
rings. Our only hope is to
measure the girth and the
team at the Ancient Tree
Inventory say it is 9.8m
around the waist. A healthy
oak grows around a
centimetre a year in the
correct environment and if
that is the case, this tree
will be approaching 1,000
years old.

The tree has made it to
the final 12 in the
Woodland Trust's tree of
the year competition and if
you put that in an internet
search engine, you'll find
more details about the tree
and be able to vote for it.

There's loads to discover
at the Rolls of Monmouth
– not least the origins of
that unusual name for a
golf club – and I'll be
revisiting them again in the
near future. Until then, best
of luck to their majestic oak
in this great competition!

Ecology Roundup is sponsored by



Greenkeepers step forward to highlight sustainable golf commitments

The past few weeks have
been a time for reflection and
celebration, taking stock of
the challenges and
sustainability issues we all
face and to recognise golf's
existing leadership with
regards climate action.

Sustainable Golf Week,
which took place between 3–9
October, encouraged the golf
industry to share examples of
the value we provide for nature
and people. It also asked the
industry to consider what more
can be done to foster nature,
conserve resources, strengthen
our local communities and take
climate action.

Greenkeepers are at the
heart of many of those
conversations. It's the
greenkeepers who steward
the land and plan and monitor
the resources that are used on
it; who know the flora and
fauna of their natural
landscape like the back of
their hand; who make
decisions every day that are
significant to the sustainability
of the sport.

It's no surprise, then, that
when GEO Foundation for
Sustainable Golf invited
people across the golf
industry to make their voices
heard during Sustainable Golf
Week and beyond,
greenkeepers answered in
their numbers.

"We fully support
sustainable golf because it's
the right thing to do," said
Craig Boath, links
superintendent at Carnoustie
Golf Links. "Sustainability is



Will Smith, Saunton



Scott Aitchison, Royal Dornoch



Craig Boath, Carnoustie

one of our core values and a
very important element in the
decisions we make. As
custodians of the links, we
want to leave it in a better
place than we found it."

Will Smith, of Saunton,
shared this sentiment: "It's
important as a greenkeeper
that you learn to love and
encourage the environment
around you and have an
appreciation for nature. Every
greenkeeper that I meet is
looking to enhance their
environment. This movement

has taken a great deal of
momentum in the last 10–15
years and sustainability has
become a large talking point
among greenkeepers."

The responses from
greenkeepers and every
corner of the golf industry
highlighted how vast the
desire for golf to accelerate its
efforts really is.

"Once you scratch the
surface, you realise very
quickly that there's a huge
number of greenkeepers
trying to help their club make
the right choices regarding
the environment," explained
Scott Aitchison, deputy head
greenkeeper at Royal
Dornoch. "As greenkeepers,
we're able to make a big
difference. Even if it's just
small changes we make, it's
going to make the world a
better place. You just never
know who's going to be
watching and who will get
inspired."

Sustainability is not simple
or straightforward, but given
the scale and urgency of the
environmental and related
social concerns facing us
today, it's essential to dive in.
Adopt quick wins, learn from
other proven solutions and
make plans for longer-term
adaptations and innovations.

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its people — for all of its
biodiversity — and making a
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with the recent addition of Mantle®, enhancing efficacy.



Seamac Proturf Fe Liquid Turf Hardener Turfite Elite Mantle®

Non-Pesticidal Disease Management

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MEET THE MANAGERS: DANIEL CLARKE

Courses and Grounds Manager | Wentworth Club

Why is it beneficial to ask someone about their job? Well, put simply, if you want to get ahead, one of the best ways to do this is to find out from others who have reached the top and how they did it.

What advice do you have for someone new to the industry?

Travel the world! Greenkeeping is a great gateway to broaden your horizons by experiencing and learning other cultures. I've done my fair share of working abroad and believe my experiences have shaped me into the manager I am today.

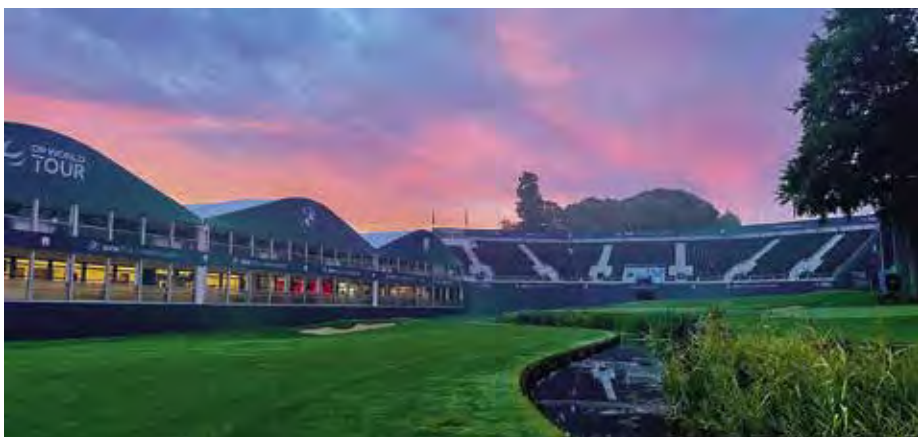
What books should I be reading?

Reading has never been my strength; however, podcasts are very informative and now readily available. Some of the podcasts I listen to are The Talking Greenkeeper, On the Horizon and ATC Office Hours.

Is there a quote that motivates you?

When you focus on problems, you'll have more problems. When you focus on possibilities, you'll have more opportunities!

I like this one Dan. A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty.



What did you study?

National Diploma and later a Degree in Sports Turf Science & Golf Course Management.

Which has been more valuable in your career, your education or experience?

It's difficult to discount one over the other as education has given me the understanding and knowledge I needed to progress, but likewise the experiences I have had allowed me to develop my skills.

What skills have you found vital to your job?

Communication and teamwork are the most important skills to have. To deliver is near impossible on your own so being able to clearly communicate and treat people how you wish to be treated is key to building a sustainable working environment.

Few occupations are solo! Effective communication is an art, there's always room to keep learning, growing & developing.

What mistakes did you make early in your career?

Early on I pretended to understand something of which I had no idea. I got caught out and apart from the

embarrassment, I learnt there is nothing wrong with not knowing or understanding something. Instead, be open and unafraid to ask questions.

What should I be doing to improve my prospects?

If you are looking at moving up the ladder and applying for a new position, ask yourself the question, "How can I make myself stand out from the crowd?"

What is your niche and how will it benefit your future employer?

CPD is vitally important. If you feel you're standing still, trust me you're dropping behind!

What's on your mind now regarding our industry?

The cost of living! BIGGA is working hard on this but as course managers we have a responsibility to push our owners and committees for better working environments and pay for our teams, which will make the greenkeeping career more attractive for future generations.



Article by
Phil Helmn MG.
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WEATHER TO SPRAY



November is typically that time of fear and trepidation for when microdochium patch is going to hit, while disease outbreaks and the ability to counter them are largely governed by the weather

Sean Loakes, Syngenta Turf Technical Manager UK & Ireland

Autumn outbreaks of microdochium patch have the potential to be most damaging, since infection can spread much faster in wet and warmer conditions.

Furthermore, loss of surface quality in autumn leaves limited opportunity for repair and recovery until the consistent growing conditions arrive in spring, which means months of moaning members.

This season's hot and dry summer for most areas, particularly in the south of England, has increased incidence of anthracnose and dollar spot, resulting in stressed turf more vulnerable to further pathogen attacks.

Now, as day length shortens, prolonged periods of wet leaves with heavy overnight dew and rainfall create the optimum conditions for disease development.

Any tools that reduce the length of time leaves remain wet — including dew dispersants, wetting agents, physically switching surfaces or improving air flow to dry faster — will help to minimise the risk.

Understanding the implications of wet weather, or more specifically leaf wetness,

Figure 1: Application of FR321 through the renovation timing period can secure microdochium free surfaces going into the winter



and the temperature for disease development is essential to predict risk and take appropriate measures ahead of disease outbreak.

All the current fungicide technology works most effectively when applied preventatively — before any signs of infection are physically visible. Some active ingredients offer a level of curative activity, but in disease pathology terms that is limited to stopping development of disease in the early stages of mycelial growth in the leaf, long before external symptoms are visible.

Assessment of average

early autumn weather data over recent seasons highlights the potential threat for disease outbreak timing, with significant regional differences (Table 1).

Microdochium patch development can be effectively arrested when temperatures fall below 2°C. However, those days may be few and far between or — more typically in recent seasons — not at all.

The weather data study shows that in an average November you can expect leaf

surfaces to be wet for more than half the day, while temperatures indicate disease could be active for more than 22 hours a day.

That makes predicting disease risk for fungicide timing more imperative than ever. The past two years of Syngenta turf disease trials at STRI in Yorkshire, have shown that starting the

Table 1: Early autumn average daily periods of leaf wetness and cold temperature

	Central/Southern England		Central/Southern Scotland		Central/Southern Wales		Central/Southern Ireland	
	Oct	Nov	Oct	Nov	Oct	Nov	Oct	Nov
Hours of leaf wetness per day	6hr 10min	11hr 36min	7hr 50min	12hr 42min	8hr 55min	13hr 0min	11hr 0min	13hr 24min
Hours of <2°C per day	0min	1hr 36min	10min	2hr 54min	15 min	1hr 0min	0min	1hr 54min

programme early to target peak anthracnose risk timing makes a huge contribution to preventing microdochium patch developing.

The trials with FR321 in 2021, combining the spore reduction and leaf surface protection of Medallion TL with systemic internal disease control of Heritage, provided complete control of microdochium patch, when untreated areas reached over 12% of surface area affected (Figure 1).

Results this season have already shown the same pattern being repeated, along with the benefits of additional Integrated Turf Management (ITM) components in the programme.

The work has also shown that if an outbreak does occur, fungicides still have an essential role in stopping the spread onto clean plants and

maintaining more healthy green leaf for plants to recover. On areas where spikes in disease had been seen, it was only the fungicide treated plots where surface quality had recovered, while untreated plots became progressively worse.

Wind issues

The other key challenge for autumn weather and disease control is finding suitable opportunity for application of fungicides alongside the other elements of an ITM strategy.

Research of historic weather data has shown that, on average, just 40% of daylight hours meet the best practice conditions for spraying — equating to around two days per week.

It also shows that with the changing climate autumn weather patterns are becoming increasingly windy, which can significantly impact on spraying opportunities.

When you factor in practical limitations of golfers on the course and the demand for other priority autumn turf management tasks and finding gaps among golf, available spray periods may be down to just a few hours per week. Syngenta website's Spray Windows forecast can be invaluable to help pick ideal conditions for application and plan actions.

If the disease risk forecast identifies a high-pressure looming, but limited opportunities to spray, it is far better to make an application earlier in good conditions to have protection in place, compared to a fire brigade action when infection has hit.

Continue the conversation

Find out more at www.syngentaturf.co.uk



Stefan Carter: A delegate's story



Stefan Carter (left) with Stuart Hall

The BIGGA delegation, sponsored by Bernhard and Company, is revered as one of the industry's best learning opportunities, packed with educational content, trade show experiences and local course visits.

The selected delegates travel to the GCSAA Conference and Trade Show, which in 2023 will take place in Orlando. Representatives from BIGGA and Bernhard and Company have completed the interview stages after a record number of members applied to be considered for the delegation.

A fantastic group of candidates have been selected to take part in this potentially career-defining experience, taking place in February.

Bernhard and Company Customer Care Manager and 2012 delegate, Stuart Hall, recently visited Wentworth Club in Surrey to chat to West Course Head Greenkeeper Stefan Carter, to reflect upon and learn about his experience on the delegation in 2019.

After delivering

tournament support at the 2018 Ryder Cup at Le Golf National, Stefan applied for the 2019 delegation to San Diego.

He said: "I think by the time I managed to successfully earn a place on the delegation, I'd applied three or four times, reaching a different stage of the interview process each time. The key for me was understanding that if I didn't get selected, I should continue to apply because eventually it would be the right time for me. There are only 10 spots available, so by continuing to apply, I showed a real commitment and desire to be a part of the experience."

"I honestly believe that I was selected at the right time in my career. If I had gone a couple of years prior, I'm not sure that I would have gained as much from the trip as I did when I eventually went."

"I remember the feedback that I received from Steven Nixon, the company's Managing Director, on my interview process — my answers were all good, but they just felt that I could do with a bit more experience."



The Wentworth Club

"So that's what I did. I went out and worked at more tournaments. I got more greenkeeping experience, I got more worldly experience, and I went to the States to do an internship. I really tried to tick all the boxes."

At the time of his application, Stefan was a senior greenkeeper on the West Course at Wentworth.

He viewed the BIGGA Delegation as a great opportunity to continue developing his career as he aspired for more senior positions.

He added: "Going on the delegation in 2019 really expanded my horizons and massively increased my network. You go on the trip with nine like-minded greenkeepers and you can really bounce ideas off each other throughout the week. There are three or four days of educational seminars, then you also get to explore the show floor."

"In the USA, some of the technology and techniques used are almost unheard of in the UK. So, picking up the little tips and tricks that they use on a daily basis was fantastic. Particularly at a club like Wentworth, where we want to be pushing the boundaries in turf care, introducing new ideas and techniques helps us to be more creative, and drive the club forward. I think that was instrumental in me going for the deputy role and then the head greenkeeper position."

"My previous bosses at Forest Hill and Bowood were past delegates. They experienced all the benefits of

the trip and encouraged me to apply. That's always resonated with me; the feeling that I got from having bosses that really cared about my progression, rather than simply turning up to work then going home."

"That's how I'm trying to operate as a head greenkeeper now and I encourage my team to apply every year. We know that if 10 people from Wentworth apply, not all 10 are going to get selected. However, by going through the application process and maybe getting to the interview stage, they'll better understand what's required and be better equipped to earn selection in the future."

"During the application process, there are questions that reference experience levels. When you are just starting your greenkeeping career, you simply don't have any experience to draw upon."

"I would suggest to anybody finding their feet in the industry, go and do some tournament support volunteering. That was so important for me when I was younger and really helped put me in the position to achieve what I have so far."

For more information about the BIGGA Delegation with Bernhard and Company, head online to www.bernhard.co.uk/delegation

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A TOUCH OF GLASS

Surrounded by illustrious neighbours, the course at Pine Ridge is carving an outstanding reputation in its own right

Laurence Pithie MG

Location: Camberley



Pine Ridge in Surrey is a popular and busy daily fee golf course and Laurence Pithie MG met up with Course Manager Kevin Glazier to find out how he manages the site and prioritises work programmes while experiencing high levels of play.

Located in northwest Surrey, Pine Ridge is surrounded by numerous high quality golf courses, the majority of which are privately owned, including Sunningdale, Queenwood and The Berkshire.

The course was designed by local golfer and owner at the time, Clive Smith, and opened for play in 1993. This was at the peak of the last golf boom, but unlike the majority of its near neighbours, Pine Ridge was designed to target the daily fee golf market. Being of a higher standard and build quality than most other public courses, the club's aim has been to provide quality at affordable cost, which proved to be a winning formula. After 14 years of private ownership, the club was sold to Crown Golf in 2007, which

owns or operates seven other sites across the UK.

As its name suggests, this undulating golf course is largely located within pine woodland. The soil type is free draining, acidic sandy/loam of low fertility, mainly composed of dry heath and forestry. In other words, ideal for golf, so it is little wonder why this region to the southwest of London was favoured by the first golf course architects 130 years ago. However, and like so many other golf courses, it is not without its challenges.

Course Manager Kevin Glazier began his career at Sherfield Oaks in 2005, before progressing to Royal Mid-Surrey five years later. After a couple of years he was promoted to the deputy's role on one of the two courses there under the guidance of Gavin Kinsella MG.

Kevin added: "I also served as support staff at Wembley for six years, which gave me a good insight into the different aspects of high level sports turf management."

By the time he was appointed course manager at Pine Ridge in 2017, Kevin had gained his sports turf Level 2 and 3 qualifications along with a foundation degree in sports turf management at Myerscough College.

"I was also fortunate to attend the BIGGA Future Turf Managers Initiative in 2014," said Kevin. "These experiences and qualifications gave me a solid background in which to progress my career."

"Being part of the wider group of Crown Golf courses and networking with other course managers, it was comforting to know that I wasn't alone and that advice and support was there when required. This proved to be a benefit, especially during the early years of management, along with the help and encouragement from group courses manager, Mike Bush who is also a Master Greenkeeper. This proved invaluable."



Kevin Glazier is course manager at Pine Ridge

Unlike many courses located on heavier soils, Pine Ridge has superb natural drainage and aside from the odd low-lying area where the flow of water is restricted, drainage is one issue the team doesn't have to worry about. It is more the lack of water and a thin covering of soil that presents them with bigger challenges.

Kevin said: "This year's drought and that of 2018, along with numerous days of temperatures in excess of 30°C, certainly challenges your ability to maintain grass cover and produce acceptable playing surfaces. The fact we are tree lined on most holes is a limiting factor in regards to sunlight and air movement on and around greens and tees."

"Extended periods of leaf dampness increase disease pressure, while the trees compete with turf for both moisture and nutrients."

"Unfortunately, the trees are protected on this site and it can be difficult to gain permission for their removal."

"This means we have to manage the turf accordingly."

"Fortunately we have good sized teeing areas and only 36 bunkers of moderate size so I guess it's a 'swings and roundabouts' scenario here at Pine Ridge."

"Golfers appear to see things favourably, however, and the playing conditions we

provide are complimented on the various golf participation websites."

Working practices

During our course walk, Kevin highlighted the methods used by his team and where his future priorities lie.

He said: "We focus on the

greens, since this is what the golfers determine as the most important aspect of the game."

"We are blessed with a good golf course in a natural environment, but if we don't have good greens then we fall short. To achieve our objective, we need to work smart and effectively as a team. This means »

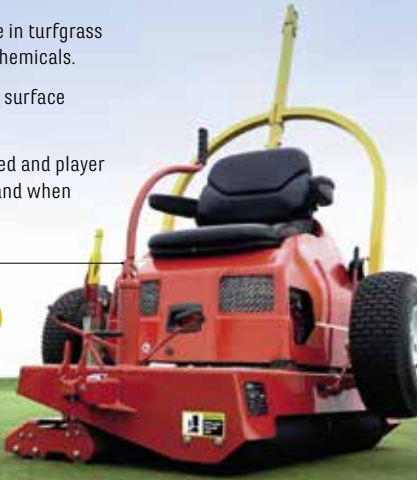
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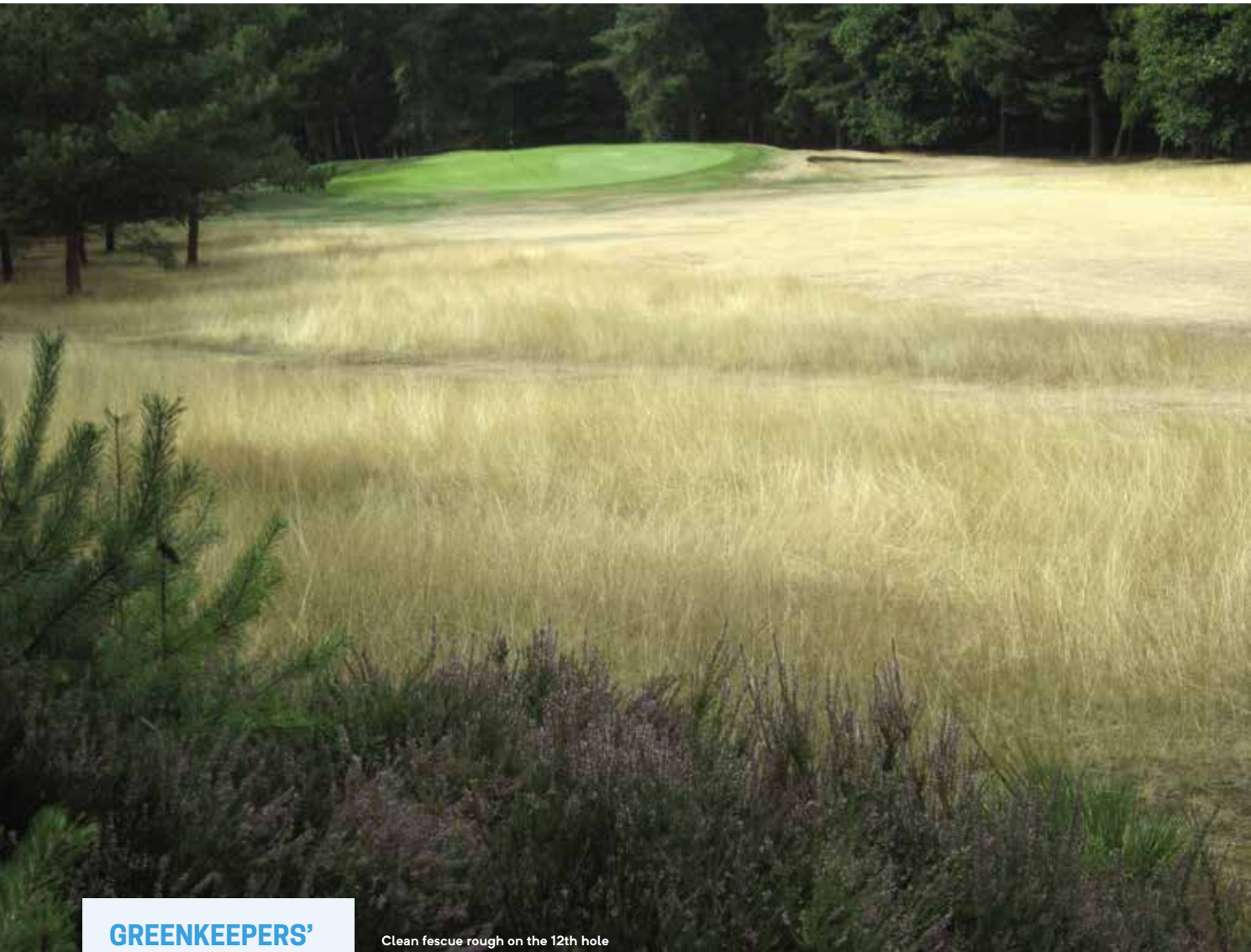
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Clean fescue rough on the 12th hole

GREENKEEPERS' TOOLBOX

The Team

- / Kevin Glazier, course manager
- / Peter Brooker, deputy course manager
- / Martin Spreadborough, assistant greenkeeper
- / Aiden Hare, assistant greenkeeper
- / Lee Gould, assistant greenkeeper
- / Gary Spreadborough, assistant greenkeeper

understanding the environment in which the greens are located, the composition of the rootzone and how the turf is best adapted to meet the requirements that the golfers and our company expect.

"Since around half the greens receive only limited sunlight, Poa annua is the dominant species, growing on USGA spec rootzones containing 90% sand. Our objective is to maintain soil moisture content at around 25% and apply around 120kg of nitrogen per annum."

Throughout the main season, this is done via a foliar feed and growth retardant mix applied every fortnight.

Kevin added: "We have two maintenance weeks each year in February and August, in which we sand dress, deep and solid tine then brush. We are currently applying around 150

tons of Redhill sand each year.

"This year we have not cored, but we did scarify earlier and followed this up with regular verti-cutting throughout the season."

Mowing and lightweight rolling is alternated, the former being at 3.75mm.

Greens analysis indicates minimal organic matter, adequate root depth and the



Work in progress on the 13th green

absence of black layer, thatch or dry patch.

"This programme provides the golfers with firm, smooth and consistent putting surfaces with a reasonable pace for the market we serve," said Kevin.

Tee rootzones are similar to greens and as such can dry out fairly quickly. The team applies two granular feeds

each year, supplemented with foliar feeds if necessary to ensure that adequate turf vigour is maintained. They are deep tined once and sand dressed and overseeded with fine-leaved rye as often as required. Front approaches are foliar fed, while fairways and roughs are cut and brushed or raked accordingly.

Speaking in late August, Kevin said: "This year we have not cut any rough since June or fairways since early July, a sure sign of changing weather patterns that we have to adapt to. Both are predominantly fescue, since neither Poa nor bent can survive the drought conditions we are faced with.

"Another interesting aspect regarding Pine Ridge is that we do not suffer from moles or rabbits, while any worm casting is limited to just a handful of tees and even then it's only minimal.

"Insect damage is also negligible, although we have seen some evidence of bird

These experiences and qualifications gave me a solid background to progress my career



The team have produced firm, smooth and consistent greens surfaces

pecking this year on a couple of greens."

Moving forward

Other than maintenance, I asked Kevin what other work he and his team have completed and what his plans are over the next few years.

"It is irrigation first and

foremost," replied Kevin. "Our system is 30 years old, most of which consists of PVC pipe with glued joints at six metre intervals. It has served us well, but sadly it has now reached the stage that almost every aspect is failing at some point.

"Water is our lifeblood on this sandy site and there is only a thin covering of soil to

hold any moisture. As a result, growth and recovery is slow.

"Combatting wear is a challenge and one that we constantly have to address, hence the need for improved irrigation cover.

"Later this year, we will replace the tank, pumps and associated pipework and the following year it will be the rest of the system."

Other work undertaken by the greenkeepers in recent years includes replacing old timber edging and sleepered steps on tees, general bunker renovations, path upgrades and woodland work.

Kevin said: "After the summer, we assess what turf renovations are required; namely what can be achieved via dressing and seeding, while prioritising areas for re-turfing this winter.

"Some minor landscaping of high wear, pinch-points are also likely in order to provide improved growth and drought tolerance." »

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MEET THE HOSTS

Andy Wood invites us behind the scenes of this year's BIGGA National Championship host venue

Karl Hansell, BIGGA

Alf Padgham, Arthur Wigglesworth, Horace Lewis, Frank Pennick, Rob Hinton – not exactly household names when it comes to golf course architecture.

Although former Open champion Padgham was consulted, when it came to the creation of Enville's initial six-hole layout in 1935, the hard work was left to Wigglesworth, a construction foreman who had never played golf before.

The remaining 30 holes were created over the following 50 years by various club professionals who had little experience of course design. And yet, almost miraculously, Enville's Highgate course is considered one of the finest in the Midlands, if not England.

It's that lack of an established pedigree that course manager Andy Wood believes is keeping both the Enville's Highgate and Lodge courses off the beaten track, known only to a select few

golfing connoisseurs.

"One of the main reasons we aren't considered in the top 100 is we haven't got a named architect. That alone doesn't guarantee a good golf course, but it does help your reputation. So, we are trying to improve all aspects of both courses for our membership and guests to enjoy and if it happens it will be because of the gradual improvement of aspects of the club," said Andy, who has been course manager for five years.

Location: Stourbridge



Did you know that before Michelangelo carved David, other lesser artists had had a go at shaping the marble block? It was only the recruitment of a Renaissance master that finally enabled the world-famous work of art to emerge from the raw materials. That's what Andy hopes will happen at Enville following the enlistment of consultant architects in the form of Clayton, DeVries and Pont.

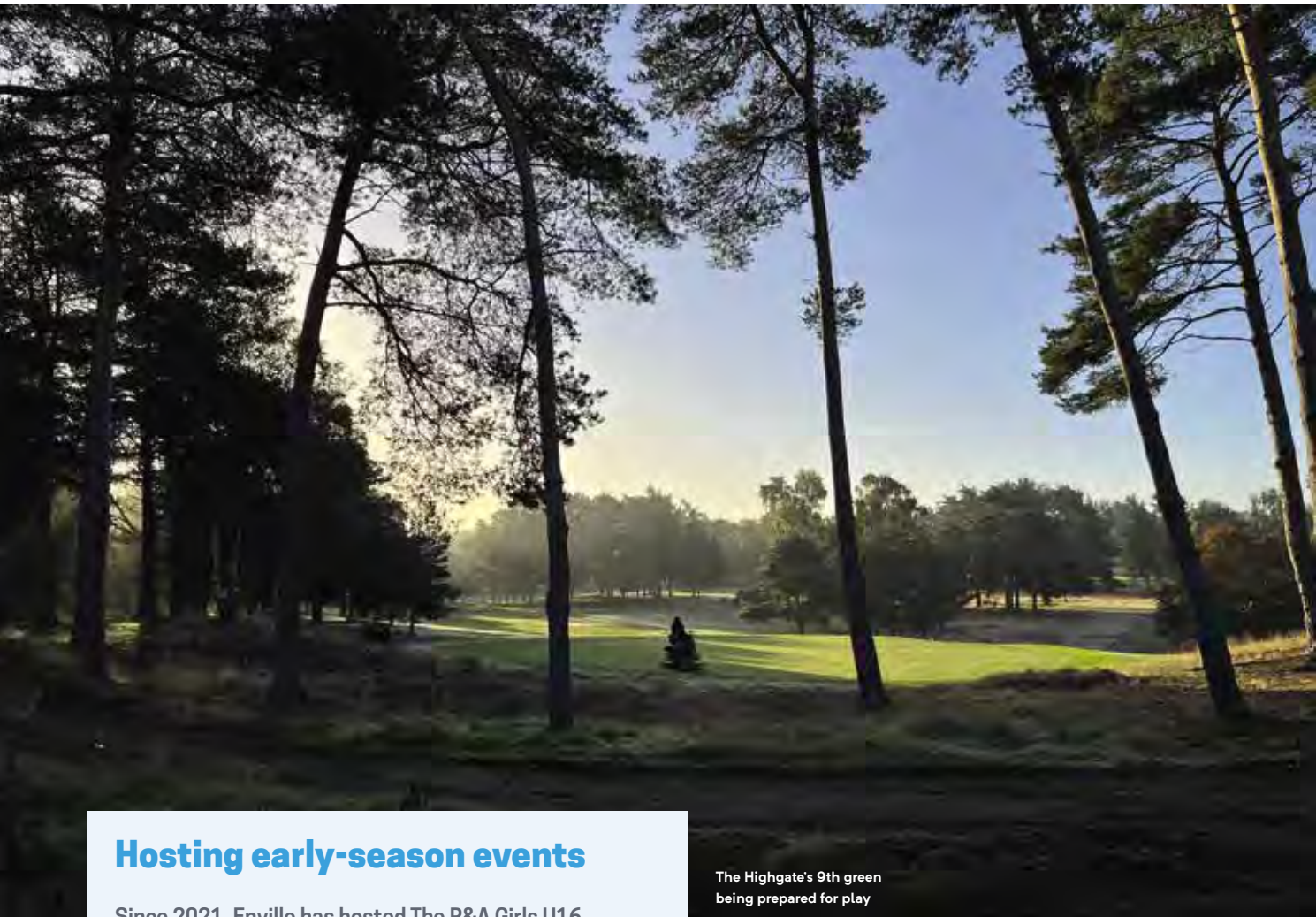
"This piece of land deserves professional architects to take it on and move it forward," added Andy.

"We've had a lot of very well-meaning amateurs do work before, but we want to move away from the 'captain's bunker', 'chairman's folly' concept and have a proper architect look at the site and build a plan for the next 30 years. They said it's an unbelievable site on a great piece of land, which can be enhanced further by a professional and consistent approach to improvement." »



Lewis Simmonds rolls a green ahead of the day's play

Read this for:
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The Highgate's 9th green being prepared for play

Hosting early-season events

Since 2021, Enville has hosted The R&A Girls U16 Amateur Championship. Taking place in April each year, the early season dating tests the greenkeeping team to its limits.

"Our fine grasses on fairways and surrounds take a little longer to get going," said Andy. "It's a difficult balancing act trying not to put too much nutrition down while also trying to get enough growth so early in the season, so it can be difficult to get the course in the condition we'd like it to be in."

"The work begins in autumn with a visit from The R&A and Alistair Beggs, their head of agronomy. We look at the tees and where they're going to be placed for the championship. We protect those areas over the winter and then make sure our renovations are completed at the start of March so we can concentrate on getting the greens as good as they can be into the start of April."

"For the Girls' under-16s event, we will set up the golf course like we would any of the professional events we've had. The only thing that will differ is we won't go for too quick putting surfaces. We'll keep them around 10.5-11 feet, which helps us because of the time of year."

"Then, around the banks and hollows, The R&A ask us to keep the grass to a reasonable height and to not be too punishing around the greens."

"It's great to have The R&A here and as a greenkeeping team we enjoy the challenge and having as many events as we possibly can. We've also got England Golf's Logan Trophy next year, so we're hosting two big amateur events and the team is massively motivated to make it as good as possible for the players."

It is testament to those willing amateurs and to the Enville greenkeeping team that the courses are so well regarded. A Regional Open Qualifying venue and current host of The R&A's Girls U16 Amateur Championship, as well as next year's Logan Trophy with England Golf, they have clearly done many things right.

During October, the Highgate course also played host to the BIGGA National Championship, an event Andy said the team were proud to hold.

"It's fantastic to be able to host your peers at any time," he said. "Whether it is regional events or this national championship, it is fantastic to get people together from all over the country."

On the course things appear to be running smoothly, with the final nine



The 11th tee is framed by trees

“There is nothing better than preparing a golf course for a major event

holes of the irrigation project due for completion this year.

For Andy though, it has been a challenging season as he was appointed interim general manager early in the year, with recruitment for a permanent replacement getting underway this month.

Balancing the needs of the clubhouse against the needs of the course has proven challenging, although he has received exceptional support from deputy course manager Robert Jones who, ironically, shares the name of a course designing great who, had he lent his hand to Enville, would have removed much of the need to recruit anyone else.

Fortunately, 20 years as a course manager has prepared Andy for many of the requirements of working as a general manager.

He explained: "I have always run my department as if it was a small business. That includes budgets, material and machinery deals, HR and health and safety. Being computer literate and working in golf for a long period of time has also helped as I know



Early-morning shade falls across the 1st tee



The greenkeeping team has been restoring valuable heathland across the entire site

the game and how members will react to certain things, which has made it easier to adapt to this side of things.


"Having said that, there is nothing better than managing a golf course, working with a team and seeing the hard work put in day in, day out to improve things, not only short term as in daily presentation but also long term, such as the heather and woodland management. The work you put in can take years to show >>

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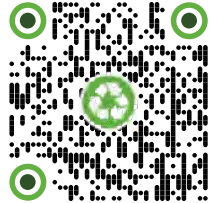
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GREENKEEPERS' TOOLBOX

The Team

- / Andrew Wood, course manager
- / Robert Jones, deputy course manager
- / George Nock, first assistant
- / Lewis Simmonds, first assistant
- / Luke Trow, Adam Worrall, Keith Abercrombie, Martin Jones, Liam Fletcher, qualified greenkeepers
- / Max Pugh, Joseph Swift, Seth Beddal, apprentice greenkeepers

Main Equipment

- / A John Deere fleet maintains both golf courses

The 7th tee

but when it does, it makes all the effort worthwhile. I'm looking forward to getting back over to that side on a permanent basis."

Over the year Andy has gained a greater appreciation for the difficulties faced by general managers. But he hopes that as golf facilities evolve, some of that burden will be shared. For Andy, the ideal situation is not a club manager overseeing all operations at a facility, but rather sitting shoulder to shoulder with the course manager, supporting each other on an equal footing as he had at Enville and hopefully will have again.

Andy said: "There is such a wide variety of things going on, on the clubhouse side of things like out on the golf course. You can have your day planned out but then you receive a

curveball and it goes out the window. But that's going to happen when you have 900 members, 36 holes and £400,000 in green fees.

"I hope that we are able to recruit a club manager who is as driven to improve the clubhouse operations as I am the golf course and who will enable us to all move forwards

in the same direction.”

Back out on the golf course and the topics for conversation are much the same as they are across the greenkeeping industry.

Despite salary increases for the team amounting to almost 35% during his time in post, the renovation of welfare and maintenance facilities, a fleet



Early morning dew removal leaves its mark on the 9th green

of modern machinery, opportunities for training, learning events and a structure that allows for promotion and career progression, it remains difficult to attract staff.

Andy said: "I'm losing a member of the team next week to a landscape gardening company because he's going to be paid the same but not have to work weekends. Last year I lost 85 years' worth of experience with a retirement and a first assistant who left to become a lorry driver. Ultimately, cash is king and money is what is going to entice people to come into the industry. People can make good careers out of greenkeeping, but the issue arises when they hit a certain age and they want to buy a house or have partners who want to start a family. We have got the [CGCS] rates, but for many clubs they aren't within reach.



The 16th hole plays over a pond

"In the five years I've been here we have achieved a hell of a lot. If you could see our greenkeeping sheds and maintenance facility from what they were, they are probably now as good as

anywhere. We've got a great team and they are now being rewarded. Wages are on the rise, the team are thought of highly by 99% of our members and we're moving in the right direction. It has been

difficult circumstances, but we are moving forwards."

Continue the conversation

Andy is on Twitter at
 @andywoodgolf



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Enville hosts the 34th BIGGA National Championship

James Lynch and Tyler Holmes win the top prizes following two fantastic rounds of golf

West Sussex greenkeeper James Lynch won the BIGGA National Championship at the first attempt following two wonderful rounds at Enville.

Playing in his first BIGGA National Championship, James shot two rounds of 74 to card a 4-over par 148, pipping three-time winner David Simpson by a single shot and previous winner Oly Browning of Queenwood one shot further back.

A scratch golfer, James said: "It feels amazing and I'm so happy to have won such a prestigious tournament. It's my first year that I've played in the championship and it was a battle to the end. The lead changed hands throughout the round and I'm so relieved that I was able to win. My thanks go to BIGGA, Origin Amenity Solutions and Enville Golf Club for hosting such an amazing tournament."

The BIGGA National Championship was contested over Enville's Highgate course on 10-11 October. Located in Staffordshire, Enville is a Regional Open Qualifying venue that is also the current host of The R&A Girls U16 Amateur Championship.

In the Stableford >>



Working with



as Golf Partners



James Lynch alongside Enville course manager Andy Wood (left) and Origin Amenity Solutions' Glen Howard



Tyler Holmes (centre) won the overall Stableford prize



Andy Unwin, Nick Bird and Wesley Saunders



Simon Ashford and Ben Shaw



Gordon Moir, James Heels and Kev Hilton



Graham Hurren, James Stratford and Stuart Coxhead



BIGGA National Champion James Lynch



Leigh Mordy, Anthony Duffield and Cassidy Steffens



James Lynch on his way to victory



The South East Region won the team prize with Ki Turner, Andrew Ramsay, Sam Cook and David Warner scooping prizes



Nearest the pin on the opening day was Chris Low (centre)

competition, Tyler Holmes came out on top after shooting a combined total of 73 points. Anthony Duffield of Ham Manor Golf Club was second with 68 points.

Andy Wood, golf course manager at Envile Golf Club, said: "It was a pleasure to host the BIGGA National Championship sponsored by Origin Amenity Solutions. We always enjoy preparing the course for a championship, but to host this prestigious event for fellow greenkeepers is a real honour and I hope everyone enjoyed their visit to Envile. Our greenkeeping team has done the club proud in setting up for this event, which gave them an opportunity to showcase their work to fellow professionals."

James was accompanied throughout the two rounds by his fiancée April Watkins. The pair are due to marry in August next year, but with James set to defend the championship at Saunton Golf Club next September, he will have to convince April

“ We always enjoy preparing the course for a championship, but to host this prestigious event for fellow greenkeepers is a real honour



James Lynch was cheered on by his fiancée April Watkins

that Devon is a nice place to enjoy their honeymoon.

On behalf of Origin Amenity Solutions, Glen Howard added: "It has been a fantastic two days. The course is looking amazing, we've been blessed with great weather and I've witnessed some cracking golf. It is a privilege to sponsor the BIGGA National Championship, which brings together golfers of all standards from across the association. It gives us an opportunity to catch up with people from within the industry, which I and the rest of the OAS team find invaluable. Congratulations to all the trophy winners, thank you to Envile Golf Club for a warm welcome and well done to all involved, particularly the greenkeeping team, who did a superb job."

The 2023 BIGGA National Championship sponsored by Origin Amenity Solutions will take place at Saunton Golf Club on Monday 25 and Tuesday 26 September 2023.



Steven Harvey, Ki Turner and Ben Knowles-Jackson



Chris Low, Stuart Diamond and David Warner



Robert Welford, Samuel Cook and Andrew De Wet



David Simpson, James Lynch and Oly Browning formed the final match of the championship



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Steve Mackey, Head Greenkeeper, Wellingborough Golf Club

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SILICON NATURALLY

Using silicon in turf management

Richard Salvage, Tim Cannon and Colin Fleming, School of Biological Sciences at The Queen’s University of Belfast and Maxstim

Although silicon has not been regarded as an essential nutrient for plant growth, research is revealing the wide range of plant functions and processes in which it is actively involved.

Consequently, silicon’s importance in plant growth is being reassessed, not least in the production of high quality turfgrass.

Silicon is the second most abundant element in the Earth’s crust, where it exists mainly as silica (SiO₂) or is bound with metals in the form of silicates. Weathering of these minerals releases the silicon into the soil. Within soil, silicon is found in water as monomeric orthosilicic acid (H₄SiO₄) and is taken up by plant roots and transported to the shoots.

In the plant, silica forms and accumulates in the cells of various tissues, including the outer epidermis of leaves and the plant vascular system. All terrestrial plants

contain silicon in their tissues, although the amount of silicon varies considerably among species (ranging from 0.1 to 10% silicon dry weight), with monocotyledons accumulating more silicon in shoots than dicotyledons.

Terrestrial grasses including cereals and turfgrass species contain about 1–1.5% of silicon in their biomass. It has been demonstrated that applications of silica to turf will increase the levels of silica in the leaf tissue of both cool and warm season turfgrasses. This phytogenic silica is eventually recycled via plant organic matter (OM) which decomposes, releasing the silicon back into the soil.

How available is silicon?

Despite the high incidence of silicon in many soils, there is often low silicon availability for plants. Due to their low mineral content, organic soils



can be deficient in plant-available silicon.

Surprisingly, mineral soils containing a high content of quartz sand (such as sand-based sports rootzones including USGA-based quartz sand greens and tees) can also be silicon deficient.

Silicon deficiency occurs most often in highly weathered, low pH soils, where heavy rainfall and irrigation causes leaching and eventually silicon depletion.

Silicon deficiency can also occur due to losses caused by continuous planting of crops that demand high amounts of this element. For example, a rice crop can remove up to 470kg of silicon per hectare.

Consequently, repeated cropping results in the removal of silicon from the soil at a rate faster than it can be replenished naturally. The loss of silicon in turfgrass cuttings removed during maintenance has not been assessed.

Role of silicon in plants

While it is well known that deposits of silicon in plant tissues can increase their mechanical strength, the role of silicon in plant nutrition is less clear, probably due to variability in the ability of different plant species to absorb it.

Research at the Queen’s University in Belfast has demonstrated that ryegrass growth can be enhanced by the application of silicon in the form of orthosilicic acid (H₄SiO₄). Significantly, optimal growth occurred at lower concentrations of silicon, supporting the view that silicon can act as a biostimulant.

Is silicon an effective plant biostimulant?

Plant biostimulants have been described as any substance or microorganism applied to plants that (regardless of its nutrient

“ Surprisingly, mineral soils containing a high content of quartz sand (such as sand-based sports rootzones including USGA-based quartz sand greens and tees) can also be silicon deficient.

content) can enhance nutrition efficiency, abiotic and biotic stress tolerance and crop quality traits. While most growers and agronomists considering the use of a biostimulant to manage abiotic and biotic stress are familiar with materials such as seaweed extracts, humic acids and protein hydrolysates, it can be a surprise to them that silicon also falls into this class of bioactive materials. Several scientific studies have demonstrated that silicon can also enhance the stress tolerance of a wide range of plants including turf species. A study on wheat has shown that silicon treatment modifies the activity of thousands of plant genes and provides some insights into the ways in which silicon can influence plant growth. Most of the genes responding to silicon were involved in plant growth and development, photosynthesis, iron metabolism, stress management and resistance to pathogens. This supports the many observations that silicon can affect growth and increase the tolerance of plants to abiotic and biotic stresses. Together, these findings highlight the importance of silicon to plants and suggest that silicon should be a key component of turfgrass nutrition.

Past research into the inclusion of silicon in turfgrass management programmes has largely involved three areas:

- / reductions in drought and salinity stress
- / improvement in wear tolerance of turf
- / plant disease suppression

Silicon enhances the tolerance of turf to drought and salinity stress. The availability and cost of irrigation water is increasingly becoming a significant problem for turf production. Experiments in the USA have shown that the quality, colour and density of silicon treated turf subjected to drought were significantly enhanced compared to non-treated turf. For example, Kentucky bluegrass pre-treated with Na₂SiO₃ over two weeks was subjected to drought stress and measurements of chlorophyll, electrolyte leakage, and antioxidative activity recorded.

Silicon-treated drought stressed plants were longer, had more roots (both length and weight) and weighed more (dry weight) than Kentucky bluegrass that had not been pre-treated with the silicon.

Silicon helped maintain higher stomatal conductance, relative water content, and water potential in the turf. Leaves on Silicon-treated plants were also larger and thicker, limiting the loss of water through transpiration and reducing water consumption. Additionally, Silicon fertilisation seemed to modify the development of secondary and tertiary cells of the plant endodermis, allowing better root resistance in dry soils and promoting a faster growth of roots, all of which enhance the plant’s tolerance of drought conditions.

Silicon also induces changes in the metabolism of plants, including stimulation of antioxidant defences that help maintain key processes such as photosynthesis. »

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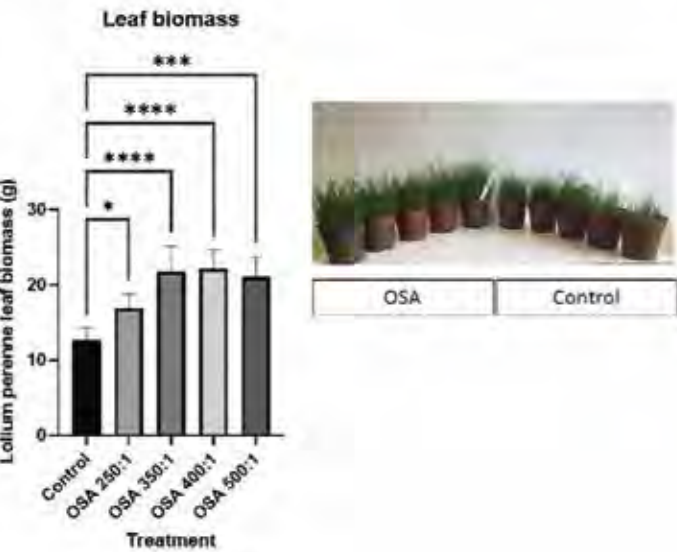


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especially during the summer when plants are influenced by environmental stress, including drought. The use of silicon applications in UK turf production has also indicated that it can increase water use efficiency in irrigated turf and enhance the response of turf to foliar nutrition.

In areas of Europe, salt stress is becoming a regular problem associated with poor quality irrigation water. There is research evidence that applications of silicon can protect turfgrass (such as Kentucky bluegrass, common bermudagrass, tall fescue and perennial ryegrass) from salinity problems. Benefits of silicon application include improved seed germination, better canopy coverage, increased plant height, leaf area and tiller number. These studies concluded the addition of silicon inhibited the absorption and transfer of sodium within turf, leading to reduced sodium levels in shoots and roots.

Figure 1 - Application of orthosilicic acid (OSA) to ryegrass (*Lolium perenne*) increases leaf weight



Silicon enhances the ability of turfgrass to withstand wear and tear

The notion that deposition of silica in plant tissues could result in more rigid and physically resilient plants came from observations in crops such as rice where

increased silicon levels resulted in a more erect leaf blade. Since then, several studies, supported by anecdotal evidence, have examined the effects of silicon on turfgrass tolerance of wear and tear and golf ball roll.

Generally, results supporting increased turf resistance have been inconsistent. However, recent research on perennial ryegrass managed as a sports field, with wear (or no wear) traffic treatments applied weekly, indicated that silicon applications significantly increased ryegrass density in the trafficked areas.

Use of silicon for disease control

One of the most significant limitations on maintaining high quality turfgrass has been the loss to the industry of multiple fungicides. This has led to increased disease problems and stimulated interest in alternative approaches to pathogen control in turfgrass. In particular, the ability of silicon to reduce turf disease has been examined, with applications of silicon often observed to reduce levels of turf diseases (grey leaf spot, dollar spot and brown patch) in turfgrass species including

creeping bentgrass, bermudagrass, perennial ryegrass, and St Augustinegrass.

Where disease control has been observed it is believed a combination of mechanisms may be involved:

- / deposition of silica in leaf tissues physically restricting the pathogen infection process
- / silicon inducing plant disease resistance through stimulation of biotic stress responsive genes

While studies have confirmed that silicon applications can reduce pathogen levels (especially grey leaf spot) in many cases, the silicon rates required were high and greatly exceeding what is delivered via recommended rates for commercial turfgrass silicon products.

Consequently, there has been considerable interest in the development of specialised formulations containing novel silicon chemistries and plant extracts, which act synergistically to deliver effective concentrations of silicon and induce plant disease tolerance. Trials examining the potential of these materials for disease control are ongoing, with particular attention on their role in managing cool season turf pathogens such as *Microdochium nivale*.

Evidence from the horticultural industry has shown complex biostimulants can be used in combination with lower rates of fungicides in the management of fungal pathogens.

There is always a practical requirement with these newly developed products to easily fit into the existing working practices and treatment regimes used by greenkeepers and groundsman and care has been in the design phase to ensure these formulations are tank mixable with most other compounds, allowing ease of use and labour savings.

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2023

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FLOATING ON CLOUD NAIRN

How Wiedenmann's Terra Float Air is key to Nairn's Poa reduction programme

Nairn, in the Scottish Highlands, is a majestic links course that nestles on the shores of the Moray Firth.

Nairn was venue to the 2021 Amateur Championship, their second staging of the prestigious event and the club has a rich history, having previously hosted the Walker Cup in 1999 and the Curtis Cup in 2012, producing home victories on both occasions.

Richie Ewan is in his 37th year at the club, with the last 10 as course manager. He has a team of 13 who look after both the Championship Course and the 9-hole Cameron Course.

A long-standing Wiedenmann UK customer, Richie is generous with his praise for an exceptional machine that has made an outstanding contribution to one of his most important projects.

He said: "We're very happy with all our Wiedenmann equipment: a Terra Spike GXi 8 HD, the Super 500 and the Terra Rake. But undoubtedly for us, the highlight is the Terra Float Air, now completing its fifth season.

"A decade ago, we made a conscious decision to improve the greens profile and composition of our grasses. We were sitting at 60% poa

Location: Nairn



dominant, with the remaining 40% a mixture of bent and fescue. For the first five years our programme was adding 140 tonnes of sand through sustained light dressings and when carrying out hollow coring and Graden work. The team worked extremely hard to reduce organic matter to the target level through this period, creating the ideal conditions for what was to follow.

"Then in season 2017-18, Mike James from Wiedenmann UK brought the newly available Terra Float Air seeder for demo. At that stage, our process was still sanding the profile and concentrating on bent seed, but we were nearing the next phase of our plan, to significantly step-up overseeding.

"As soon as Mike demonstrated the Air, with its speed, precision and quality of finish, I knew it was head and shoulders above anything I'd seen for bent seeding. It was absolutely the impetus to accelerate our programme.

"The Air's arrival coincided with an approach to the club's committee to set up a monthly Maintenance Monday, which they readily agreed. For one Monday in each of the months of May, June, July, August and September, we get the course to ourselves from 5.30am to 9am, which gives us the head start needed on the greens with the Air.

"Greens are verti-cut, dressed with a light topdressing, seeded, then brushed and rolled with the Air, all without disturbance to golf following on. We manage to stay ahead of play and almost always complete 18 greens plus the putting green within a day.

"The Air, combined with the monthly maintenance window, enabled us to go from two to three overseedings a year up to as many as five a year, doubling our bent programme.

"Crucially though, the doubling happened while employing far fewer resources.

"The Air only needs one »



The Terra Float Air is both quick and precise

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Nairn GC 6th green & 10th



Wiedenmann’s futuristic Terra Float Air goes as low as 1g per m²

Distinctive on many levels, the Terra Float Air has a futuristic look, often described as ‘like a robot’, and its head, neck and body are a composite of three units in one.

The process starts with the operator inserting the chosen seed into size-appropriate dosing sleeves. Wiedenmann offers multiple dosing options for bent, rye, fescue, meadow, or Bermuda including soft-touch dosing sleeves for coated seed, which vitally keep protective coatings intact.

Next, the seed bed is determined by selecting from a range of hole-making tools, including stars and cone-shaped ones, at 5mm and 8mm in diameter.

These tools have capacity to make 1,500 holes or 500 slits per m².

Before setting off, the operator inserts the selected tools into a heavy-duty floating spike roller. The roller is formed in three parts and floats to follow contours. Whether on tricky undulations or on straight terrain, the roller loosens and aerates the soil down to 30mm, creating

uniform ‘pots’.

A feature of the machine is that all aspects of seed delivery use electric-drive technology.

The seed-dosing sleeves and fan are both electric powered. Seeds are pneumatically delivered down a series of eight pipes onto deflector plates, which direct the seed into the plant ‘pots.’

Everything can be calibrated from the cab. An on-board computer stores data from previous runs and allows you to amend the application rate at any point in the process. This brings reassurance for those needing finite calibration or working with precious seed. Maximum accuracy is assured at extremely low rates, even quantities as little as 1g/m².

After the seeds are in the ground, a double layer sweeping brush follows on and it, too, has floating properties.

A further three-part roller, like the one on the Wiedenmann Terra Spike GXi 6, means you have an optimal brush and roller combination to incorporate topdressing materials to the ground, before smoothing the surface.

The greens during renovation work

crew member, whereas previously we needed three.

“We have accelerated overseeding while freeing up team members to attend to other tasks within the process.

“In terms of the bigger picture, it’s been so positive. We are much more efficient around the golf course and our results are massively improved. Overseeding is faster and simplified while we enjoy the rewards of extra work conducted elsewhere.

“The seed on the greens throughout has been Barenbrug’s All Bent. We’ve pretty much sustained the same quantities, so 5gm², with

no reason to amend.

“In the first three years with the Wiedenmann, we obviously noticed a considerable increase in the bent take on our greens. We also became aware of a handful of localised stubborn areas that were extremely poa dominant. We put this down to their location and the fact they received constant wear, potentially not allowing the bent seed to take.

“To combat this, these past two years, each time we overseeded the greens, we also took a little time with the Air to target those tricky areas with two or three additional



The team at Nairn

passes, as we felt those areas needed to play catch up.

“The Barenbrug product has been highly successful to the point that this year we are confident, through our agronomy report, that we have 70% bent on the greens, which is a massive turnaround from the initial starting point.

“It has always been the plan in recent years to get the poa on the back foot and sustaining 140 tonnes of sand into the profile per year, we’ve consistently increased bent within the composition. Now we’ve arrived at a significant percentage, and, with these foundations, we are ready to move into the next phase of our plan, where we start to increase overseeding with fescue.

“Back in 2012, we were always confident we could do it. What the Air has allowed is a significant acceleration of that process. Most importantly, it’s been carried out discretely under the noses of the golfers with no disturbance whatsoever.

“Bear in mind, we had 39,000 rounds on our golf course last year. We are a high-playing members’ club and we have a healthy level of visitor play. For the team to turn the sward composition around through management of our sands, through dressing and overseeding, with fully booked tee times, without any — or at least minimal — disturbance on play, is a major achievement.



Each green takes around 20 minutes



Nairn

“A decade ago, we made a conscious decision to improve the greens profile

“We’ve sought to improve sustainability. Our putting surfaces have always been good, but we’ve known where we needed to get to. Because of work to the profiles and surface, for the amount of golf and the ever-changing climate, we have become less reliant on fertilisers and irrigation. The profile is a much healthier and resilient prospect all together.

“Happily, with so much bent in the profile, we are now in the position where we can start to accelerate overseeding with fescue.

“Wiedemann’s new conical roller, especially as it is fescue specific, is on our shopping list. We hope to have it in place for our first fescue overseeding next season.

“We’ve still got a fair bit to do in terms of targeting our fescue overseeding and to further reduce the poa percentage. Going forward, we will now gradually look to increase our fescue seeding and as we do, we will then naturally reduce the bent applications while hopefully sustaining the same level of overseeding annually.

“Whatever we do on the Championship course, we repeat on the Cameron. We try and keep all greens and playing surfaces in line. Once we are out with the fescue conical roller on greens, it’s

highly likely we will use it on other areas. We are currently using fescue elsewhere so that would open up using the Air even more.

Mike James, Wiedenmann UK sales manager, said: “It’s been an absolute education going down this road with Richie and his team. Richie’s machine was one of the first Wiedenmann Terra Float Airs delivered anywhere in the world. I’ve been privileged to have a ringside seat, seeing his knowledge and understanding in action, coaxing the Air to do exactly what he needs. It’s been a masterclass in sustainability and I’m so ready for the fescue rollers, their results and for them to deliver what he needs. Roll on 2023!”

Continue the conversation:

You can contact Wiedenmann UK on Twitter at @WiedenmannUK

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 Wiedenmann

Origin Amenity Solutions integral to Gillingham's transformation

After previously suffering with the side effects of excessive thatch content, the course manager at Gillingham Golf Club has praised a programme from Headland Amenity, part of the Origin Amenity Solutions (OAS) group, for its role in transforming the health and presentation of the greens.

Together with a comprehensive cultural regime, the improvement in course condition has seen a reduction in disease activity and reduced reliance on fungicides and saw Gillingham proudly play host to a Kent Golf Captains event for the very first time.

John Hunnisett joined Gillingham as course manager just over a year ago, when he was faced with a course that lacked any definition and multiple areas, including bunker surrounds and tee banks, completely unmaintained. To make the transformation project even more challenging, the greenkeeping team consisted of three trainees and, 13 months on, John remains the only qualified greenkeeper out of the team of five.

"I pretty much had to start from scratch in all areas" explained John. "I'd used a few Headland products previously but had the benefit of seeing a full Headland



programme in action during a stint spent at The London Golf Club. It opened my eyes to a whole new range and so I called in our OAS technical manager, Andy Ward, to help with the monumental task at hand."

Soil analysis taken by Andy highlighted high levels of organic matter in the top 20mm which, combined with an increase in aeration, scarification, and topdressing, has been improved with a new nutritional regime.

John said: "Our summer programme consists of Protec Plus, TeMag Elite, Turfite Elite and Ascoflex Plus. This combination of products delivers a long-lasting, balanced supply of nitrogen together with maximising health and recovery following periods of heat or stress. We have received lots of positive comments from the members about the

presentation, with many saying that the greens have never looked better!

"In the autumn and winter we switch to Headland's 20-20-30 tank-mix, which is probably my favourite discovery and has made the biggest difference to the greens. The combination of reducing organic matter and enhancing plant health with monthly applications of 20-20-30 between September and March drastically reduced the amount of disease we registered — and what we did get was easily recoverable and didn't lead to scarring."

Headland's 20-20-30 tank-mix combines Liquid Turf Hardener, Turfite Elite and Seamac ProTurf Fe, proven to deliver enhanced plant strength and disease resistance when applied as part of a preventative approach.

John continued: "The course emerged in the spring of 2022 healthier than ever, which was great as we entered preparations to host the Hampshire County Match at the end of June. Being selected for this for the first time was testament to just how far we've come, with the right products and the pure passion of my team."

Continue the conversation

Headland Amenity joins other industry leading brands Rigby Taylor, Symbio and Turfkeeper to form Origin Amenity Solutions. For more information contact the OAS team on 0800 138 7222 or visit www.originamenity.com

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Hart Common enjoys market-leading results with the new Husqvarna Ceora

Hart Common Golf Club in Bolton has been enjoying the benefits of advanced robotic solutions following the installation of the new professional robotic mower from Husqvarna – Ceora.

The family-run 18-hole golf course and driving range, located in Bolton, was one of the first to put the new technology to the test, introducing its first Ceora robotic lawnmower onto the fairways in June.

After experiencing the mowing results for themselves, the golf club team has invested in a second robotic mower to further increase productivity.

Here, Husqvarna spoke to Catherine Roberts, head of greenkeeping at Hart Common Golf Club, on how Ceora has benefited the business.



Ceora and its pioneering EPOS technology, we knew this was something we needed to try out and explore how it could support our business.

We saw a demo of the product in person and were instantly convinced. We then placed an order with our local authorised Husqvarna dealer, Chelford Farm Supplies, where the team was fantastic in organising the installation — a very quick process and we were supported throughout, with regular communication to make sure everything was running smoothly.

What is your initial experience of Ceora?

CR: We have been very impressed with Ceora so far, from the simple setup to the fantastic results that we have already seen.

Following the installation in June, Ceora has taken care of everything on the course and has proved invaluable as a solution to save team time and to decrease workload so our greenkeepers can focus on more rewarding tasks.

We have the robotic mower operating across four holes on the course in the early mornings and evenings.

It can cut our largest fairway in two and a half hours, which is quick for a machine of that size on such a

large area. This saves our greenkeepers from having to go and cut manually, which ultimately saves us time.

The blades are also easy to swap, meaning there is little to no downtime for the mower and that our fairways are always maintained. Ceora is brilliant for all-year-round cutting, with the capability of offering a standard 20mm cut for the fairways.

The cutting height is easily adjusted in the app so the other areas that have been mapped can be cut at different heights. This means we will never have to worry about the quality of the turf.

What has the reaction been from your golf players?

CR: Our golf players have been surprised that such a compact machine is packed with such intelligent technology. As soon as they see Ceora operating on the fairways, the first reaction is to stop to take photos and videos! They are definitely impressed when we tell them what it can do.

Do you have any future plans for more robotics?

CR: Now we have seen the results of Ceora and advanced robotic technology, we know this is the route we want to go down and we are keen to explore Husqvarna's extensive portfolio of commercial grounds care products further.

We are in the process of having our second Ceora robotic mower installed, which will care for a further four or five holes on the

course, as well as a smaller Husqvarna Automower, meaning that we will be covered across the club both day and night.

Husqvarna recently announced the launch of its new low-cut deck for the golf market, enabling Ceora to manage more areas of the golf course, cost-save and improve the playing experience.

With a capacity of 20,000–25,000m² per day, Ceora can now be equipped with the new 43l cutting deck, which will be able to mow an area of up to three regular-sized fairways every day and night. However, the new cutting deck is not limited to mowing fairways. With an electric cutting height adjustment system, the same robotic mower can operate fairways, semi-rough and rough, as well as other golf areas, at cutting heights from 10 to 60mm.

For more information about Husqvarna and Ceora, visit husqvarna.com/uk

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INDUSTRY NEWS

Trimax offers BIGGA support

Trimax Mowing Systems designs, manufactures and distributes tractor-powered mowing equipment and BIGGA is proud to welcome the company as the association's latest Supporter.

A family-owned business that was founded in New Zealand in 1981, Trimax has had a presence in the UK market for over 24 years. European Marketing Manager Caroline Shaw said: "It's a real privilege to be part of such a proactive association and be able to contribute in a positive way. Supporting all the fantastic greenkeepers and making their lives easier is a top priority for us as a business. Here's to a great



partnership!"

Committed to providing outstanding service and support, Trimax has been manufacturing in the UK for 10 years and now holds over £1.2m worth of parts in stock at any one point.

As a BIGGA Supporter, Trimax will help underpin the activities of the association, including the production of education opportunities and

resources for our members.

BIGGA's head of business development, Lauren Frazer, said: "Trimax believes in working alongside customers to create solutions. That's what we do at BIGGA, working with members to overcome the challenges they face in their daily lives. So, I'm extremely proud to welcome Trimax to BIGGA's growing stable of official Supporters."

FairWays Foundation

Founded in 2019, the FairWays Foundation has completed its third grant cycle, bringing the total funding to \$441,791 since its inception, with 29 projects supported across the USA, Canada and UK.

The FairWays Foundation is dedicated to supporting and promoting conservation and stewardship within the turf industry and beyond.

Twelve projects have been funded in the 2022 grant cycle, totalling \$169,000.

Projects include the extension of Irvine to Girvan Nectar Network and an on-course vegetable garden to serve the club restaurant.

St Enodoc certified

St Enodoc in North Cornwall has been awarded GEO Certification in recognition of the outstanding work undertaken by the team.

In its strive towards excellence in sustainable golf, St Enodoc has worked with Natural England and implemented a Countryside Enhancement Scheme (CES) for a Rock Dune Site of Special Scientific Interest.

General Manager Simon Greator said: "St Enodoc is rightly proud to have the GEO verification and is delighted that this international accolade recognises in particular the outstanding work of the course manager, Simon Gibson, and all his greenkeeping staff in terms of ecology and environment."

The club has also invested in measures to protect and restore sand dunes.

Welsh habitat day



Greenkeepers, conservation groups and employers in the horticulture industry joined together for a summit to mark World Habitat Day.

Over 50 people attended an event at Coleg Cambria's £1.2m education hub in Llysfas, where speakers from across the region led on a variety of topics, from beekeeping to ecology on the golf course.

Among the speakers were representatives from Nefyn Golf Club and Wales Golf.

Coleg Cambria's Kate Muddiman said: "The main

theme was around ways to improve habitats with greenkeeping at the crux of that, looking at ways to create natural areas of wildlife around golf courses by creating wildflower meadows and encouraging more natural wildlife and a more sustainable environment.

"The atmosphere was fantastic, the audience got truly involved, asking questions, offering further suggestions and giving people ideas to take away."

The hope is this will become a biannual event.

Lincolnshire course sold

The Lincolnshire in Scunthorpe has been sold by HMH Golf & Leisure for an undisclosed sum.

The 140-acre site, which is home to an 18-hole golf course, has been purchased by a local family and the golf course was permanently closed on 30 September.

Tom Marriott of HMH Golf & Leisure said: "HMH has now sold 13 golf and hotel venues this year alone and buyers in this market are looking for assets. We had strong interest in the club, however there is a lot of golf in the area and the business has been under pressure for some time. The eventual buyer has other plans for the site."

Located in Belton, The Lincolnshire was a pay and play course that was renowned for its water features on numerous holes.

Bayer rebrands as Envu following sale

Following its sale to a private equity firm, Bayer has been rebranded as Envu.

The parent company Bayer completed the sale of its Environmental Science Professional business to Cinven, a private equity firm.

The purchase price for the business amounts to \$2.6billion.

Rodrigo Santos, head of Bayer's Crop Science Division, said: "We thank the employees of Environmental Science Professional for their many years of commitment and the associated success of Bayer. In Cinven, we have found a strong new owner with a firm commitment to the long-term growth potential of the business and to its people."

The divested business will operate as an independent company called Envu. The business is a global leader offering solutions to control pests, disease and weeds in



non-agricultural areas such as vector control, professional pest management, vegetation management, forestry and turf and ornamentals.

Nearly 900 employees will transfer from Bayer to Envu.

Pontus Pettersson, partner at Cinven, said: "Envu is a global leader in a highly attractive and critical industry.

"We thank Bayer for the trust they have placed in Cinven and plan to build on

the strong foundations established by Bayer by significantly investing in it.

"Cinven is excited to build an independent, focused company and is well positioned to drive innovation and accelerate growth, including the delivery of digital and data-enabled solutions and to extend the product portfolio by creating innovative and sustainable solutions."

Husqvarna expands Ceora range



Husqvarna has launched a new low-cut deck for the golf market, enabling the professional robotic mower, Ceora, to manage more areas of the golf course.

Ceora can now be equipped with a 43l cutting deck, which will be able to mow an area of up to three regular-sized fairways a day.

Cuttings heights can vary from 10 to 60mm.

Kubota's George Brown boost



Kubota (UK) has announced that George Brown has opened a depot in Witney, West Oxfordshire.

The branch opening has seen George Browns' groundscape-only Haddenham depot close.

Steve Brown, managing director, said: "This is another strategic move for our long-term business partnership with Kubota."

Chen appointed



With the growing importance of biological products to enhance the agronomy of professional turf management and production of high-quality ornamentals, Syngenta has created the dedicated role of biologicals technical manager.

The company has appointed the experienced research scientist Dr Hui (Eric) Chen to support and develop the integration of biological products within the Syngenta Professional Solutions team across Europe, Africa and Middle East.

Nicklaus-brand development launched

Nicklaus Companies and developer FM Group have teamed up to launch the first Jack Nicklaus-branded residential golf community in Europe at Stonehaven.

The development of homes at the historic Ury Estate in Scotland will be constructed around an 18-hole Jack Nicklaus Signature Golf Course, which is currently under construction.

Commenting on the launch of the development, Jack Nicklaus said: "The Scottish people have always been very nice to me. I guess they like somebody who excels at what they do, and I've excelled in Scotland. We are trying to create not only a golf course, but a way of life around what I've done."

Nicklaus won two Opens in Scotland, in 1970 and 1978.

1982

HISTORY OF GREENKEEPERS' ASSOCIATIONS

1982

At the British Golf Greenkeepers Association (BGGGA) AGM, membership was announced as 1,378 greenkeeper members.

Membership was growing but not all were happy, especially in the south of the country, where the feeling was that the association was oriented to the north.

In the November issue of the magazine, the BGGGA secretary, Walter Heeles, said he and past chairman Colin Geddes had produced figures for the employment of a full-time and part-time administrator and these were £14,000 and £10,000 per annum respectively.

There was a clear desire to modernise the structure of the association.

In addition to rumours of breakaway groups and obvious dissatisfaction from some about the running of the association, a further blow was felt with the announcement that the BGGGA chairman, Harry Hetherington, had been made redundant from his position as head greenkeeper at Lindrick. This was a complete shock to the greenkeeping world as the Hetheringtons were seemingly synonymous with the club.

Harry's father, George, had been head greenkeeper before him and their service extended to over 60 years.

The club stated Harry would not be

replaced and the greenstaff would be controlled by a greens committee.

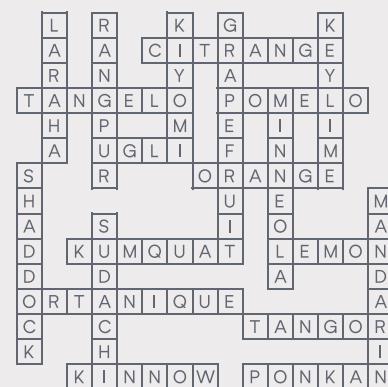
The club put out a document to all its members, explaining its reasons and policy for the upkeep of the course. In this document was a paragraph that must have caused consternation to all greenkeepers: "Head greenkeepers have relied almost entirely on practical experience for their training. To implement policies relating to [course maintenance], it is now clearly necessary to have a thorough understanding of complex scientific principles. The past and present training of head greenkeepers has not allowed for this and therefore such personnel are not sufficiently qualified to handle implementation of policy."

How were greenkeepers to get this understanding if not through education and training, which clubs and unions had steadfastly refused to help the greenkeepers' associations to attain?

The Lindrick committee at the time was stating its belief that greenkeepers were not competent to do their job and suggested that other clubs should do the same. Yet one has to wonder how many of the greens committee, including chairman E N Park (a dentist) were qualified to make such decisions?



Number Crossword



Box Clever

NEWT
NEAT
BEAT
BEAD
BEND
BOND
POND
(Other solutions may be possible)

Egg Timer

1 Earnest
2 Resent
3 Enter
4 Tern
5 Toner
6 Ornate
7 Another

MEMBER BENEFIT:
COUNSELLING HELPLINE



BIGGA
British and International
Golf Greenkeepers Association

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Read Elliot Small's History of Greenkeepers' Associations on the BIGGA website

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