



# Greenkeeper International

## ■ Practical Greenkeeping

Could AI make your job easier? Almost certainly

## ■ Sustainability

The success of Abridge Golf Club's tree management plan

## ■ From Your Association

Our First Green initiative reaches St Andrews

A photograph of a man, Stuart Hogg, sitting in a yellow and green golf cart. He is wearing a blue polo shirt with "SALMERS" and "EST. 1981" on the sleeve, and dark trousers. He is smiling and looking towards the camera. Two dogs are with him: a black dog sitting on his lap and a brown dog sitting on the cart's seat next to him. The background is a blurred green field under a clear sky.

# A labour of love

Stuart Hogg and his team have patiently and painstakingly restored West Lancs's true links credentials



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June 2025



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.

#### Contact us

##### Email

Membership enquiries, including changes of address  
[membership@bigga.co.uk](mailto:membership@bigga.co.uk)  
Letters and editorial enquiries  
[info@bigga.co.uk](mailto:info@bigga.co.uk)

##### Post

BIGGA, Coxwold House, Easingwold  
Business Park, Stillington Road,  
Easingwold, York YO61 3FB

##### Phone

Membership services 01347 833 800

##### Social

[f golfgreenkeepers](https://www.facebook.com/golfgreenkeepers)  
[X @BIGGALtd](https://twitter.com/BIGGALtd)  
[@ @bigga\\_hq](https://www.instagram.com/bigga_hq)

##### The BIGGA team

Chief Executive Officer Jim Croxton  
Chief Financial Officer Steve Wragg  
Head of Membership Scott Reeves  
Editorial Assistant Lorna Taylor  
Design and Brand Executive Libbie Wadleton  
Head of Commercial and Marketing Lauren Frazer  
Commercial Manager Gavin Rees

##### Publishers

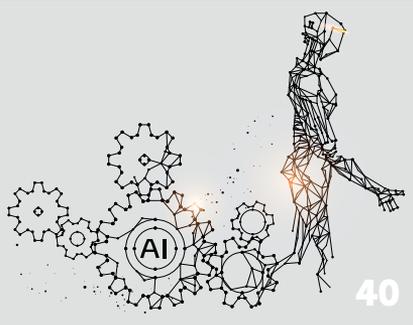
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BIGGA's activities on a national and regional level are underpinned by the generosity of our industry partners and supporters. BIGGA's various member benefits, learning and development opportunities and other activities are made possible due to the ongoing commitment shown by these companies, organisations and individual donors. From our supporters through to our national patrons and partners, our thanks go to them all for their dedication to BIGGA and its members.



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# First Cut

All you need to know from around our industry

- England Golf launch new initiative focussing on better mental health
- R&A and TEP support rising demand for water security at golf facilities



## Stefan Carter joins The R&A Championship Agronomy team

Former Wentworth Deputy Courses Manager Stefan Carter has been appointed as The R&A's new sustainable championship agronomist.

Stefan, who started his greenkeeping career at Forest Hill Golf Club in Leicester at the age of 16, comes equipped with a wealth of experience at some of the biggest events in the world.

His first taste of major tournament preparation came in 2013, when he volunteered at The Open Championship at Muirfield.

Stefan later swapped Forest Hill for Bowood, where he worked under Jaey Goodchild, who recently joined The R&A as an agronomist.

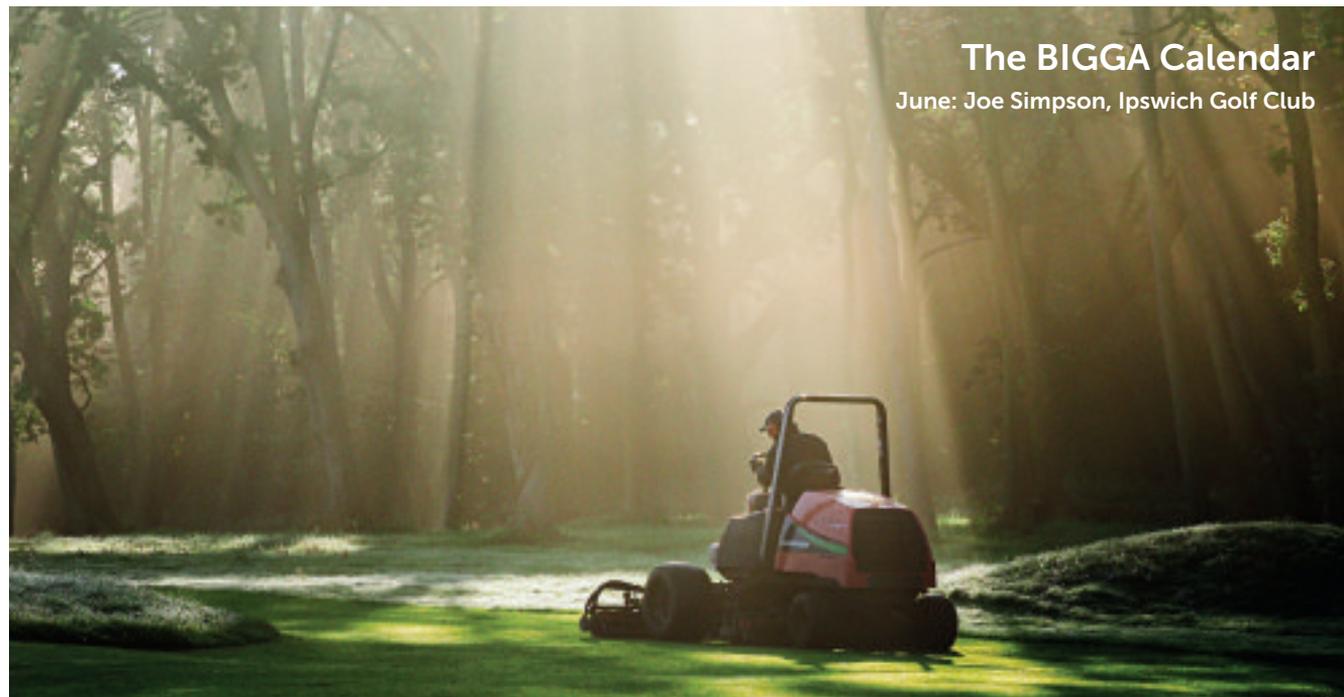
In 2015, Stefan moved to Wentworth and honed his skills at one of the best venues in the country, while he further bolstered his CV with a year-long internship at the world-renowned Augusta National Golf Club in 2017, where he was part of the home team preparing the course for The Masters.

"Joining The R&A as a sustainable championship agronomist is a dream come true in my career," he said. "I'm looking forward to working with some of the greatest golf clubs in the world, hosting both amateur and professional tournaments, as well as growing the greenkeeping and golf industries."

Alongside his professional development, Stefan was awarded an R&A Scholarship in 2019

while completing a BSc (Hons) in Sportsturf Science and Management at Myerscough College – an achievement that further reflects his commitment to excellence in agronomy.

Adam Newton, sustainable championship agronomy lead at The R&A, added: "We are delighted to welcome Stefan into our team at The R&A. He brings with him a wealth of championship and greenkeeping experience along with strong technical skills and a passion for agronomy which will be invaluable in helping our host venues deliver world-class playing surfaces in an environmentally sustainable way for R&A championships." **GI**



The BIGGA Calendar  
June: Joe Simpson, Ipswich Golf Club

## England Golf launches Fore Your Mind with Mind & Mental Health First Aid England



England Golf is working with Mind and Mental Health First Aid England to launch a powerful new initiative, called **Fore Your Mind**, to support better mental health in the golf community.

The programme will provide clubs and facilities with opportunities to support staff and members with their mental health, courtesy of Mental Health First Aid England training and resources.

One in four people will experience a mental health problem each year. Fore Your Mind will support those who need

it by signposting to various providers of mental health services, including Mind and the NHS, while giving them an insight into mental health, how they can look after their own and how to spot the signs of poor mental health in their friends, family and colleagues.

This project also supports clubs, counties and facilities, with the aim of appointing at least one Mental Health First Aider among their staff and volunteers.

Bedfordshire County piloted the Fore Your Mind initiative in January, training 15 Mental Health First Aiders for the clubs in the region. The results have already shown that Fore Your Mind is having a promising impact on the golf community. Bedfordshire County Golf Secretary, David Hawkins, said: "Three years ago, I went through a very difficult patch. I reached out to a friend who I

knew had gone through some tough times himself, and he pointed me in the right direction.

"I received support, and the sessions really helped me, to the point that I now give several hours a week to try and help others going through mental health problems. I reached out to England Golf and, alongside the team there, we put a plan in place, using Bedfordshire as a pilot, and the results have been fantastic.

"In just a month, we've had over 25 key conversations with people coming to our first aiders, and several already seeking further support. This immediate impact shows the importance of having first aiders in place as soon as possible because there are so many people out there who need somebody to talk to, and the reality is, it could save so many lives." **GI**



### A greenkeeper's best friend – Willow

**Owner:** Lee Carratt (course manager)  
**Course:** Belton Park Golf Club  
**Breed:** Labrador retriever  
**Age:** 3 years, 2 months  
**Favourite treat:** Dried sprats  
**Favourite spot:** 22nd hole, sat waiting

for squirrels to chase  
**Naughtiest moment:** Chasing a herd of deer  
**My dog is happiest:** When changing holes with me, running behind the buggy or sat in the back of it



## What's on this month

### Dates for your diary

**4 June**

BB&O North Oxford Final Golf Day – North Oxford

**5 June**

BIGGA South West Summer Golf Day – Worlebury  
BIGGA North West Section Spring Golf Day – Silloth

**10 June**

First Green STEM Field Trip – Parkstone

**11 June**

BIGGA East Anglia Section Golf Day – Rookery Park

**17 June**

BIGGA North East Section Golf Day – Hexham

Hexham



**19 June**

BIGGA Scotland Legacy Golf Championship – Auchterarder  
BIGGA North Wales Spring Golf Day – Rhuddlan

**24 June**

First Green STEM Field Trip – St Andrews  
BIGGA Yorkshire Section Golf Day – Harrogate

**25 June**

Sheffield Section Golf Day – Sitwell Park

First Green at St Andrews



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# R&A and TEP support rising demand for water security



As climate patterns continue to shift alongside increased competition for water, The R&A Sustainable Agronomy Service in collaboration with The Environmental Partnership team (TEP) has recently been in high demand to provide support to golf facilities on sustainable water security – even following two consecutive wet years.

The R&A Sustainable Agronomy Service and TEP are at the forefront of addressing water security challenges by providing research, guidance and expert support to ensure golf courses can maintain high-quality playing surfaces while protecting vital water resources.

**“We have seen an increase in demand for water security support from golf club facilities”**

“Even during two consecutive wet years, we have seen an increase in demand for water security support from golf club facilities,” said Paul Woodham, Agronomy Lead for Europe & UK.

“We would like to make sure clubs have a water resilience plan in place for the next five to 20 years to future-proof their water sourcing and strategies.”

Over the past 50 years, the reliance on irrigation has grown significantly, making water security a pressing issue for golf courses worldwide.

The R&A Sustainable Agronomy Service and TEP are delivering innovative solutions to help golf facilities assess and improve their water sourcing, flood management and overall sustainability.

Through this collaboration, TEP acts as a dedicated water management expert, supplying feasibility reports that evaluate current water use and identify the most secure and compliant options for future sourcing.

The R&A Sustainable Agronomy Service then provides further insight and tailored recommendations to integrate sustainable agronomy practices with effective water management strategies.

This ensures clubs are equipped with long-term, holistic plans to navigate environmental challenges and meet current and predicted legislative requirements.

The outcomes of this initiative are to improve resource efficiency, reduce reliance on potable water or summer abstraction, and the development of future-proofed solutions that align with The R&A’s sustainability ambitions.

By working together with golf facilities, The R&A and TEP are ensuring that courses not only meet the demands of today but thrive well into the future. **GI**



# Bringing club managers and course managers closer together

A group of club managers gained invaluable knowledge in how to manage and support their greenkeeping teams during an education course at Moortown GC.

The GCMA's Advanced Management Programme Certificate in Golf Course Management for Golf Club Managers gave delegates a first-hand look at the world of greenkeeping and agronomy.

The three-day course, hosted at the venue that set the stage for the first Ryder Cup to be played on British soil in 1929, consisted of classroom learning and the opportunity to get hands-on out on the course.

The programme aims to provide golf club managers with a baseline of knowledge to enable them to effectively work with their greenkeeping teams.

The GCMA consulted with BIGGA as part of the programme development process and representatives from BIGGA delivered elements of the training, specifically around the

**“A little understanding of each other’s roles helps to build trust”**

importance of good relationships and governance within a golf business.

Steve Robinson, course manager at Moortown, helped deliver the course, alongside Bernhard Academy's Phil Helmn MG.

“The relationship between the club manager and course manager is so important at every club,” he said. “A little understanding of each other’s roles helps to build trust, which can only be a good thing for any club.

“I think the club managers appreciated the agronomy demonstrations on the 18th green at Moortown GC.”

The course received a 98% satisfaction rating, with Strathaven GC General Manager Paul Hubner

emphatically underlining the value it provided to him.

“This was an incredibly valuable three days of education and fun,” he said. “I can now return to my club with confidence and a depth of knowledge on agronomy, budgeting and sustainability that simply wasn’t anywhere near this level prior to attending the course.”

Attendees were introduced to a range of key agronomic principles, as well as sampling some of the equipment and greenkeeping practices used to measure success and health on the golf course.

The group also learned about greenkeeping finances and financial planning, with Master Greenkeeper Phil sharing various approaches to greenkeeping budgeting. Delegates debated the advantages and disadvantages of different budgeting styles, gaining a much clearer understanding of financial planning for golf course operations. **GI**



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# From your Association

Representing the greenkeeping community

- First Green event at St Andrews inspires other clubs to get involved
- R&A Championship Agronomy Programme team prepare at Royal Birkdale



## Apply now for the chance to be part of the BIGGA Delegation to Orlando

Applications for the BIGGA Delegation sponsored by Bernhard and Company are open now.

With experiences designed to elevate careers to the next level, this industry-leading opportunity offers a week-long educational trip to the GCSAA Conference and Trade Show.

The 2026 show is taking place in Orlando, Florida, where the 10 chosen delegates will undertake site visits to leading golf courses in the region, as well as seminars, networking events and educational demonstrations.

Being part of the delegation is an honour in the greenkeeping world and a significant addition to anyone's CV. You don't need to be at a top-tier venue to be selected – all you need is a passion for learning, enthusiasm for sharing your knowledge and a deep commitment to the turf industry.

Michael Budd, course manager at Shirley Park, was part of the 2024 delegation to Phoenix. He said: "This trip has changed my greenkeeping career already. I couldn't have ever dreamed of learning and meeting the

people I have. I will be encouraging my team and other BIGGA members to chase such a sought-after opportunity."

The GCSAA Conference and Trade Show runs from 31 January to 5 February 2026, and the event will mark the start of the association's centennial celebration year.

As part of their duties, the 10 delegates will attend the BIGGA stand during the conference, speaking to visitors about the association and UK greenkeeping. **GI**

The BIGGA National Board is comprised of the following members who volunteer their time to support the association:  
Kevin Fish, Antony Kirwan, Gordon McKie, Lucy Sellick, Andy Smith and Jez Ward  
BIGGA President Ronnie Myles, BIGGA Chairperson Steven Lloyd

# St Andrews event spreads the good word of First Green

The First Green event at St Andrews won over several interested onlookers who are now hoping to get involved themselves

Visitors from Monifieth Golf Links, Montrose Golf Links and Scottish Golf were on site on a glorious day at The Home of Golf, with the famous venue hosting First Green for the second time.

Activities for the 28 pupils from Canongate Primary School included bunker raking and hole changing, while a chance to sit on some of the machinery proved popular, and the wildlife and habitat station afforded the children a chance to make their own bug habitat in a cup.

Paul Teviotdale, head greenkeeper at Montrose, was visiting with the club's head professional and both were impressed by what they saw.

"All members of staff at St Andrews were very good with the kids, trying to answer all their questions, making the job seem very interesting and enjoyable and hopefully planting a seed for one or two of the kids about a possible career in golf either as a greenkeeper or a golfer," he said.

"After speaking to our head professional about the day he is very keen to contact the local schools and see if they would be interested in possibly coming down to visit their local golf course and allowing the kids to have an education day with a difference away from the classroom and in the outdoors."

Viki Hart, general manager at Monifieth, was already sold on the idea and seeing it first-hand was a memorable experience.

"The First Green concept as a whole is fantastic, and it's something we're genuinely excited to introduce at Monifieth Golf Links," she said. "STEM learning plays a vital role in children's education, but as we all know, every child learns differently.

"Offering them a range of hands-on experiences while showcasing the diverse components of golf can help spark curiosity in different ways. Hopefully, by being in and around the golf environment, some will develop a lasting interest and want to get more involved – which, in turn, will support the sustainability and future of the game." **GI**



## About First Green

First Green is an innovative environmental science, technology, engineering and maths (STEM) education outreach programme using golf courses as hands-on learning labs. The initiative aims to introduce young people to the career opportunities available in golf and showcase the skills required for these roles. In doing so, First Green hopes to inspire the next generation of greenkeepers.

Get involved by scanning the QR code



# From Bulgaria to the Arctic Circle, we're all in it together



**Ronnie Myles**  
President

I saw the role as BIGGA president as the pinnacle of my professional life and it is certainly living up to my expectations



**I have now had the honour of serving as president for five months and it has been my pleasure to be able to give back to a profession that has given me so much over so many years.**

On my travels this year I have been struck by the incredible diversity and shared challenges within our global greenkeeping community. My journey so far has been nothing short of extraordinary, offering insights that extend far beyond the borders of the United Kingdom.

One of the most enlightening experiences has been my attendance at the FEGGA Conference in Varna, Bulgaria, where I had the privilege of meeting greenkeepers

from 26 different nations, each bringing unique perspectives on course management.

The conference was a stark reminder of how varied our profession can be across different climatic zones. Imagine the challenges faced by a greenkeeper in the Arctic Circle, whose course was under six inches of ice when we were gathered in Varna. Or consider our colleagues in Bulgaria, who manage courses experiencing temperature swings from minus 20 in winter to plus 40 in summer. These encounters have broadened my understanding of greenkeeping as a truly global profession.

My travels have also taken

me to San Diego, where I spent time with American greenkeepers, gaining invaluable insights into the challenges they face and how they tackle them.

**“I recently found myself back in the thick of it”**

Each interaction reinforces a simple truth: while our specific circumstances may differ, we share a fundamental passion for maintaining exceptional playing surfaces.

The current landscape of greenkeeping presents significant challenges. Expectations continue to rise, while resources

and budgets seem to be shrinking. Recruitment remains a critical issue, with many golf clubs struggling to find qualified staff who truly understand the complexity of our profession.

I recently found myself back in the thick of it after agreeing to help at a local club who were in need of assistance, and I'm very grateful to our friends at Stirling Golf Club for providing some manpower in a time of need.

As president, I've made it a priority to visit as many sections as possible and I will continue to get around the country to meet with members. My goal is to listen, learn and support our greenkeeping community.

**GI**



With  
Roger Butler,  
Membership Services  
Manager – Northern

# Scotland's Legacy Club is a shining example

Roger Butler discusses the launch of the Legacy Club in the Northern Region following its success in Scotland

We were proud to launch the BIGGA Northern Legacy Club in May, with the opening event taking place at Bramhall Golf Club.

This is something I've been passionate about bringing to the region after seeing how successful the model has been in Scotland, where my colleague John Young has been running it for a couple of years.

Much like with our maiden event, things started small up there but the initiative has gone from strength to strength, attracting more and more BIGGA members.

I am indebted to our former President Chris Sheehan for his assistance in getting things up and

running and I know those who attended enjoyed the occasion in Manchester, which combined a relaxed golf day with a social meet-up.

Chris is set to retire soon and he is keen to help reach out to members - either still working or retired - to provide a platform to golf, chat and keep in touch with the wonderful world of greenkeeping.

I know from feedback I've had and emails I've received that more of you would like to have been involved but were not able to attend.

Rest assured, we will be looking at hosting further events closer to you at a later date.

The goal is to create a meaningful

social connection for industry professionals who are 55 and older, increasing their opportunities to enjoy more regular events outside of those already in the calendar and geared more towards their specific demographic.

The Legacy Club in Scotland has developed to the point where they are involved in selecting leadership roles and nominations for Life Membership, and I am optimistic about the potential for growth with the initiative in the Northern Region and hopefully beyond. **GI**

**If you would like to get involved, please email [roger@bigga.co.uk](mailto:roger@bigga.co.uk)**



"The Legacy Club is about having that expertise and passing it on to the next generation. We sat around a table one day, there was 24 of us, and we realised we had over 1,000 years' worth of experience in greenkeeping between us. Trainee greenkeepers may not realise that the world is their oyster, but a greenkeeper trained in the UK is worth their weight in gold and that's recognised the world over. OK, for four months of the year it's head down, trying to battle against the elements, but from spring onwards when it's bright mornings and the birds are singing, do you want to be stuck in an office or do you want to work in this environment? It's such a wonderful occupation and I hope the Legacy Club is helping people appreciate that."

- BIGGA President Ronnie Myles



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# 'Ecstatic' BIGGA members ready for Championship Agronomy Programme opportunity



The 10 greenkeepers selected for The R&A Championship Agronomy Programme met at Royal Birkdale for a day of networking and learning in April ahead of a career-defining experience.

The group will join the home greenkeeping teams for the hosting of this summer's R&A championships, including The Open at Royal Portrush and the AIG Women's Open at Royal Porthcawl.

Working alongside the host teams and The R&A's Championship Agronomy Team, each member is selected to participate at one of the championships and gain first-hand insight into elite tournament preparation.

The programme seeks to identify potential championship course managers and agronomists of the future, with Kilworth Springs' Senior Greenkeeper Jack Hall, who will be on site at the Women's Amateur Championship at Nairn, delighted to be involved.

"I'm ecstatic," he said. "I enjoy tournament support work and I've done quite a lot of it, but to add an R&A event is something I'm really happy about."

"I'm looking forward to being part of the team prepping the course for a championship and working alongside The R&A, seeing how they do things."

The day started with R&A Senior Agronomist Adam Newton and his colleagues outlining the exacting standards required for Championship events, leading to thoughtful questions from the team.

Royal Birkdale Course Manager Sean McLean then provided an insight into the motivations behind the ongoing

renovation of the course followed by some details of the scope of works, before leading a course walk.

After lunch, BIGGA CEO Jim Croxton spoke about the association's role and provided a further chance for the group to get to know each other a little more as they seek to capitalise on a potentially transformative opportunity.

It is certainly one that Steven Connolly, course manager at Ansty Golf Centre, is looking forward to, and he encouraged his fellow BIGGA members to apply when the chance next comes around.

"Don't be shy. I was shy for so many years – no point," he said. "Get out there. Get new experiences. Go for it." **GI**

**“I’m looking forward to being part of the team”**

## BIGGA members selected for 2025

- Dean Baily, Heswall Golf Club
- Steven Connolly, Ansty Golf Centre
- Kyle Gauld, Whitecraigs Golf Club
- Jack Hall, Kilworth Springs Golf Club
- Adam Matthews, Minchinhampton Golf Club
- Geoffrey Seath, Broadstone Golf Club
- Duncan Sieling, The Richmond Golf Club
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# Welcome to our new members



Western Gailes

## International

**Fergal Greenan (P)**  
ICL

## Scotland

**Christopher Gray (A)**  
The R&A

**Blair Roberts (APP)**  
**Jack McMillan (APP)**  
**Ethan Pow (APP)**  
St Andrews Links Trust

**Callum Smith (APP)**  
Leven Links

**Calum Inglis (APP)**  
Balmore

**Kieran Rennie (APP)**  
Grangemouth

**Robbie Hutchison (APP)**  
The Duke's Course

**Fergus Brown (APP)**  
Nairn

**Scott Mckie (AGK)**  
**Calum McKeen (AGK)**  
Western Gailes

**Scott Reekie (AGK)**  
Fairmont St Andrews

**Keith Manuel (AGK)**  
Goswick Links

**Brian Hillen (RP)**  
Patersons Quarries

**Ryan Michalak (APP)**  
Blairgowrie

## Northern

**Daniel Stather (AGK)**  
Silkstone

**Megan Dent (AGK)**  
**Joe Halliday (AGK)**  
Whitley Bay

**Jack Barker (AGK)**  
Oulton Hall

**Harry Holmes (AGK)**  
Normanton

**Adam Swallow (GK)**  
Crow Nest Park

**Ashley Sharples (GK)**  
Ashton-in-Makerfield

**Callum Tait (G)**  
Northumberland

**Wesley Hanshaw (RP)**  
KAR UK

### Key

**A** Affiliate Member

**AGK** Assistant Greenkeeper

**APP** Apprentice

**ATP** Approved Training Provider

**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

**P** Partner

**R** Retired Member

**RP** Regional Patron

**S** Supporter

**ST** Student Member

**SUP** Superintendent

 **Central**

**Blaise Pearson (APP)**  
Abbey Hill Golf Centre

**Charlie Walker (APP)**  
Forest of Arden Marriott  
Hotel & CC

**Alfie Chambers (APP)**  
Ashridge

**Casey Cornwall (APP)**  
Henley

**Sian Ball (AGK)**  
Wycombe Heights Golf  
Centre

**Sylvia Mcgarry (AGK)**  
**Joshua Spencer (AGK)**  
Welwyn Garden City

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**Christopher Rouse (GK)**  
Tadmarton Heath

**Robert Maidment (GK)**  
Millbrook

**Robert Palmer (G)**  
Norwich City FC

**Brandon Taylor (P)**  
ICL

**Stephen Vincent (S)**  
Clere Golf

 **South East**

**Ross Brady (APP)**  
Hadley Wood

**Max Cowdry (APP)**  
Cobtree Manor Park

**George Ager (APP)**  
The Shire London

**Owen Peck (APP)**  
**William Green (APP)**  
Bury St Edmunds

**Lewis Collis (APP)**

Barnham Broom Hotel

**Kieran Griffith (AGK)**  
**Bradley Gerspacher (GK)**  
Royal Wimbledon

**Calum Dougal (AGK)**  
Pyrford

**Adam Hooper (AGK)**  
Tottenham Hotspur FC

**Daniel Todd (AGK)**  
Rustington

**Joe Gachet (DCM)**  
Richmond Park

**Connor Brown (FA)**  
Oakville

**Lewis White (GK)**  
Harpenden

**Alex Lucas (GK)**  
North Foreland

**Tyler O'Driscoll (GK)**  
Mid Kent

**Liam Baldwin (HGK)**  
Haywards Heath

**Daniel Martin (HGK)**  
Sene Valley

**Neil Anthony Douglas (HGK)**  
Walmer & Kingsdown

 **South West & South Wales**

**Shane Meffen (APP)**  
Bramshaw

**Jack Bartlett (APP)**  
Bridport & West Dorset

**Callum Lloyd (AGK)**  
Worcestershire

**Edison Butler (AGK)**  
Lansdown

**Rhys Ricketts (AGK)**  
Neath

**Robert Hallam (GK)**  
Lilley Brook

**Charlie Ballem (G)**  
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# Member Interest

Where we meet your fellow turf professionals and share their stories

- Stuart Hogg and his team successfully restore West Lancs to a top-tier club
- Stewart Marshall leaves the city behind as he takes on rural role in Cumbria



## North Middlesex puts its trust in Ben as greenkeeper takes on club captaincy



North Middlesex Head Greenkeeper Ben O'Sullivan can rest assured that the club captain will not be

knocking on his door next year to complain about the course.

It's not just that he and his five-strong team can be relied upon to produce quality playing surfaces, but Ben will be the club captain in 2026.

A former junior member, Ben has been employed at the club since 2018 and has helped orchestrate a dramatic turnaround in fortunes, with membership up from around 170 when he joined to just shy of 700.

The key to that resurgence has been affording the man in charge of course maintenance the freedom to

execute his duties without the input of a greens committee, with Ben also sitting on the board as course director.

He is thankful for being entrusted to oversee all matters relating to greenkeeping and agronomy, while the club captaincy will add just another string to his bow.

"It's a nice position to be in," he said. "The club have put their faith in me to present the course to the standard I know I am capable of, and things get done a lot quicker this way.

"For example, a greens chairman goes to a board meeting and gets loads of questions to which he says, 'let me speak with the head greenkeeper and I'll get back to you'.

"It's that time frame right there which slows everything down and prevents

you from getting things done. It's better to know what you want to do, how to do it and be able to get on with it without interference."

Ben acknowledged that communication is crucial to ensure members are kept informed, and he welcomes dialogue and feedback.

Taking on the responsibility of captaincy next year will add to Ben's workload but he is honoured to have the opportunity and hopes that his position at North Middlesex can be replicated elsewhere.

"I would like other clubs to see this and understand the value in working this way," he said.

"Greenkeepers are paid to do a job, we're the experts – we should be trusted to get on with it." **GI**

# Stuart Hogg

West Lancs has enjoyed a dazzling resurgence during the course manager's decade at the helm





## Career Timeline

○ 1988-1992  
West Kilbride

○ 1992-2004  
Fortrose and Rosemarkie

○ 2004-2015  
St Annes Old Links

○ 2015-present  
West Lancs

Stuart Hogg knew from the start that restoring West Lancashire Golf Club to its rightful status as a top-tier links venue would require time, patience and no shortage of skill, but he was confident in his ability to deliver.

With the backing of the club and buy-in from his team, Stuart has overseen a transformation at the Blundellsands course, showcasing what can be achieved when a course manager is given the agency to do what he knows is best.

We caught up with the 37th Master Greenkeeper who has been working wonders at West Lancs.

### Open goal

Stuart was a promising goalkeeper in his younger years, playing for Kilmarnock and Dundee up until the age of 16. When he moved back to Largs in the west of Scotland, his job hunt came with only one condition – he needed to have his Saturdays free to play football.

His father, who ran his own dentist's, introduced him to an opening at West Kilbride. It was there that Stuart got his grounding, working Monday to Friday with the odd bit of weekend work, though never at the expense of a match. After four years, and with football steadily taking a back seat, Stuart moved on to Fortrose and Rosemarkie, where he ascended to the position of head greenkeeper in 1995 at the age of just 23. The Black Isle venue was also where he earned his Master Greenkeeper status.

Stuart then spent more than a decade at St Annes Old Links, getting a taste of R&A and European Tour events, all the while enhancing his own profile in the industry.

"When I came down to England, my ambition was always to try and manage an Open Championship golf course, with Birkdale probably being the favourite, so I thought working at St Annes would give me a chance to learn about the area, weather patterns and so on," he said. "This West Lancs job came up in 2015 and I saw it as an opportunity to move closer to Birkdale, but also as an opportunity in its own right.

"It definitely had its challenges, but I always thought that if I never got an Open Championship golf course, then West Lancashire would be a fantastic place to finish your career because it's a phenomenal golf course and so underrated."

The test was to deliver a course that lived up to that potential, a process Stuart knew would take time, and he was clear from the start about the timeframe, ensuring nobody was under any illusions about the journey ahead.

"I said from the start, after walking the golf course, that it's a five-year turnaround, and that wasn't wrong," he said. "I wasn't going to tell them I could turn it around in 12 months. I gave them a short, medium and long-term view of what we needed to do.

"First and foremost, we needed to make it more aesthetically appealing. The rough was an issue when I started and the club had already put a contractor in to cut and collect the areas prior to me arriving, so it really gave me a blank canvas to create the managed rough areas as I saw fit.

"We have since tweaked those cuts and in places we have continued the cut and collect method to improve areas just outside the playing rough using the Amazon Profihopper. These areas are marked on a course map and updated yearly to help with our GEO application. There was a lot of Poa in the greens and the staff were under-resourced, cutting fairways for a championship golf course with a 100-horsepower tractor and a set of trailed gangs."

## The team

Morale is a top priority and the club provides excellent facilities and working conditions for staff.

- Stuart Hogg – course manager (10 years)
- Peter Cotgreave – deputy (29 years)
- David Owens – senior greenkeeper (18 years)
- Arran Leach – mechanic (3 years)
- Richard Drake – greenkeeper (3 years)
- Peter Evans – greenkeeper (5 years)
- Lewis Mayles – greenkeeper (6 years)
- Jonathan Kirk – greenkeeper (4 years)
- Andrew Sciarrini – greenkeeper (3 years)

## Teamwork

With limited room for manoeuvre in the budget, Stuart found himself having to be financially savvy, calling in favours to procure machinery and getting the most out of existing resources. Despite conceding it was “quite scary” to know the business was sailing close to the wind, he was confident in the venue’s potential and his own ability to deliver on it. To do that, he would need a team effort from the greenkeeping staff, who would have to adapt to Stuart’s methods as he sought to bring the course up to a standard that would fulfil its promise.

“Staff get used to certain ways of working,” he explained. “What we were trying to achieve, and the way we were trying to achieve it, was different to what had gone before. Over the first few years I was able to bring in my own staff, and they were people who could work well alongside the guys still here. There are two, who are now my deputy [Peter Cotgreave] and senior greenkeeper [David Owens], who thrived on that and are a major part of the team 10 years down the line. Pete will have done 30 years here next year, and both he and Dave can turn their hand to anything. We’ve got a varied team, ranging in age from 25 to 66, and those two really help bring the whole group on.”

The work they had to do in those early stages involved addressing some fundamental issues that Stuart noted from the first time he walked the course.

“We spent a lot of time from the start ensuring there was proper definition to the course so people knew where they were going,” he explained. “We needed to cut it in a way that made clear where the next tee was and how to navigate around the course.”

There were other matters that would have to wait as the priority was to present the course to a respectable standard in order to satisfy the membership and attract visitors, boosting the club’s coffers.

“We were cutting greens at 3.2mm, which goes against the grain for me, but we had to do it to make sure we could get the money back in from visitors and keep members happy,” he said. “We weren’t taking enough green fee income and we needed to address that first, get that figure going up and then we can look at cutting heights and other areas. We achieved that goal within the first three or four seasons.

“In those first few years we were having to put on a bit more water than we would have liked because it was mainly Poa greens with very shallow roots. We used around 90kg of nitrogen, which is low for some but more than I like.”



## Major boost

When The Open came to Royal Birkdale in 2017, it proved to be a major boost for West Lancs, with the course located less than 10 miles down the coast.

“That was a big year for the club financially,” said Stuart. “We had already started to turn the corner and been able to secure our first five-year machine deal, bringing in the essentials like greens mowers, a sprayer and the stuff you need to make the improvements we were looking to make. Then, with The Open at Birkdale, we had this big rise in footfall and that brought figures of up to £350,000. The following year was even higher at £425,000.

The huge spike in revenue did not immunise the club against the effects of the 2018 drought, which presented a major issue for Stuart and his team but proved to be an opportunity as well. He explained: “The drought caught us out badly. We only had a water licence for 21,000 cubic metres, which was really low, so we had to turn off the fairway irrigation halfway through the drought to

**“** The course is in the best condition it's ever been in”



**Left to right:** Lewis Mayles, Peter Evans, Peter Cotgreave, Jonathan Kirk, Stuart Hogg, Andrew Sciarrini, David Owens, Arran Leach, Richard Drake

## About West Lancs

The West Lancashire Golf Club, founded in 1873 in Blundellsands, Liverpool, is among the 10 oldest clubs in England and boasts one of the most natural and testing links found anywhere in the British Isles. The course was designed by CK Cotton, is laid out on some 200 acres of land. The routing exemplifies the ideal layout of a golf course – two loops of nine holes with both the 9th and 18th greens in front of the clubhouse.

keep the amount of water that we had left for the greens. At that point we had been spending money on proper management of the greens and aprons and they survived, but the fairways were destitute.

“At that point I put a business case together for us to take green management out onto fairway management, which was a big impact. It was probably another 35 per cent of

the budget into fairways with wetting programmes and overseeding programmes, getting fescue back into them.

“Fairways were overseeded with fescue, drilled at a rate of 20g/m<sup>2</sup> in two directions with a third direction on the worst-hit landing areas. The fairways were then toppedressed with our own sand in mid-November with the GXi8 Wiedenmann. These were things that we'd dabbled at but not been able to do seriously. Now that we had a core of visitors, the reputation was growing, the course was enjoyable, the board backed me and we were able to do the fairways repairs and we've continued with that approach ever since.

“In 2019 until now, we've had the budget to apply four wetting agent applications to fairways and semi-rough, along with applications of a stress-management product.”

## Covid hits

With the greens team having showcased their skills to such great effect, the club stood by them when Covid hit,

“ You need to make sure the staff are with you otherwise you can't achieve anything



ensuring nobody would lose their job and everyone would remain on full pay.

“When you're able to turn around to tell four of your staff that you're having a month's holiday, but don't worry, you're getting paid for it, you get the rewards from it,” said Stuart. “I'm a great believer that if you look after your staff, they will look after you.”

West Lancs had been set to host the 2020 Men's Amateur Championship with Royal Birkdale, but the Covid-enforced reshuffle meant it was the women's event that came their way. It wasn't exactly a straight swap, and it certainly wasn't straightforward, but the team rose to the challenge.

“We'd been preparing for the men's, ensuring all the championship tees were looked after and all the landing areas for those guys would be protected,” said Stuart. “We wanted everything at its best to give us a good shout alongside Royal Birkdale to keep our name up there.”

“Things were changed about because of Covid and we ended up having the Women's Amateur, with a different set of tees and different landing areas, meaning we ended up with seven days' work instead of maybe three. Add in the fact it absolutely chucked it down, flooding the fairways in August time, and we were under the cosh. But we came out with flying colours and the team delivered. I remember the guys eating bacon butties and drinking coffee with the water pumps and the squeegees beside them, because they'd been

out all morning doing that. The work we did there in those circumstances re-ignited our reputation with The R&A.”

The ongoing work to improve turf health and playability further enhanced that reputation, with the club's growing financial strength reflected in the conditions on the course.

“We took the decision to keep the greens at a higher height and start putting better grasses into them and we've done that since,” Stuart added. “I'm a great believer in cold seeding and putting a lot of seed in, probably doubling the recommended rate just to make sure we've got the numbers in the greens.”

“Greens and aprons were overseeded at 10g/m<sup>2</sup> of browntop bent at 35mm spacings. This was done weekly over a three-week period with sand applied afterwards then rolled. We put this in as deep as the disc seeder would allow. Seed was 50 per cent Egmont, 50 per cent Manor.”

#### Turning point

Covid provided West Lancs with an opportunity and the club seized upon it, safe in the knowledge it had done the hard graft to re-establish its reputation. Stuart can vouch for the benefits of being patient and not forcing things too soon.

“Covid was a turning point for us and we used it as a stepping stone to change from just having a normal golf course to being able to put links characteristics back into the greens and fairways,” said Stuart. “We did three years

## Driving range project

The remodelling of the driving range included not only the relaying of the surface but a complete rebuild of a large-scale sleeper wall, pathways, fencing, ball collection hut and lighting. While most clubs would have taken the contractor route, West Lancs took it in-house and delivered to an exceptionally high standard. First mooted in 2020, before being pushed back due to Covid, planning was granted in late 2022 and the team got straight to work after the Christmas break, installing more than 40 H-beams and 257 sleepers to create a striking feature wall. The range was lengthened to 315 yards and ducting was installed all the way around for electricity and internet capabilities. When lit up at night, the visual impact is impressive and certainly a point of pride for the members.

which depicts the history of the club as you walk through the pro shop and main lounge, the club now looks every inch the top-tier links venue it was always supposed to be, and it all started by getting things right on the course.

"The position the club is in now would've been the stuff of dreams for previous board members," said Stuart. "That is first and foremost down to the quality of the golf course – people enjoying it, wanting to come back. Last year's figures show we're doing around 30,000 member rounds, 4,500 visitor rounds, 1,000 opens and 3,500 members' guests, so we're hitting around the 40,000 mark instead of around 32,000 pre-Covid."

Such an increase in footfall adds pressure on the surfaces, which requires careful management. Stuart conceded: "It's a hell of an impact on the course. We are finding it's a lot busier but we're seeing the money come in from that and the course is in the best condition it's ever been in."

## “I'm a great believer in cold seeding

of drilling bent straight into the greens to give us a better sward. We were able to lift a height of cut, and we reduced nitrogen levels quite quickly, allowing us to start overseeding with fine fescue grass into the greens and aprons using the cold-seeding method.

"We managed to get down under 50kg of N/ha but this was too far, so since Covid we're running at around the low 60s of N/ha. We use a base feed of Invigorator early spring then a mixture of ICL SMX (1bag / ha) and then a fortnight later 15Lts – 20 lts/ha of Links Stressbuster.

"We did all that knowing that we'd done the hard work to get the reputation back up. I think a lot of people try and jump down the links route very quickly when they take on a new course and aren't involved in the business side before making those changes. I'm lucky I am involved in business decisions here and, alongside my 30 years' experience, that told me not to rush in and change things.

"The focus was to get the golf course back to a good level, get the business plan back on track and get the money coming in. On top of that, you need to make sure the staff are with you because otherwise you won't achieve anything."

The upward trajectory continued post-Covid and the next big project was the driving range, undertaken in-house, underlining the broad skill set within the team. With work having also been carried out on the golfers' entrance -

### Bright future

Its reputation now firmly established, West Lancs is a proud host of Open Final Qualifying, while it also supports the Rose Ladies Series.

The pursuit of ever-higher standards does not stop there, however, and Tom Mackenzie's redevelopment plan – another project set to be carried out largely in-house, focussing on tees and bunkers – will further enhance the course over the next four to five years.

"I'm very proud of the fact that Tom's come in and he's not looking to take away anything we've done," said Stuart. "Everything he's proposed is to enhance what we've got, rather than to undo anything.

"That tells me everything we've done in the last 10 years has been right."

Stuart knows he could not have made the same impact without the support of the club's hierarchy and he wishes others were afforded that chance.

He concluded: "Greenkeepers aren't involved enough in the business side of golf clubs to make decisions. I was lucky; I was informed right from the start and included in key decisions. I knew that if I couldn't deliver after five years, then I'd probably be out of a job.

"But I was prepared to take that chance because I knew I'd get a fair go at it. And yes, it has worked, but you're only as good as your last day, aren't you?" **GI**



# Latest job vacancies

From trainee vacancies to senior management roles, new greenkeeping job opportunities are added daily to BIGGA's online recruitment pages. Our website receives 1.6m page views per year and 55% of those are to our careers pages. Visit [bigga.org.uk/careers](http://bigga.org.uk/careers) to see our latest opportunities and find out more about advertising your position. Call 01347 833 800 or email [info@bigga.co.uk](mailto:info@bigga.co.uk)

## Assistant Greenkeeper

Chart Hills Golf Club, Kent



An exciting position has become available for an experienced Greenkeeper to join Chart Hills Golf Club. Chart Hills was designed by Sir Nick Faldo in the 1990's as a Championship parkland course. Reporting directly to the Course/Deputy Course Manager, you will assist in presentation and maintenance operations to the highest standards.

The successful applicant would have a minimum of two years greenkeeping experience and possess the following attributes: Outstanding attention to detail; flexible approach; able to work independently and with a team; knowledge of golf course machinery; reliable; passion to work at a Championship venue. You would ideally possess: Level 2 in Greenkeeping or Sports Turf; PA1 and PA6 Spraying certificates.

Excellent salary depending on experience and qualifications.

**To Apply: Please email a copy of your CV and a covering letter to [neill@charthills.co.uk](mailto:neill@charthills.co.uk) by Tuesday 10th June.**

## Qualified Greenkeeper

Heswall Golf Club, Wirral



Heswall Golf Club is a private 18-hole members club, established in 1902, on the Wirral Peninsula.

We are currently recruiting for a full time Greenkeeper to work within our team. The successful candidate will have an excellent work ethic, dedication, a passion for the role and keen eye for detail.

The ideal candidate will possess: NVQ Level 2 or equivalent; 3 years greenkeeping experience; PA1,2,6 spraying certificates.

The position is a permanent full time role and offers a range of benefits including: Full training and development support; pension contribution; staff bonus scheme; honorary golf membership; BIGGA Membership.

Salary £30k plus overtime.

**Please apply with a covering letter and CV to:**

**[martinandrew@heswallgolfclub.com](mailto:martinandrew@heswallgolfclub.com)**

**Closing date: Monday 9th June**

## Golf Greenkeeper and Golf Course Manager Assessor



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Land Based Assessment limited are looking for Apprenticeship End Point Assessors in Golf Greenkeeper Level 2 and Level 3 and Golf Course Management Level 5.

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**If you have the relevant work experience (3years +) and if possible, hold a recognised assessor qualification please send your CV to [enquiries@landex.org.uk](mailto:enquiries@landex.org.uk)**

**If you don't hold an assessor qualification but have the relevant experience, please share your CV and we can discuss steps required to obtain this through our training programme.**

## Assistant Head Greenkeeper

Raglan Golf Club, Monmouthshire



Raglan Golf Club is a stunning 18-hole parkland course set within the historic deer park of Raglan Castle. We are seeking an experienced Assistant Head Greenkeeper to join our team.

**Responsibilities:** Maintenance of the course; implementing course improvement strategies; ensuring safe working practices; supporting the Course Manager in team leadership.

**Requirements:** Minimum 5 years' experience; NVQ Level 2 in Sports Turf Management or equivalent.

**What We Offer:** Permanent, full-time position; salary £30k plus overtime (depending on experience); ongoing training; BIGGA Membership; golf membership; full uniform and PPE.

**Please submit your CV and covering letter to Lucy Sellick, Course Manager: [lucy.sellick@raglangolfclub.co.uk](mailto:lucy.sellick@raglangolfclub.co.uk)**

**Closing date: Thursday 12th June**

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## My New Job



# Stewart Marshall

As a lifelong city boy, a move to Cumbria represents a major change for the former Dudley course manager



“It’s a big change after 46 years of living in a city”

**Stewart Marshall has relocated from the hustle and bustle of England’s second city to the serenity of Cumbria, but he hasn’t gone there to wind down.**

His hard graft and resourcefulness at Dudley saw the club land the Greenkeeping Project of the Year prize at the 2024 BIGGA Awards. Now he’s looking to make an impact in a new role. We caught up with Stewart to see how he’s adapting to life away from his beloved Birmingham.

#### Tell us about your new role

I am now deputy head greenkeeper at Workington Golf Club, a fantastic 18-hole parkland course near the Lake District. It’s a great club and I’m really excited by the opportunity.

#### How did the opportunity come about?

We came here on holiday last March and drove past the course. When we got home I sent the club an email explaining that I was a greenkeeper in Birmingham looking at the possibility of moving up to Cumbria in the next couple of years and they replied to say there was a job going! I went for an interview and was offered the job last October.

#### How are you adjusting to the more rural lifestyle?

It’s a big change after 46 years of living in a city. The scenery is nicer, I don’t see a single car on the way to work and it’s

a lot more laidback and relaxed. I’m here full-time, while my family are still in Birmingham. My daughter finishes college next year and we’ll be looking to have a house in the area by then, all being well.

#### What are your hopes and expectations in the role?

It’s already a great club and the board wants it to become the best members’ club in Cumbria – that’s what gets me up every morning and makes me stay late. My goal is to surpass members’ expectations.

#### Do you think Dudley gave you a good grounding?

Absolutely. I knew that, respectfully, I was starting at the bottom with regards machinery, staffing, budgets and so on, but that stood me in good stead because I had to be creative and call on members for skills and materials. I’m now at a course that has more resources but my hunger to work and desire to improve things is just as strong.

#### What would your advice be to any greenkeepers going for an interview?

Honesty is important. I’m not hugely experienced but I do have loads of enthusiasm and a strong work ethic. It’s okay if you don’t know everything but be confident in your strengths and don’t be afraid to sell yourself based on those. **GI**

# Obituaries

Summer 2025

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We include an Obituaries section in Greenkeeper International on a periodic basis to pay our respects to BIGGA members and those close to the association who have recently passed away.

If you would like to inform us of a member's passing, please contact us by emailing [membership@bigga.co.uk](mailto:membership@bigga.co.uk)





## Forbes Bruce

1950-2024

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**Forbes started working from a young age at local farms before swapping agriculture for greenkeeping.**

After spending many years at Murcar Links, he moved to Newburgh Golf Club to take over as the deputy head greenkeeper and spent 27 years at the club.

He was a dedicated and hardworking man who demonstrated great loyalty to Newburgh during his long service.

Paul Manson, now club manager at Inverurie, paid tribute to a beloved former colleague.

"Forbes was one of the friendliest people you were ever likely to meet," he said. "I had the pleasure of working with him during my time at Newburgh, where he latterly worked alongside Dale Robertson and Matthew Smith before illness forced him to give up work."

Matthew added: "Spending 27 years at any company is a fantastic achievement and everyone at the club can't thank Forbes enough for everything he did. He was a true gentleman and is missed by everyone at the club."



## Henry Gillespie

1930-2025

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**Henry was head greenkeeper at Hillsborough Golf Club, having served there for almost three decades.**

He retired in 1994 and was replaced by Ian Whitehead, who had spent the previous 10 months as his deputy.

"Henry was old school with a modern twist," said Ian. "He was very forward-thinking but maintained good greenkeeping practices.

"He helped me a lot. I was only 24 when I took over from him, but the time I spent with him was invaluable."

Henry was also on the Sheffield Section committee, serving as secretary and chairman.



## Andy Humble

1962-2025



## Robert Janovskis

1924-2025



Andy left school in 1979 at 16 and began his career as an apprentice lawn mower mechanic at Erringtons of Evington Ltd.

After completing his apprenticeship, he moved into lawnmower sales, eventually specialising in commercial mowing and turf maintenance equipment across Leicestershire and Nottinghamshire.

In 1997, when Erringtons ceased their mower operations, Andy joined Lely UK — the UK and Ireland distributor for Toro. Tasked with direct sales in the East Midlands, Andy thrived as retail area sales manager. His success in the role helped shape Lely's national approach, leading to 23 direct sales territories across the UK.

Andy met his wife Sarah in 1986. They settled in Oakham, Rutland in 1989 and married in 1996.

He was a devoted family man and proud father to Evie (28) and Jack (24). Weekends were often spent supporting Evie at equestrian events or working with Jack on restoring a heritage Mini. Andy also leaves behind his mother Anne and brother Simon.

His passions included motorcycles, cars and watches. Known for his honesty, kindness and deep industry knowledge, Andy was a cherished member of the Reesink East Anglia team. He had a special commitment to young greenkeepers, supporting them through The Student Greenkeepers of the Year Awards and continuing to guide them as they advanced.

Andy truly loved his job and leaves behind a legacy of service, generosity and dedication that touched many lives.



Honorary life member Robert was celebrated in this magazine on the occasion of his 100th birthday last year. He was BIGGA's oldest living member.

Born and raised near Jekabpils in Latvia, Robert was conscripted into the Latvian Army aged 18. At the end of the Second World War, he came to Britain as a displaced person. Initially he used his farming skills in the South East before moving into factory work in Rochdale. Desperate to work outside on the land, Robert eventually joined Springfield Park in Rochdale as an assistant greenkeeper during the 1950s. This was the start of a career that lasted nearly 40 years.

Robert went on to become head greenkeeper at Grange-Over-Sands, where he redesigned parts of the course, and then to Swinton Park, in Salford, in 1968. Over the years, he worked at various golf clubs in the Greater Manchester area, eventually ending his career at Worsley in the early 1990s.

One of the first things Robert did at Swinton Park was to plant a row of lime saplings along the club's boundary with the A580 East Lancashire Road. Nearly 60 years on those trees are still there, although the golf club itself is no more.

Robert always valued his membership of BIGGA. He often attended conferences, taking part in the seminars and lectures to improve his knowledge. Having attended a short BIGGA course at Cambridge University he used to joke that he was university educated. He also appreciated the opportunity the conferences gave him to network with other greenkeepers and industry professionals.



## Lauchlan 'Jock' Millar

1935-2025



**With the Millar greenkeeping dynasty stretching over four generations, Jock served as course manager at Burnham and Berrow for over 20 years, across two spells.**

He began his greenkeeping career at the age of 15 at Southernness, working alongside his father, another Lauchlan, who went by Lachie. When the family moved back to the Glasgow area, father and son worked alongside each other again at Erskine before Jock was called up for national service in the RAF. It was there, while serving in Suffolk, that he met future wife Rose.

Jock and Rose lived together on site at Moor Park when he got an assistant's position at the Hertfordshire venue, soon becoming head greenkeeper at the age of 23. He persuaded his younger brother Alec to join him, and they spent 10 years there before Jock moved on to Burnham and Berrow in 1967, briefly returning to Moor Park in 1976.

He later oversaw the construction of Meon Valley and Tewksbury Park and became course manager at St Pierre in Chepstow in 1980. Jock returned to Burnham and Berrow in 1985 and remained there until his retirement in 2000.

As well as being a great greenkeeper, he was once a scratch golfer and kept his handicap at 1 for over 20 years.

Jock leaves behind two sons: Lauchlan Jr recently retired after over 40 years in the industry, while Kelvin is course manager at Churston, where his own son Ashley serves as deputy. Jock's nephew Alix is estate manager at Stoke Park, where his two sons also work. Jock's three sisters either married greenkeepers or had sons in the profession.



## Luke Wilson

1978-2025



**Luke was head greenkeeper at Radcliffe on Trent Golf Club, having lived in the town for his whole life.**

One of four brothers, Luke started as an apprentice at Cotgrave Golf and Country Club in 1994, moving on to Radcliffe on Trent four years later, where he worked his way up to becoming head greenkeeper in 2016.

He had a cockapoo called Sherbet who came to work with him most days.

Luke was loved by all who worked with him.

A funny and quick-witted man with a dark sense of humour, he enjoyed music, Formula One and Nottingham Forest Football Club.

He played pool for a pub team and regularly enjoyed a round of golf with his friends, once getting a hole-in-one at his own course on the 8th.

"I first met Luke when I came to the club for work experience as a 14-year-old in 2007," wrote greenkeeper Will Crowder in a heartfelt tribute.

"He immediately took me under his wing, and from that moment on he became a father figure to me.

"However, it wasn't just me. He treated every youngster that became part of the greens team in the same way.

"Luke, you helped shape me into the person I am today, and the greens team will never forget you."

Luke leaves behind wife Jo and 13-year-old son Thomas. Luke's favourite thing to do was to watch Thomas play football for the local team.

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# Practical Greenkeeping

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Course Manager Adam Lindsay and his team are ready to thrive under the pressure of their busiest month of the year



What we do in...  
June

Club: Banchory,  
Aberdeenshire

June is chaotic for us! Although I should make clear that it's organised chaos – there's a lot going on, but we know what needs doing and we'll get it done.

It's the start of the Aberdeen Pennant League and we have two home matches with that. We have the Gents Club Championship across four days, the Ladies Club Championship across three days, as well as junior and senior events and more besides.

Basically, it's just flat-out for us. That doesn't mean just being here at half five in the morning through to three in the afternoon, but it's probably being here at five and staying until six or seven in the evening. When you work it out, you're probably cramming an extra week's worth of work into this month.

Coming out of the relative quiet of May, when it was just about keeping on top of the general day-to-day maintenance, it's certainly a change of pace.

With the Club Championships, they close the golf course down for two hours in the afternoon for us to get out and prep the course and get it in



the best possible condition for our elite golfers.

We're not a big team and if we're lucky we'll have four of us to look after an 18-hole course, not just for those competitions and our members, but also visitors, outings, charity days, corporate days and more.

We're going to have to really keep on top of it and make sure that we are applying the right wetting agents and chemicals at the right time, just to help us out with growth regulation and water management control.

We don't have the staff to keep on top of a lot of the cuttings, so

using growth regulators can help us maintain the golf course at a good level throughout the week, with only having to cut certain areas maybe once or twice a week. We'll do the greens five or six times a week.

It does bring pressure and we have to do what we can with the budget we've got, the manpower we've got, and the machinery that we've got. I actually enjoy that pressure – I love being out there seeking perfection and getting positive feedback because we're doing the hard work and members are seeing results. It's a chance for us to prove how good we are. **GI**

“ I love being out there seeking perfection ”

# Biostimulants on trial for summer stress

Turf health programmes in the Nordics have reduced irrigation, fertiliser and fungicide use, as well as improved rooting and quality



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**Author:** Sean Loakes, Syngenta Technical Manager UK & Ireland

Climatic changes and abiotic stresses are putting extra pressure on plant health that increases the risk of greater damage from disease infection or pest attacks, as well as com-

promising its ability to recover. Turf quality can be affected more severely and take longer to get surfaces back to good playability.

This season, turf has already been subjected to extensive waterlogging through the winter, followed by a prolonged period of extremely dry weather in early spring, coupled with the highest levels of light intensity on record. While at the same time experiencing some of the biggest diurnal shifts in daytime and night temperatures. All these factors disrupt

a plant's natural processes and exert extra stress.

Most golf course managers have recognised that biostimulants can have a role in promoting plant health and enhancing the ability to fight abiotic stresses. But with the plethora of products available, understanding which attributes can specifically help with different stress factors is increasingly important to get the optimum results.

Syngenta research is looking to identify how specific biostimulants



interact and regulate responses to stress. That begins to explain how and why some biostimulants are more appropriate than others in different situations.

Syngenta and the pioneering artificial intelligence (AI) company, Trait-Seq, have been combining forces to use technology to identify highly specific plant cellular responses to stress, called biomarkers. When activated, these biomarkers can indicate how well a plant is responding to efforts to boost its health, or to block the

effects of external, abiotic stressors.

The research is looking to develop the next generation of biologicals products that enhance natural plant processes, leading to an improved nutrient use efficiency, increased tolerance to abiotic stress or better turf quality. It also seeks to improve the consistency of performance that can vary depending on environmental factors, such as temperature and local climate.

Furthermore, while that R&D is going on in the lab, there is a series of trials being undertaken on golf courses across the UK and Europe to assess the practical use of existing Syngenta products and pioneering new biostimulants in practical strategies to manage different stress factors.

#### Aims for a season long turf health programme

- Faster turf recovery in cool conditions
- Help turf cope with stress
- Increase root mass and depth
- Improve utilisation of nutrients and water
- Greater resilience right through the season

The research expands on work undertaken in the Nordics for the past two years, where stress factors are similar to the UK, only conditions are frequently far more extreme. For example, spring is often cool and slow to get going, but where recovery from harsh winter conditions is essential to get courses back in play as soon as possible.

Nordic greenkeepers also need to quickly build resilience in turf plants for intensely stressful summer conditions that can be very dry, or very

wet. Light levels are also extreme, with intense sunlight and long days – which also leads to 18-24 hour a day golf with high play levels in the short season.

Against this challenging backdrop, a Syngenta turf health programme has been devised to better cope with the specific turf stress conditions. It includes Hicure and two new Syngenta development biostimulants, along with Qualibra moisture management, Ryder light stress relief and Primo Maxx II growth regulation – and comparing results to untreated or standard course management.

The research has shown course conditions can be recovered in the spring two to three weeks faster than with conventional agronomy programmes. Furthermore, as the season progressed, turf showed 30-50% greater rooting.

As a result, irrigation was reduced by 60% during the dry summer period on one course and eliminated the need for hand watering areas, along with reduced overall nitrogen fertiliser use. All courses reported significantly improved resilience against damage from heavy play through the summer months, along with faster recovery from mechanical operations.

Maintaining stronger and healthier turf throughout the whole season reduced the need for reactive fungicide treatments and reduced overall disease pressure on stressed plants.

Highly notable was the ability to withstand greater variation in climatic conditions, with some areas experiencing record levels of rainfall, and other protracted periods of extreme drought and high temperatures.

Following the results of the trials in the Nordics, the same turf health programme approach is now being trialed on courses in the UK in different situations and under varying climatic and course conditions – with practical results available at BTME to plan next season's programmes.

**“The next generation of biologicals are designed to enhance specific natural plant processes”**



# How AI can make your job easier



## Dr Ben McGraw explores some of the quick wins that turfgrass professionals can gain from using AI tools

**I'm an entomologist by training; I study insects and earthworms. You might imagine that such things are about as far removed from the AI revolution as it is possible to be, but you'd be wrong.**

At Penn State we do a lot of studies in the insect world and much of our teaching intersects science or education with technology.

The rise of AI over the past four or five years has changed the landscape quite dramatically and made me realise this is an area where I need to sharpen my understanding.

While I am certainly not an expert in the field, I have developed an interest in exploring its utility. What I have found is an abundance of tools that have made my job easier, and they are freely available to you as well.

Yet a recent survey in Golf Course Industry magazine showed that adoption of AI in the turfgrass industry is remarkably low.

### Large language models

My own journey with AI has mostly been from the educational side of things, with a focus on large language models. These are systems trained on vast amounts of text data to understand, generate and respond to human language. The one most

people will be familiar with is ChatGPT.

Even if you haven't engaged with that software, or others like it, chances are you will have had some experience with predictive texting on your phones, suggested search terms on Google, or recommendations on Netflix – these are examples of AI systems that are now part of daily life for most of us.

Given the exceptional calibre of the students at Penn State, I have to concede that I am always likely to be outpaced on the learning curve when it comes to developments in technology.

We have a massive online programme encompassing 300-400 students enrolled across the globe. That always leaves the question of who is doing the work. You don't know if their mother is doing it for them, or we'd often hear people say when we travelled to golf courses, 'We helped that kid get a degree – we all took it as a collective effort'.

But the big change coming out of Covid was the widespread adoption of AI by our students, meaning now it wasn't their mums or colleagues doing the work for them, but software programmes – and it was noticeable in the work that was submitted.



**Dr Ben McGraw**  
Penn State University

Dr Ben McGraw is an associate professor of turfgrass science and programme coordinator of online and residential turfgrass academic programmes at Penn State University. Ben specialises in insect and earthworm pest management. He obtained a Bachelor of Science from the University of Maine, his Master of Science degree in Entomology from the University of Massachusetts, Amherst, and a doctorate in Entomology from Rutgers University. Dr McGraw's appointment at Penn State includes teaching, research and extension. His research programme focuses on understanding pest ecology and behaviour to develop sustainable management practices.



### What is AI?

- Computer systems or machines that can perform tasks requiring human-like intelligence
- Understanding language, solving problems, making decisions, recognising patterns and even simulating creativity
- Relies on 'big data' to draw conclusions from a large volume of data and then apply these conclusions to real-world scenarios

Students realised they could harness the power of AI to complete an assignment in a matter of seconds, but these shortcuts were undermining the whole point of education – which is that the value comes from the work, from learning and developing an understanding. Not just in turning in a paper that may or may not fool your teacher.

### A rapid evolution

It is often said that AI is in its infancy, but Alan Turing might disagree with that.

Turing began to sow the seeds of AI back in the 1950s with the Dartmouth project and his first conference on machine learning as they were developing a computer programme

that could predict how a human would think.

What we're seeing now is the rapid evolution of a technology that has been around in some form for many decades.

In fact, far from being in its infancy, AI is more like a teenager, with many of the pitfalls that come with that.

Just as teens are no strangers to lying – whether intentionally or through having an incomplete grasp of the facts – so too can these AI programmes provide misleading responses.

My fear as an educator, and especially a scientist, is these models will generate information that is patently wrong, and you wouldn't know that unless you've taken the

effort to study that system before.

Therefore, the other aspect of AI systems that is analogous to teenagers is that you have got to interact with them. You have to provide prompts, dig deeper, offer your own insights. These AI tools are dealing with reams of complex data, but they are also learning to interpret and explain it – they are not omniscient.

### Low adoption rates

One of the biggest fears around AI, aside from it taking over the world and making us all superfluous, is whether it will replace us in our jobs. It's something I hear a lot from greenkeepers as I travel around.

Now, I was shocked to see that only

about five per cent of US businesses are using AI, and it's even lower in agriculture, at two per cent. While it seems to be pervasive at the university level, both from the students and the academic side, the uptake from business is minimal.

Yet 82 per cent of respondents in the Golf Course Industry survey said they believed AI will replace some part of the job by 2035 – and I would say that's even a low percentage from my estimation.

While AI-powered technology in the world of turf is definitely in its infancy, change is coming and improvements over the next 10-15 years will be vast.

However, I still think that, rather than the wholesale replacement of greenkeepers, what we'll see is an increasing number of the more mundane, time-consuming and labour-intensive tasks being undertaken by AI-powered robots.

Whether it's autonomous mowing solutions on steep terrain or drones spraying fine fescue areas that can't have traffic on them, there are tasks where machines would be able to carry out the work more efficiently, to the same or higher standard, and without the downsides of a human doing it, such as risk of injury to themselves or damaging the playing surfaces.

### Where to start with AI

Given the low adoption rates in the turfgrass industry and the current levels of available technology, we're not at the stage of talking about integrating robots into the workforce and dealing with AI at a high level.

The key here is baby steps – looking at the quick wins and the tools that can be used to make your jobs that little bit easier.

For many people, the issue is not knowing where or how to start, so they've just shut themselves off from it and continued to do things the way they always have.

Here are three areas where you could start using AI right now, without the need for any great technological mastery:

#### 1) Writing and communications

These large language models can really reduce the amount of time on the job that you spend writing. Think of those times you have a presentation to write and you get

what I call 'blank page syndrome' – you don't know where to start.

These AI models can produce ideas, outlines or entire presentations in a matter of seconds, based on your prompts. Again, it's important that you are still checking the details and the facts, probably tweaking a few things – don't expect it to be 100 per cent what you wanted, but it will likely do a big chunk of the work for you.

I use this type of AI for emails. I have a lot of email correspondence and, I'll admit, I'm a grumpy person. My communications in certain situations might not be very polite on first go,

**“The key here is baby steps”**

and my natural inclination is to write an email and then run it by my wife and have her tone it down for me, but AI can do that.

It's also great if you're a non-native speaker, as it levels the playing field for you, providing the correct grammar, translations and an appropriate tone.

There are a variety of other uses to consider, and in each case the time-saving factor is probably going to be huge.

Consider the following, and how long it would normally take to do these things, compared to having the help of a tool like ChatGPT:

- Expense reports
- Employee handbooks
- Standard operating procedures
- Job listings
- Preparing interview questions

#### 2) Logistics and planning

This is an area that usually requires a huge amount of data and it's a time-consuming task to calculate how, when and where to allocate resources.

As greenkeepers you have agronomic schedules with a vast scope of tasks, timelines and deadlines, and each task within that schedule needs a person assigned to it.

How we coordinate lots of moving parts around the job can be enhanced through open AI models, and that's not something that's doing your homework for you; it's just making you a more efficient manager.

We have a tool that I use to organise

tasks in my laboratory, where we staff people seasonally. We have certain weeks where we have high demand for labour, multiple trials going on across the region that we have to get to, and what the tool allows me to do is detail the strengths and the weaknesses of each of the staff and list their availability. With that data, the tool can come up with the most efficient way to get the trials done, including information on the quickest route across the state to the various places we need to get to.

You can apply this kind of method to your own schedule on a daily or weekly basis. If you needed to add in meetings, an hour's break for a bit of exercise, a two-hour window to work on a particular project – AI can map that all out for you.

It can also come in handy when you're having to do some maths and perhaps calculate how much sand you need for a green when you're hollow tining. You can provide the dimensions and full details of the task at hand and it will work it out for you.

#### 3) Data assembly, interpretation and analysis

Paid-for versions of AI tools will allow for more effective results in all of these areas but particularly when it comes to data analysis, as you can



## “Adoption of AI in the turfgrass industry is remarkably low”

upload files, such as spreadsheets, and give it a comprehensive data set to work from.

You might have figures that you need to put in a newsletter or communicate to the powers that be, and you want to showcase the data in a particular way. An AI tool can produce a graph, a chart, a table – whatever way you want to visualise that data, it's available to you.

It can also be used to interpret data sets and provide you with a better understanding, whether it's analysing the efficacy of a certain product or agronomic method.

A particularly impressive tool is Google NotebookLM. This is a nice bridge between the scientist and the practitioner, especially in turfgrass management, where we can take complex ideas published in peer-reviewed journals and then have it translated into a common language that all of us can understand.

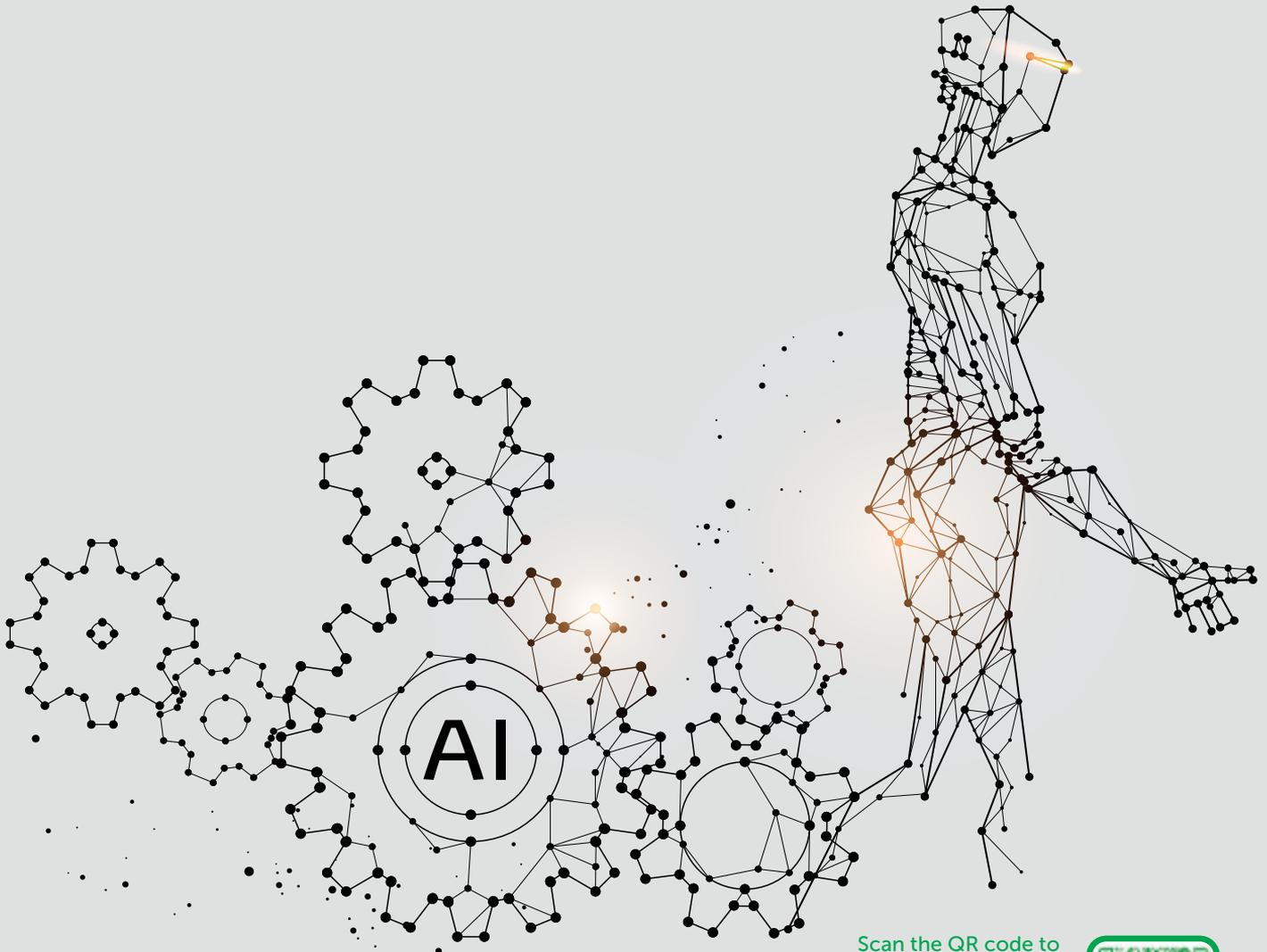
You can upload a file containing the journal and this platform will allow you to break it down and analyse it in all sorts of ways. Maybe you just want

to draw out the main conclusions, or look at areas for further study, or compare the results of one study with another – it's all there to engage with in a really easy-to-use way.

### Figure it out

By starting with these simple models and just dipping your toe in the water, you can begin to figure out where and how AI is going to work for you.

The technology will continue to evolve and it will establish a greater foothold in the turf industry. It's a good idea to get on board with it now and recognise that AI is something that can help you – not something that's out to replace you. **GI**



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# Why good greens are about more than speed



Paul Woodham, The R&A's Agronomy Lead for Europe and the UK, offers his essential guide to measuring golf green performance



Measuring greens performance has become an integral part of agronomic assessment for the last 15 years in the UK and has developed globally with the innovation of new practices and advancement in the tools and platforms we use.

Even before then, golfers naturally asked: "From what background knowledge is a judgement of green quality and consistency made?"

On the same day that some golfers think the greens are too fast, others may allege they are too slow. This subjective opinion can lead to counter

arguments with commonly held beliefs on green speed split between greens being faster in the morning just after they have been cut and green speeds increasing through the day as greens dry out.

Opinion can also be misjudged with other key characteristics, such as firmness of surface and the smoothness and trueness of ball roll, which are two further key qualities to be taken into account when assessing performance.

Our Championship management work is a well-practised process

integrating daily and complete data collection to support the decision-making process. So what is the value of measuring green performance for individual clubs, and how best is this done?

The ultimate goal when measuring performance is to save time and money, optimising inputs for maximum output – green performance and consistency.

## Is green speed a measure of quality?

Rightly or wrongly, golf courses seem to be subjectively judged on



“The ultimate goal when measuring performance is to save time and money, optimising inputs for maximum output – green performance and consistency”

developers were always aware that their tool – the Stimpmeter – was in the wrong hands when used by the golfer or when the golfer is requesting the information – data which will generally hold little value to golfers outside of the elite game.

There are ethical dangers in promoting performance targets if misinterpreted. History tells us that publishing data ranges can lead to abuse, such as in the case of Stimpmeter readings which may lead to inter-club comparisons. Research discussed this just a few years after its introduction as it was apparent that many clubs were attempting tournament speeds for the entire season with speed dominating players' expectations. This would often come with associated problems such as the decline in green health and grass cover.

#### Why green firmness is so important

The industry waited another 30 years or so before the Clegg Impact Hammer made its way from being research equipment to a field-testing tool measuring surface firmness – perhaps the most important characteristic of a reliable and resilient green. Up until 2010, measurable firmness was probably not understood. Golfers, even today, commonly criticise inconsistent or disappointingly slow green speeds but do not give consideration to the importance of firmness and the influence it has on green speed. While there may once have been a desire to replicate target golf conditions and thus dictate agronomic practices, which produce softer more receptive surfaces, the consequences of reducing green speeds because of soft and unreliable surfaces was probably not considered. Quite simply, fast greens on soft surfaces cannot be sustainably achieved.

#### Player feedback

My degree dissertation was titled 'Objective Data Assessing the Performance of Golf Greens as a Comparison to Golfers' Perception of Playing Quality.'

The study compared performance data (speed, firmness, smoothness) collected morning and afternoon against player feedback from three different handicap categories. The measurements gave an accurate

either being better or worse than the neighbouring course based on what are often speculative conversations in the clubhouse. These comparisons are commonly centred on the ball roll speed (green speed). Some golfers may consider green speed as one of the most important criteria by which players judge course performance. Green speed is not the sole measure of quality though.

The Stimpmeter is the best known and most accessible and widely used tool for measuring green speed. Invented by Edward S Stimpson, the

intention was to develop a tool which would accurately, objectively and statistically gather valid measurements of putting green speed. The device was subsequently modified by USGA and introduced in 1978. The Stimpmeter is a tool to aid uniformity between and within greens, and also to encourage each club to decide upon a speed its members are comfortable with. Then clubs can use the data to work toward speed uniformity for all greens on the course.

It has been said that the founding

“ Making maintenance decisions purely based on player feedback could lead you down the wrong path”



measure of performance but it did not always agree with the players' perception on playability.

The low-handicap players were more challenging in their assessment of morning to afternoon green speed (there's a shock!), whereas the medium-to-higher-handicap golfers placed more emphasis on smoothness.

What the study did show is that player feedback is likely to be inconsistent at best and largely inaccurate. Making maintenance decisions purely based on player feedback could lead you down the wrong path.

### Measuring green performance

The case for measuring and benchmarking performance against researched targets is undoubted. I spent more than a decade working with clubs where measuring soil profile (organic matter and soil moisture content) and surface performance (firmness, smoothness, trueness and green speed) was part of agronomy reporting. This was a game-changer and led the industry by driving informed decision-making.

Golf clubs started to purchase soil moisture meters and take more notice of researched target ranges for green performance. But there was a danger too in becoming overly data heavy and not understanding the cause and effect of the readings taken. We often ask course managers at interview whether they feel that greenkeeping and agronomy is an art or science. The reality is that it is a blend of both. Data is there to monitor change and inform the skilful implementation of maintenance by the turf manager. Bad data is worse than no data at all. The tools and protocols we use need to be robust and researched.

At The R&A, we use performance data to support our Championship agronomy and integrate it where needed into our Sustainable Agronomy Service work with private golf clubs.

What we see, however, is that there is more value when greenkeepers are collecting their own and more frequent data rather than just a moment in time. It is also important for the agronomist to have access to more data to assess any changes or trends.

The availability and cost of performance tools has been an



obstacle for many though. While most clubs have purchased soil moisture probes, and probably have access to a Stimpmeter, few had access to tools for measuring firmness (Clegg or TruFirm), and there was no commercially available and reliable tool for measuring smoothness and trueness. That is until now though as the USGA researched and developed the GS3 ball – a universal tool for measuring green speed, smoothness, trueness and firmness (drop test), working on the USGA Deacon app.

### Environmental measurements

There are other measurable greenkeeping assessments, which are growing in importance. Environmental data has developed with significant importance moving on from the simple catch can rain gauge. The technological advancement of weather stations – environmental monitoring stations – now interact with irrigation systems and greenkeeping software programmes, some of which have integrated AI and disease-modelling programmes. Even basic measurements, such as programmes that monitor daily and hourly soil and air temperature, will inform statistics such as understanding Growth Potential (GP) and Growing Degree Day (GDD) – information that can help with understanding growth and the timing of fertiliser applications and other products.

### Measuring growth rates

Is it possible to measure and record growth (greens clip yield – the volume

of grass collected from mowing) and use the results to direct or confirm maintenance practices such as fertiliser application and/or mowing adjustments? All greenkeepers do this by simply asking how much growth was collected in the grass boxes today. Or, in simple terms, how many empties they did. The problem is gathering this information with accuracy. Jim could be emptying half-full boxes whereas Jill could be waiting until the boxes are full.

Recording measurements of clip yield is easy and not as time-consuming as one would think. Clip yield volume will vary according to all environmental conditions, including soil moisture and light, as discussed, and also through any changes to cultural maintenance, like brushing and grooming. All of these factors can be recorded and evaluated when analysing the results.

The challenge is to reveal the influence of inputs (rainfall, irrigation, nutrition, plant growth regulator) and use sward refinement options to control the output of green performance and maintain turf health. I would expect that over time you will see moisture and temperature drive growth more than you'd imagine.

Organic matter will reduce if you manage growth effectively and will be accurately controlled if you apply sand top dressing in accordance with clip yield. The information will also help you to manage costs and revise the timing of nutrient, PGR, sand top dressing and sward refinement strategies. **GI**

## Paul's top tips to improve your greens

- Data is for the greenkeepers and club management – not for the members
- Measuring and checking soil moisture is one of the most important aspects of managing greens health
- Consistency is the game – work within researched targets adapted to your site conditions and situation
- It is vitally important that you differentiate between routine plans vs competition play when small regiments may be applied to increase green speed
- Maintain performance within target ranges and not to exceed target
- Do not consistently push the boundaries on minimum or maximum targets. Exceeding the limits will induce turfgrass stress and increase the level of disturbance which will favour annual meadow grass
- Don't just limit data to the main season months. Intermittent data such as green firmness and moisture content collected during winter months is equally valuable (but green speed is not)

# Abridge's tree work set to bear fruit



Course Manager Geoff Smith loves getting stuck into a project and the tree management plan at Abridge Golf Club has certainly stoked his enthusiasm

### About Abridge

Set in 240 acres of beautiful parklands with breathtaking views of the Essex countryside, Abridge is a clay-based 18-hole course with a membership of approximately 650. Geoff has nine staff and a mechanic on his team, who help maintain playing surfaces that play host to major amateur events, including The South East Regional Open Qualifier.

As well as elevating Abridge's reputation for excellent playing surfaces, the greenkeeping team at the Essex club are also making best use of one of the parkland venue's most striking features – its trees.

With help from ecology expert James Hutchinson, Course Manager Geoff Smith is overseeing a long-term plan to ensure the course, its surrounds and its trees are all allowed to flourish.

James's visit to Abridge came as part of the club's prize for winning the BIGGA Championship Greenkeeping Performance of the Year Award after hosting a PGA EuroPro Tour event in 2022, at which the team presented immaculate conditions, despite an exceptionally dry summer.

PGA officials said they had never seen such dedication to producing a course for a championship and the CEO of EuroPro said Abridge was one of the best venues they had been to.

We spoke to Geoff about trees, irrigation and why a round at Abridge may soon form part of a healthy diet.

**“ We planted nine pear trees, nine apple trees, cherry trees and plum trees and they've all come out in blossom this year. We've called it the BIGGA orchard”**



**Left:** winning the BIGGA Championship Greenkeeping Performance of the Year Award 2023

### What were the key findings to come out of James's visit?

We had a fabulous few days walking the golf course and one of the things that came out of it was the desperate need for tree management. We're a beautiful parkland golf course but the trees were getting out of hand. The report became more focussed on the trees and James presented it to the club and the members, which went down really well – they loved it and fully embraced it, and we've got a 10-year plan now. It's always great to get someone in who is more qualified to talk about these things, and we had an agronomist involved as well.

### What sort of issues were the trees causing?

We've got some stunning oaks and great trees, but we've also got horrible poplars that are well past their sell-by date. When they built golf courses 60 years ago, they used poplars as great screens, but James and I identified that they're blocking a lot of light and a lot of air, so our surfaces were suffering because of it. We basically plotted across the whole golf course where trees need to be removed, or where they need to be managed and cut and thinned out. We've also promised the club that for every tree we take down, we will plant two or three new ones but native species in selected areas. At the same time as this, a tree trust approached us and we're working with them for the next four or five years with approximately £15,000 a year to spend on trees.

### How have the members and others with a vested interest responded?

There will be people who are worried

whenever you talk about cutting trees down, and rightly so. But James and I, along with the agronomist we had there, explained how some of the trees were in the wrong position and that managing them would actually benefit the environment and encourage wildlife and the health of the trees left behind. We showed that, rather than destroying habitat, we'd actually be creating it. We've left a lot of areas now with long grass and all the wildlife that attracts. When you start clearing areas, you do get some people who don't like change, but now they're saying, 'Wow, this is amazing. It looks so much better'.

### The club also received funding from the Plant a Tree for BTME scheme – what are you doing with that?

I like to do things differently; anyone who works with me knows that I'm not very conformist, so I said to James, 'What could we do that's different?'. We had an area of land that used to hold buggies, and we'd just converted it back to grass. I asked about having an orchard there. He told me he'd never heard of an orchard on a golf course before, but he loved the idea. BIGGA were happy for us to spend the money on that, so we went ahead and planted nine pear trees, nine apple trees, cherry trees and plum trees, and they've all come out in blossom this year. We've called it the BIGGA orchard.

### What will you do with the fruit?

As soon as the trees start fruiting next year, we're looking to start supplying desserts out of our clubhouse - nice fruit pies and things like that. We'll also be telling members if they want some

fruit as they come off the 9th green and onto the 10th tee, they can help themselves.

### Do you look at projects like this as part of a legacy that will outlast your own time at the club?

Definitely. I used to say that I had a three-pronged project that I wanted to be the basis of my legacy at the golf club. The first was a completely new irrigation system, because the old one was falling apart; then the drainage work to make us more playable in the winter; and finally, the irrigation lake we've put in. This work we've got going on with the trees now is also a huge positive and something that will continue when I'm not here. We've gone from being a good course to a great course and I'm proud of that, but I must say that none of it would be possible without the whole team – I'm nobody without them.

### Can you tell us more about the irrigation project?

The club committed to a massive investment seven years ago to install wall-to-wall irrigation. We carried out loads of drainage work and continue to drain the fairways every year, all done in-house as well. I made it a goal of mine to get us off mains water, so we built a 34,000-cube irrigation lake and we're totally self-sustainable when it comes to water usage. All our drainage, certainly on the front nine, runs off into the lake and anything that misses gets pumped back in, so we catch every bit of rainwater. We also have an extraction licence from a subsidiary river that leads into a main river that we have a winter extraction for, so we literally catch it and then use it all summer. **GI**

### Geoff's team

Aaron Church - Apprentice Greenkeeper  
Jamie Blagden - First Assistant  
Nick Lappage - Assistant Greenkeeper  
Nathan Davis - Assistant Greenkeeper  
Ryan Hervey - Apprentice Greenkeeper  
Noel Cooper - General Manager  
Geoff Smith - Course Manager  
Ben Scrivener - Deputy Course Manager  
Brad Davis - Assistant Greenkeeper  
Ian Cannell - Assistant Greenkeeper  
Gareth Clarke (not pictured) - Mechanic





# Kubota M4073 praised for delivering power and productivity at Meldrum House Golf Club

A Kubota M4073 has been praised by Meldrum House Golf Club, providing high capacity and productivity on turf tyres, ensuring a sensitive footprint. Delivered alongside an L2452 with loader by HRN Tractors in August 2024, the addition of the higher horsepower model has given the team the ability to tackle larger and more specialist tasks in-house, to the benefit of both the golf course and wider estate.

Meldrum House was acquired by Apex Hotels in May 2024. As part of ongoing investment in the site, Golf Course and Grounds Manager Kenny Harper, was tasked with the replacement of the club's tractor fleet – and he knew exactly where to turn, thanks to his longstanding relationship with local dealers HRN. "A major part of any equipment purchase for us is the back-up support we receive, and we know we have that in HRN" Kenny explains. "With that assured, we then needed to know that the machines themselves were up to task. When HRN switched franchises to Kubota, they brought in demonstrator models

and it wasn't long before we decided that was spot on too."

"Increasingly, we were finding implements were putting too much strain on the tractor, or the tractor itself didn't have enough power or grip for some of the heavier tasks. The solution was to purchase two Kubota models – an L2452 which is a straight replacement for a similar size compact tractor we were using and the M4, which is a pretty sizeable step-up to give us greater scope and capacity."

The M4 series from Kubota is a proven all-rounder, with an extremely spacious and comfortable cab and a reliable, efficient 4-cylinder Kubota diesel engine at its core. With 74hp, the M4073 model delivers maximum power and particularly strong rear hydraulics to provide full lifting power to suit all greenkeeping and estate management tasks.

"One feature the team and I particularly like on both tractors is the gear selection and constant speed controller which gives us pinpoint control over engine speed which is important for creeper tasks such

as trenching or sandbanding." He continues, "The pair have been pretty much non-stop since they arrived with winter aeration and renovation works and haven't missed a beat."

Another of the winter tasks the M4073 has taken in its stride is woodland management across the 18 parkland holes and hotel estate. Partnered with a new 8-tonne trailer, Kenny and the team now benefit from twice as much space and power than their previous set-up. "We had to hire-in equipment for large tree works and were dependent on what was available when we needed it. The Kubota and trailer now enable us to conduct the task in-house which, in itself, brings many benefits." He concludes, "We're yet to really find anything the M4 can't do!"



For more information about Kubota, visit [www.kubota-eu.com](http://www.kubota-eu.com) or [www.kubota-global.net](http://www.kubota-global.net)

# Rock Golf – a Finnish masterpiece



Master Greenkeeper Steve Okula gives a fascinating insight into his work on one of the most spectacular par-3 courses in the world, opening this month



**For the eighth year running Finland has been declared the world's happiest country by the World Happiness Report, launched in 2012 to promote the sustainable development goals of the United Nations. It is an enviable society, highly educated and affluent with low crime and poverty.**

Perhaps the low population density helps reduce stress. Compared to the United Kingdom, Finland has 8% of the population spread over 50% more land mass, with most of the people living in the southern end of the country. You will scarcely find a traffic jam even in Helsinki, the largest city and capital. Hence, drivers are largely courteous and law-abiding.

There are 155,000 members of the Finnish Golf Union, who enjoy the 180

golf courses in the country. Compared to the UK, it is twice the golf participation per capita. Casual observation indicates that they could

**“It was clear from the outset that there was careful planning months ahead of time”**

fill more courses in Finland. During my time there I resided on the property of Pickala Golf, a 54-hole complex that appeared to be fully booked during the golfing season from May through October. Though the season is short,

the hours can be long, and at mid-summer teeing off at 9pm is not too late to get in 9 holes.

In 2024 I was privileged to be invited by Turfgrass Agronomy Services (TAS) and the Rock Golf project to work on a new, 9-hole, par-3 golf course taking shape in Finland, about 25 miles west of Helsinki. The project is the brainchild of the businessman Kari Karvinen, who tasked everyone involved to create the greatest par-3 golf course in the world. I have not seen every par-3 course in the world, so I can only speculate that if it's not the best then it must be awfully close.

The project had every advantage; well-funded and resourced on spectacular terrain, and moreover a competent, professional team with whom it was a pleasure to work. The

## Specifications

TAS provided the specifications for construction of greens, tees, sand capping fairways and the fertility programme. We also specified the desired species to be sown as follows:

**Greens – *Agrostis stolonifera* L93XD @ 8grams/meter<sup>2</sup>**  
**Tees – *A. stolonifera* 50% L93XD & 50% Seaside II @8G/m<sup>2</sup>**  
**Fairways & semi roughs – Sown at 25-30g/m<sup>2</sup>**  
***Poa pratensis* 60% blend of 3 varieties**  
***Festuca rubra* 15%**  
***Festuca rubra commutate* 15%**  
***Lolium perenne* 10%**  
**Outer roughs – Sown at 15g/m<sup>2</sup>**  
***Festuca brevipila* 50%**  
***Festuca ovina* 50%**

The greens were built on 30cm of 100% sand over a gravel layer thoroughly tested by European Turfgrass Laboratories for compatibility. Further sand analysis considered particle size distribution, porosity and percolation rates. No amendments were incorporated into the root zone prior to placement, but zeolite, organic and starter fertilisers were applied to the surface as pre-plant. We at TAS have used this method successfully on numerous projects and found it to be practical and expedient. The tees had a 20cm layer of sand also over a gravel layer with the same pre-plant programme as the greens.

The native soil was a heavy clay with poor percolation rates, so to ensure proper drainage, fairways, roughs and semi-roughs were capped with 20cm of sand over the drains installed to plan, with numerous catch basins.

My role was to oversee the seeding and grow-in, which began in late May. We had two Finnish supervisors from Rock Golf, the superintendent Juho Sillantaka and his assistant Matias Merilainen. For the rest of the team we had contract labour of six Lithuanians, a common practice on Finnish courses for seasonal employees to round out the staff.

As mentioned before, the

Lithuanians had no previous golf course experience and had to be trained from scratch, which was relatively easy because their attendance was reliable and they were earnest in their attitude to help (though their English skills varied greatly).

Prior to seeding, sensitive areas around greens bunkers, tees, catch basins and sprinkler heads were turfed with a *Pratensis*/*Festuca* mix from a local turf farm selected for its compatibility with the seed mix. A total of one hectare of turf was budgeted for this purpose.

Irrigation syringe cycles started out on hourly intervals throughout the day and were gradually reduced as root development began. Fertilizers were applied about every two weeks depending on observable results.

An enormous advantage to working in the Nordic countries is that the prolonged summer sunlight along with moderate temperatures (20-26°C) accelerates establishing turf. The bentgrass greens and tees were ready for mowing after two weeks. The fairways and semi-rough took longer, 3-4 weeks, as the *Pratensis* and *Festuca* germinates more slowly.

Foliar applications began on the greens and tees soon after the mowing. Applications were bi-weekly, with a tank mix of soluble nitrogen, seaweed extract, iron sulphate, and Primo Maxx. Initially, we used a 150-litre pedestrian sprayer. As the establishment progressed, we were able to employ the Toro Multi-Pro 1750 borrowed from Pickala Golf. No pesticides were applied or necessary until late August when we began a preventative treatment programme to control *Fusarium* (*Microdochium nivale*).

The well-organised Nelson people built the bunkers to the architect's high specifications, with underdrains, Capillary Concrete and Dura Bunker edges. Sand was placed in the bunkers before the surrounds were sand-capped and turfed out.

architect was Lassi Pekka Tilander, another Finn whom I had met some 20 years prior at the Edinburgh College of Art golf course design curriculum. Lassi did an outstanding job with the routing and situating the holes to maximal effect.

There are four sets of tees on every hole and tee shots may play from 87-245 yards. No holes play uphill so there are no blind shots to the greens. Yet this is no Academy course for beginners to learn the game. There are abundant hazards in the way of water and sand, so any golfer is well-advised to bring their A-game.

The construction team was furnished by Nelson-Vecchio, owned and operated by David Nelson, a Scot who had previously done a number of courses in Scandinavia. Nelson had a



### What is kunтта?

One of the interesting facets of this construction was the inclusion of a total of one hectare of a landscape plant material known in Finland as kunтта. Kuntta is a natural carpet of plants; consisting of heather, fescues, wild berries, moss and lichen that is cut and rolled to be transported and subsequently laid out much like turf. It is a popular landscape material and has many uses. On the Rock it served as a transition plant between the maintained turf and the surrounding forest.

The rolls are transported by tractors and cut to fit with chainsaws. Other than assuring that the ground is reasonably level, there is no preparation. It must be watered until it is rooted, but after that requires no maintenance whatsoever. There was a budget for 15.000m<sup>2</sup> of kunтта.

Ever on the cutting edge of technology, the Finns are prominent utilising robotic mowers. The advantages are many. Economically, the initial investment is considerably less than a conventional mower. A fleet of six robots that could mow the fairways and semi-roughs is less than half the cost of a five-unit fairway mower.

Additional savings are gained by reduced machine maintenance, there are no reels to grind, oil to change or points to grease. The robots only need to have the cutting blades changed every fortnight or so at the cost of a few euros.

The robots at the Rock could operate around the clock, mowing 90 minutes and recharging 30 minutes. By mowing every day there is never an

accumulation of clippings that necessitate removal. Robots are small and unobtrusive, and they can operate at night and even while the course is crowded with golfers.

That said, every technology has its drawbacks. The technology, as it is today, only allows for cutting heights no lower than 12mm, making them unsuitable for greens, or in the case of the Rock Golf, tees, where we mow bentgrass at 7mm.

The finished appearance does not compare to a conventional, well-tuned, reel type mower. A robot does not leave the mowing strips on turf that is so aesthetically pleasing. Still, the robots will most likely have an ever-increasing role to play in the future of golf course maintenance.

The Rock Golf is a rarity in the golf construction business in that it adhered to the construction programme, and in fact was playable even before the schedule called for. It opens this month, with the clubhouse, maintenance facility, roads, utilities, and other infrastructure all finished.

Special thanks to the owner Kari Karvinen, Rock Golf Manager Andrea Nyman, Project Manager Hannu Jalakanen, Lassi Tilander, Juho Sillantaka, Marcus Suojoki, David Nelson and dozens of others without whom the project would not have come to fruition.

I also owe a debt of gratitude to Sylvain Duval, Alejandro Reyes and Turfgrass Agronomy Services, the most professional and knowledgeable people in the business. I thoroughly enjoyed my time at the Rock Golf, and all of us involved are proud of the product we have created.



“If it’s not the best then it must be awfully close”

truly international staff, including English, Polish, Romanian, Finnish and Lithuanian. To a man they were experienced and capable. (If you include TAS, then there were French and American as well.) English was the lingua franca, spoken by virtually everybody in Finland.

The Finns in general are intelligent and well-organised people. It was clear from the outset that there was careful planning months ahead of time to be sure that assets were on site in a timely manner. There was never any delay caused by lack of machinery, tools, materials or staff. It was also an extraordinary situation where the construction was next to

an existing 54-hole complex, Pickala Golf, with whom we had excellent relations throughout and who were most helpful and cooperative (many thanks to Course Manager Markus Suojoki).

For example, before the seeding, we could train the inexperienced Lithuanian Rock maintenance staff on greens mowers on the Pickala practice greens so that when the time came to begin mowing the newly seeded greens they were already familiar with the machines. Also, we could use the Pickala reel and bedknife grinding equipment, sprayers, and any other item we might be lacking. It all contributed to a very

smooth operation.

The actual construction began in January 2023, with the clearing of the existing woodland, bulk earthworks, excavating lakes and installing substantial bulwarks around them. In early 2024 Nelson began in earnest the shaping, irrigation, drainage, feature construction and sand capping.

The architect furnished plans for drainage, shaping and construction of features. The irrigation plan was done by Tmi Kimmo Laihonen and includes a RainBird CirrusPRO control system. Other sub-contractors did stone retaining walls, cart paths and kunnatta installation. **GI**

# Putting the



## Aquatrols introduces new nutrition technologies for sustainable turf management

Aquatrols is proud to introduce a pioneering new line of turf nutrition solutions, purpose-built to meet the evolving environmental and agronomic challenges faced by golf course and sports turf managers worldwide.

This latest innovation builds on the trusted legacy of Aquatrols' existing nutrition products, integrating advanced technologies that address the modern demands of turf management. As a recognised leader in water and plant health innovation, we remain committed to pushing the boundaries of turf care - delivering solutions that unite cutting-edge performance with a strong focus on environmental sustainability.

Our latest innovation, the VerdeLNX range, represents a significant advancement in turf nutrition, offering an environmentally and financially smarter approach to managing turf health. Central to this groundbreaking line are two exclusive, proprietary technologies developed to improve nutrient delivery and nutrient retention in turfgrass systems. These technologies, included within the

formulation of every product in the range, are not only highly effective but have also been developed with a strong commitment to environmental responsibility.

The first technology within the VerdeLNX range has been engineered to increase the absorption of essential macro and micronutrients by turfgrass plants. This is achieved through improved foliar and root uptake, ensuring that nutrients are more efficiently absorbed whether they are applied to the leaves or the soil. By enhancing nutrient absorption pathways, this technology helps turf managers get more out of every application, ultimately reducing the need for frequent reapplications and promoting stronger, more resilient turf.

The second proprietary technology is focused on reducing nutrient losses to leaching, a potential issue in free draining rootzones with traditional fertiliser products. This innovation works by holding nutrients higher in the soil profile for longer, giving turfgrass roots a better opportunity to access and take up applied nutrition. By reducing nutrient migration beyond

# “new” in nutrition

the reach of the root system, this technology not only maximises the value of fertiliser inputs but also plays a crucial role in helping protect groundwater and nearby ecosystems from nutrient runoff, contamination and eutrophication.

Both technologies are underpinned by Aquatrols’ unwavering commitment to sustainability. They are 100% renewable, fully biodegradable and leave no residue in the soil or water environment. These eco-friendly attributes ensure that turf managers can achieve exceptional results without compromising on environmental integrity. Whether applied on golf courses, sports pitches or recreational landscapes, the VerdeLNX line helps deliver high performing, resilient playing surfaces while aligning with modern environmental stewardship goals.

At Aquatrols, we understand the immense pressure turf professionals face - not just in delivering high quality, year-round playing surfaces, but in doing so under increasing scrutiny around environmental impact. Our goal with the VerdeLNX range is to help address those pressures by providing products that deliver high performance, long-term value and environmental peace of mind.

## VerdeLNX product range

Aquatrols new tank-mixable product range is designed to help turf professionals build a customised nutrition programme tailored to their turf’s needs. With no hidden nitrogen in any product, turf professionals maintain full control over nutrient inputs.

This next generation of turf nutrition is more than just a

product launch - it’s part of a broader commitment by Aquatrols to lead the industry toward more responsible, sustainable turf management practices. As part of this mission, we are actively investing in research, partnerships and education to support the adoption of best practices in nutrient management and water conservation across the industry.

Our products are not only designed for efficacy but are also supported by a strong research and development ethos including independent research and end user trials, ensuring they meet the practical needs of turf professionals in diverse climates and growing conditions. By choosing the VerdeLNX range, our distributor partners and end users are aligning with a future where high-performing turf and environmental sustainability go hand in hand.

As the industry continues to evolve, Aquatrols remains at the forefront - innovating with purpose and delivering solutions that help turf managers meet their goals while protecting our natural resources. With the introduction of the VerdeLNX line, we reaffirm our role as a trusted partner in creating strong, sustainable turf systems that are as responsible as they are resilient.

We invite turf managers, agronomists and industry stakeholders to discover the difference VerdeLNX can make - not just in terms of turf surface performance, but also in respect of the wider environment.



**Scan the QR code for more information**

VerdeLNX product	N-P-K analysis	Key product highlights
Ferrosol Pro	5-0-0 + 7% Fe	A refined version of the original Ferrosol, formulated with reduced nitrogen to strengthen the plant and enhance disease tolerance.
Attain Max	8-0-0 + 3% Fe + seaweed + amino acids	A next-generation bionutritional liquid formulation, enriched with organic compounds and seaweed extracts, to promote strong, resilient turf.
Base N	37-0-0	Contains a blend of urea, ammonium, and nitrate to enhance nitrogen availability and support sustained growth year-round.
Base K	0-0-38	Formulated to promote strong root development and enhance plant vitality.
Base Ca	8-0-0 + Ca	Designed to build and strengthen the physical structure of the grass plant.
Sward	0-6-5	Enhancing turf surface performance without excessive growth.
Elite Pro	1-1-7 + humic acids	Strengthening the turf root environment.
Base Micro	Micronutrient package	A balanced, high quality micronutrient package designed for sand dominated profiles.
Liquid Seaweed	0-0-0	The next generation of high quality, cold pressed seaweed, with no hidden nitrogen.

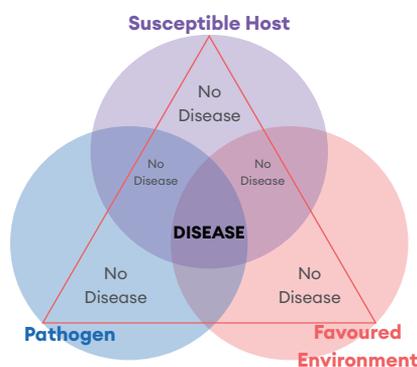
# Dollar spot on the rise

What greenkeepers need to know in 2025



Dollar spot (*Clarireedia spp.*) continues to emerge as one of the most persistent turfgrass diseases in the UK & Ireland. Once viewed as a sporadic summer issue, it's increasingly recognised as a season-long threat—particularly on tees, approaches and greens—often with a frustrating ability to reappear even after treatment.

As disease pressure changes and turf expectations grow, turf managers are refining their strategies. This article revisits the fundamentals – from the disease triangle to prediction models – and highlights practical strategies that turf managers can apply now. We also revisit key learnings from our 2024 webinar with Dr James Hempfling (Envu) and Kelly-Marie Clack (Origin Amenity Solutions).



## Understanding the dollar spot triangle

To understand how dollar spot becomes active, we return to a key concept in plant pathology: the disease triangle. This simple model reminds us that for disease to occur, three elements must be present:

- **Pathogen** – *Clarireedia* species are often present at low, background levels in most turfgrass systems.
- **Host** – Fine turf under stress or low fertility often the most susceptible.
- **Environment** – High humidity, prolonged leaf wetness (especially from dew or light, frequent irrigation), and temperature range of 15° - 30°C are ideal for infection.

On many UK courses, especially those with meadow grass, bent/fescue dominant fairways or greens maintained under moderate/lean nutrient regimes, all three factors frequently align.

## What drives dollar spot in the UK?

A common misconception is that dollar spot won't thrive in dry conditions. In

reality, leaf wetness, not soil moisture, is the critical environmental trigger. Extended dew periods or frequent irrigation, poor airflow and nighttime humidity provide enough surface moisture for spores to germinate.

Compounding this is the fact that modern turf is often maintained close to the edge—minimal inputs, tight mowing and irrigation limits—creating ideal conditions for stress-related diseases. Key risk factors include:

- Low and/or inconsistent nitrogen levels
- Drought or traffic stress
- Morning dew that persists as temperatures rise
- Shaded or poorly ventilated areas
- Slow growth and low clipping yields

Dollar spot can appear as diffuse or irregular patches, and can be misdiagnosed as dry patch, dull mower damage or abiotic stress in early stages.

### The role of prediction and monitoring

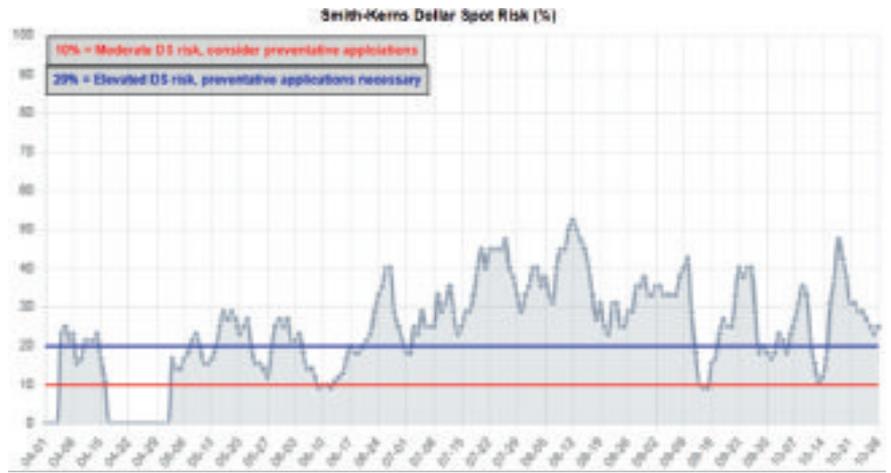
In North America, many turf managers use tools like the Smith-Kerns dollar spot model to time fungicide applications more effectively. While not fully validated for all UK conditions yet, it is an effective method of prediction and management. These models are based on temperature and humidity patterns that still apply here. Start tracking it now for your site and monitor the thresholds.

Even without formal models, turf managers should be recording outbreak patterns, high-pressure periods and turf response. Regular scouting, soil moisture/temperature tracking and disease logs help identify recurring hotspots or weak links in cultural practices.

### Cultural controls still matter

Prevention starts with good agronomy. Cultural controls won't eliminate dollar spot, but they help reduce its severity and slow its spread.

- **Fertility:** Avoid excessively lean regimes or spikes and drops in growth. Balanced nitrogen supports natural turf defence.
- **Dew removal and rolling:** Brushing, rolling or even irrigation just before sunrise can reduce leaf wetness.
- **Irrigation:** Water deeply and infrequently. Avoid late afternoon or evening irrigation.
- **Host selection:** Seed with species and cultivars that are proven to



Smith-Kerns Dollar Spot Risk Newquay 2024, as we can see, the risk index is well above the threshold for treatment for the majority of the summer highlighting the importance of data collection and visual records to assess IPM effectiveness

have low susceptibility to the disease. Cultivars within the same species can vary significantly!

- **Mowing:** Maintain sharp blades and consistent(ish) height of cut. Stressed turf invites infection.

Thatch management, traffic rotation, airflow and light also play supportive roles in longer-term resilience.

### Fungicide strategy with Exteris® Stressgard

Where dollar spot pressure is persistent or reaches unacceptable thresholds, preventative fungicide use becomes a critical part of an integrated approach.

Exteris® Stressgard combines two active ingredients—fluopyram (a powerful SDHI) and trifloxystrobin (a QoI)—to provide broad-spectrum control with long-lasting residual. The Stressgard® formulation improves turf appearance and health during periods of stress, with benefits such as:

- Strong preventative and curative dollar spot control
- Improved turf colour, density and playability
- Reduced rebound effect following outbreaks
- Compatibility with growth regulators in IPM programmes

Rotating fungicide groups and using products with dual modes of action helps prevent resistance while extending performance longevity.

### Expert webinar highlights: Hempfling & Clack, 2024

In our recent webinar, Dr James Hempfling (US GST, Envu) and Kelly-Marie Clack (Origin Amenity Solutions) explored the nuances of dollar spot

management across different climates and turf systems. Some of their key takeaways included:

- Dollar spot thrives under dry but humid conditions—don't wait to act.
- Get rid of that dew! It is a breeding ground for disease.
- Even courses with good fungicide plans are vulnerable without cultural alignment.
- How to build a successful IPM using data.
- Exteris® Stressgard not only delivers control but supports turf under heat, traffic and drought.

They also shared real-world insights from UK and US sites using Exteris® preventatively, highlighting improved turf quality and longer intervals between outbreaks.



Missed the session? Watch the full webinar on-demand by scanning the QR code.

### Final thoughts

As dollar spot becomes more entrenched, a shift in mindset is required. Waiting for visible symptoms may be too late as by then, turf quality is already compromised. Through consistent cultural practices, informed monitoring and smart fungicide use, greenkeepers can stay ahead of this evolving challenge.



# Smooth operator

Discover how Toro's Intelli360 has the power to make the job easier



Toro's latest launch uses advanced technology to make life on the course easier. Called Intelli360, this cutting-edge digital solution allows golf course professionals to manage their equipment from anywhere, monitoring operating status, hours and upcoming maintenance needs.

## 1. Centralised platform

Intelli360 is built on the foundations of Toro's myTurf Pro fleet management software and provides a centralised platform that brings together all the information and insights needed for proactive decision-making.

As a web-enabled digital toolbox it is accessible anywhere and uses GPS mapping to deliver real-time information into golf course professionals' hands. An interactive map tracks machine location, operating status and maintenance requirements giving complete visibility to where equipment

is, what it needs and how it's used every day.

So why is this important? This level of detailed data allows users to create work orders and schedule labour all in one convenient place to improve efficiency, productivity, and utilisation, and making it easier to plan ahead.

## 2. No downtime

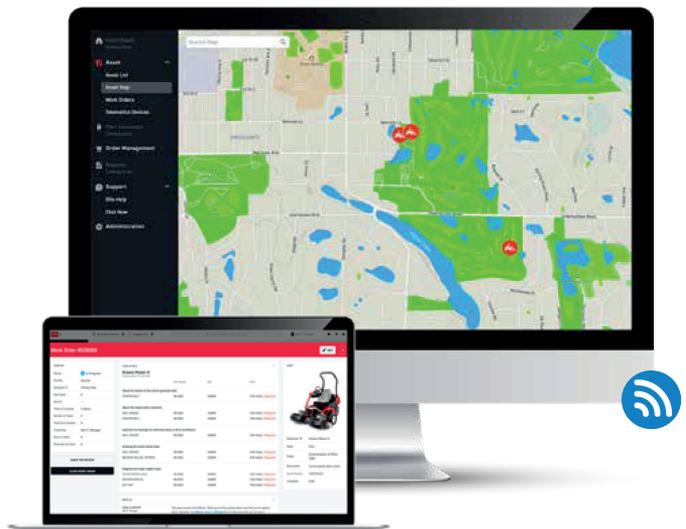
By providing all the real-time information needed to provide full fleet visibility, golf course professionals can check in on machinery maintenance requirements for the most efficient course operation.

Golf course professionals can find and order parts, schedule servicing and keep downtime to a minimum and in many cases prevent it completely, by setting due dates in one central place and ensuring each piece of equipment gets the maintenance it needs at the right time. The system

“There’s so much information golf course professionals need for operations across the course to run smoothly. With Intelli360 Toro provides everything needed to work productively and be proactive in planning. The convenience and having everything together in one place for efficient management to streamline operations across the entire facility cannot be underestimated”

**Jon Cole, Divisional Business Manager, Reesink Turfcare**

**Intelli360™**



From your staff, your fleet, to your course conditions, Toro's Intelli360 – a new web-enabled digital toolbox accessible from anywhere – brings together all the elements for the ultimate course management.

even knows to send a notification when stock is getting low so orders can be placed well in advance.

### 3. Precise management

The Intelli360 home page gives golf course professionals the ability to create work orders, schedule labour and allocate resources from one central hub. It works to the extent that if an issue arises and a piece of equipment throws a fault code, an alert shows up in the Asset Map which means it can be addressed and resolved immediately.

### 4. An investment in the future

New features are already on the horizon, including the ability to find and order inventory parts for planned maintenance, get instant notification of equipment faults for faster repairs, and the much-welcomed integration to Toro IntelliDash.

The IntelliDash dashboard will combine irrigation data with machinery requirements. From the course's agronomic conditions to weather and radar streams and evapotranspiration forecasts, Intellidash will deliver the final element for seamless integration of tools to shape the future of golf maintenance.

### 5. Specialist training and support

Intelli360 joins an impressive array of new Toro products featuring advanced technology and Reesink places such stock in this value it has developed a new role to drive sales, support and training on these product lines.

Lee Rowbotham, GeoLink and Digital Specialist at Reesink Turfcare, is available to discuss how this technology works and will boost productivity, call **01480 226800** or email **info@reesinkturfcare.co.uk**

# Break down your goals to make the journey simpler



Jaey Goodchild is an Agronomist at The R&A

Setting targets does not need to be complicated – take it one step at a time and tick off the milestones

Being a keen walker, I recently took a chance in a long-distance foot race through the middle of England, the type of event that runs at grassroots level. Predetermined check points break the journey up and cover the basics of tea and water, biscuits, fruit and sandwiches; accurately described by the organisers as “no bells and whistles”. It all ran like clockwork and it got me thinking about turf management and the greenkeepers that I have the fortune of meeting regularly on their ground.

I have this golden opportunity every week to see a wide variety of techniques and approaches from greenkeepers in all parts of the country, working with the whole

fantastic tools that enable quick and easy measurement of your surface performance. Quantifying your performance will give you a clear starting point and guide your strategy to achieve goals.

My colleague Paul Woodham has recently written an extended piece on data collection on the golf course that offers a great view into new surface performance and benchmarking technology.

So, what steps do you need to take to reach the next check point for the tea and biscuits? Look at the fundamentals and keep the steps clear; structure the management processes around simple greenkeeping operations and reaching

readings gives valuable numbers to quantify and refer back to, allowing refinement of operations.

Soil testing will quantify organic matter content but a quick check of a green soil profile with a knife will give an idea in the field of where the topdressing quantities should be heading. If these numbers need improving, keep it simple, adapt the topdressing and integration regime to step towards your goals.

Was your nutrition in place to capitalise at the earliest spring opportunity as we discussed last month when talking about seizing seasonal opportunity? Now that we have emerged from the uncertainty of spring and settled into more stable growth, managing broad nutritional needs could be simplified by merely measuring your clippings each day with a bucket. As clipping yield declines from stable mowing yields, is it indicating that nutrition may be required to contribute to consistency.

Knowing where you are now by creating a picture through data is the starting point. Simplifying the journey to a step-by-step process of proven operations will create an achievable path to attain your goals. **GI**

“Quantifying your performance will give you a clear starting point and guide your strategy to achieve goals”

scale of team sizes, budgets and site specifics.

But regardless of these variations, the one consistent factor among all those who best achieve their goals on the golf course, is the setting of a clear goal or destination and a thorough breakdown of their journey into clear and simple steps.

Knowing your current situation is crucial for setting goals and developing a plan to reach them.

Agronomic goals are what most of us aim for and over recent years we have seen the development of some

each step will be achievable.

Are your soils in the right place? Are they affording your turf the opportunity for root development and growth to depth? Are they giving your turf resilience?

Think about which aeration techniques will create the best opportunity for roots to easily grow to depth. It may well be the simplest operation that can easily fit into the work schedule and golf calendar.

Are the surfaces firm and is the organic matter accumulation being effectively managed? Taking firmness



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