In his own words, Kenny Mackay ‘got lucky’, but it could only be through hard work and determination that meant he was Head Greenkeeper of a prestigious Hertfordshire golf club within six years of joining the industry. He spoke to Kerry Haywood about his career path and life now at Wentworth Club.

**A day away is a day wasted**

“A day away from Chartwell is a day wasted”. That’s what Sir Winston Churchill said about his family home near Westerham in Kent, which has been in the care of the National Trust since his death in 1965. Neville Johnson went there to learn why its gardens and grounds are just as treasured as the house itself.
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Here lies the problem!

At the end of November, I was invited by a local Secondary school to address their year 11 students (school leavers in the summer of 2020). The ninety or so that attended in three groups listened to me talk about our industry as a whole, the benefits of an outdoor recreational vocation and the opportunities available to them through apprenticeships.

I talked around a PowerPoint presentation and just used a lot of pictures rather than regurgitate text on a screen. Given the last thirty years, I have a huge photo collection of work at numerous stadiums and amenity venues, so I thought there would be plenty there to excite a few of them, particularly those with an interest in top flight sport.

How wrong I was! Whilst I live with the hope that I may have planted a few seeds - in one or two of them at least - that they may revisit the thought of working in a world of sport, the majority seemed totally disengaged with the notion of a future career working outside.

And here lies the problem that our industry faces in recruiting new blood. These kids, this generation, can work their way around an iPad, phone or Xbox no problem but, for most, the halcyon days that we enjoyed playing football ‘up the park’, or making cycle tracks and dens in the woods are no longer on any weekend agendas. In short, being outside isn’t as much fun as being in the warm in front of a TV or computer screen.

It would also be fair to say that the wage scales in our industry aren’t nearly as enticing as those in many other industries; and I’m not sure how this can or will ever be addressed.

As a business, we have taken on twenty-three apprentices since 2010. Twenty-one of them completed their courses and time with us, and twelve of them remain within the company.

However, since we have a fair number of departments, all of them, bar one, have taken on roles in accounts, logistics, marketing and sales. The only one that came through this avenue in a groundsmanship capacity failed to complete his course satisfactorily.

For the last few years, my local schools (presumably this runs nationally as well) have operated ‘Forest Schools’ within the curriculum, which encourages primary age children to get out and discover nature on a weekly basis. It may be that this next generation will be more inclined to seek outdoor work but, in the meantime, we will have to work very hard to recruit good young talent.

People with the motivation to work in all weathers, producing quality natural grass surfaces for sport and amenity, continue to prove elusive.

I wish you all the very best for 2020.

Cheers
Dave Saltman

SAY THAT AGAIN!

“Over the last two years, we have taken the club to another level and it’s so rewarding to see that happen and be a part of it. Where else would I want to be?”
Kenny Mackay, Wentworth

“If you have a family member or member of staff who appears not to be working to their normal ability, don’t think they are being lazy or on a different planet - ask them if they are alright”
Ian Darler, Cambridge United

“We have a full season of rugby now and then a full term of football and then, all of a sudden, you need nine cricket outfields - on pitches that have been churned up for the last six months - on a three week turn around”
Will Temple, King’s School, Ely

“I believe if we don’t get it right at the beginning, it will just come back and bite us. If we can’t afford to do it right this year, save the money for next year. Do it once and do it right”
Scott Humphries, Oxford United

“I think internally the industry is doing well with lots going on for aspiring greenkeepers. If you want it enough, there are many roads you can take within our profession - but it’s not a given, and you have to work hard for it”
Danny Millar, Rudding Park
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Issue 88 December/January 2020

COVER STORY: Wentworth it

In his own words, Kenny Mackay ‘got lucky’, but it could only be through hard work and determination that he was Head Greenkeeper of a prestigious Hertfordshire golf club within six years of joining the industry. He spoke to Kerry Haywood about his career path and life now at Wentworth Club. P12

GOLF

Loop the loop

Wakefield Golf Club is an undulating parkland course in west Yorkshire. It comprises two loops of nine holes, both of which start and finish at the clubhouse. This is where Lee Williams met with Matt Booth, the club’s Head Greenkeeper. P20

Highland hopes

As Turnberry is to Ayrshire and Gleneagles is to Perthshire, Castle Stuart Golf Links has been conceived to be for the Highlands, a stunning championship links course opened in 2009, overlooking the Moray Firth. Course Manager James Hutchison has helped shape the golf course into what you see today. P30

Rudding marvellous

Less than three miles from Harrogate in North Yorkshire, Rudding Park Golf Club was originally part of the Forest of Knaresborough and still retains some of the ancient oak trees. Since the course opened in 1995, it has developed into a popular Yorkshire retreat with over 700-strong active members. Lee Williams met with Matt Booth, the club’s Head Greenkeeper to discuss the day to day running of the course. P40

MENTAL HEALTH

Life changing

It’s in Chapter 11 of Ian Darler’s Life’s a Pitch that he speaks about the life-threatening incident that nearly ended his career and plunged him into a very dark place. Here, Ian describes the incident in detail and explains the intensive surgery and recovery process he faced. P50

WINTER SPORTS

In deep water

Inverness Caledonian Thistle Football Club began life in 1994 and came to prominence, or perhaps notoriety, when the still considered minnows took on the might of Celtic at Celtic Park in the Scottish Cup, running out 3-1 winners. The Scottish Sun’s headline the following morning read; “Super Caley go ballistic, Celtic are atrocious”. P60

Scott’s struggles

At the time of writing, Oxford United lie seventh in the League One table, with ambitions of gaining promotion to the Championship. The club recently moved into their new dedicated training facility in Cowley, a few miles south-east of the city and a stone’s throw from BMW’s Mini factory. Lee Williams met with Scott Humphries, the training ground’s twenty-five-year-old head groundsman. P70

Just the tonic

EFL League One side Wycombe Wanderers are currently exceeding all expectations sitting top of the division, with hopes of promotion to the dizzy heights of the Championship. Adams Park Stadium is their home ground, which is where Lee Williams met with Turf Tonics employee and Head Groundsman, Sean Woodley on, what was, a very wet and windy morning in November. P78

Dale Stephen, Head Groundsman, Inverness Caledonian Thistle
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EQUESTRIAN

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TRAINING

Understanding the benefits of ongoing training
In this article, Reesink Turfcare’s training and development manager Neil Adams discusses the importance and benefits of machinery training in today’s industry, and speaks to customers who have recently undertaken some training and the benefits they attribute to that. P128

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The turf industry is rapidly changing and if turf managers are to thrive in a highly-competitive environment, we need to embrace new ideas and ways of thinking, evolving our methods to suit modern needs.

For almost 30 years BTME has been at the forefront of that change and the 2020 exhibition will feature product launches, major industry announcements and everything you’d expect from Europe’s premier turf industry event.

“OUR thanks go to the staff at Maxwell Amenity for hosting one of the best trips we have had for some time. You could see by the questions that they were asking, the students were clearly engaged by the presentations, and they found the whole visit really informative, and enjoyable too.”

The day finished with a site tour aimed at highlighting the importance of the various commercial departments and how they all contribute to creating and fulfilling a sale and providing a positive customer experience.
Dave goes back to school!

How do we attract new people into our industry?

A question that’s been asked so much over the last couple of years and one, I think we would all agree that, as an industry, we need to approach school/college leavers and educate them on the career opportunities available.

With this in mind, Dave Saltman Managing Director of Maxwell Amenity Ltd, recently visited Grove School in Market Drayton, Shropshire to speak with a group of ninety Year 11 students to provide an insight into, not only the life of a groundsperson or greenkeeper, but also the many other roles including accounts, sales, warehouse, journalism, marketing research and development etc.

Dave commented: “As an industry, we really struggle to get youngsters in. Since 2010, Maxwell Amenity has employed twenty-three apprentices; some of whom now hold senior positions within the company and proven that there is a career path into the industry.”

“It was a great honour to be asked to address the students at Grove School and I’m sure it went some way to creating an excitement and interest in what can be achieved; the opportunity to work outdoors in a healthy environment, being physically fit, the ability to carry out interesting and varied daily tasks and a sense of great pride after you’ve completed a good days work.”

“Within sports, the grass will continue to grow, and we need people to maintain those surfaces. With technology and products available, I believe the job is easier than it was twenty years ago - that’s not to say it isn’t difficult at times - but it’s a vocation and you’re getting paid to do something that you love.”

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Rubber crumb leaches environmental toxins

Chicken embryo model allows researchers to assess toxicity of environmental pollutants

New research, spearheaded by scientists at McGill University, reports on exposing chicken embryos - a model of higher vertebrate development - to leachate from rubber crumb used, for example, in artificial turf infill, to assess the toxicity of environmental pollutants contained in such material.

The new study, published in the journal PNAS, by a team of scientists from McGill’s Department of Chemical Engineering and Redpath Museum and Health Canada, is the first to use chicken eggs as a comprehensive model system for testing environmental toxins.

Nathalie Tufenkji, co-senior author of the new study and a professor in McGill’s Department of Chemical Engineering, said the use of a “higher vertebrate” testing model has the advantage of being able to measure system-wide effects of environmental toxins, something for which previous models used to test the toxicity of rubber crumbs - such as algae, water fleas, zebra fish and mammalian cell cultures - fell short.

“We were curious to understand what impact the rubber crumb might have on the environment and wildlife in general,” Tufenkji said. “Precipitation on outdoor fields containing rubber crumb might lead to leaching of chemicals into the environment, and how those chemicals may interact with vertebrate development and health are unknown.”

This multi-disciplinary effort demonstrated that the early development of chicken embryos is compromised when eggs are exposed to small amounts of water in which rubber crumbs soaked for seven days. When directly injected into the egg yolks, this leachate caused mild to severe malformations, including impaired development of the brain and the cardiovascular system.

Hans Larsson, a professor at McGill’s Redpath Museum, says that their new chicken embryo model will provide useful information about how toxins disrupt embryo development of such a complex animal.

“Chicken eggs are, relatively speaking, closely related to mammals, including humans;” said Larsson, the study’s other co-senior investigator. “Their genome, anatomy and development are closer to ours than the other standard models, so using them as a test system for environmental toxins may be the most efficient way to explore how these toxins might potentially affect human health.”

Tufenkji and Larsson’s teams now plan to further assess what kind of chemicals are released from rubber crumb under natural conditions in different environmental scenarios.

“We would like to test leachate from naturally weathered rubber crumbs and track its potential effects on chicken embryo development,” said Tufenkji.

This work received financial support from the Canada Research Chairs program, the Natural Sciences and Engineering Research Council of Canada, and the Canada Foundation for Innovation (Integrated Quantitative Biology Initiative).

Jim Nedin wins 2019 Edwin Budding Award

Jim Nedin, a consultant for Turf Industry Service Business Optimization in York, Pa., is the winner of the 2019 Edwin Budding Award from GCSAA.

The Edwin Budding Award, named for the inventor of the lawn mower, is given annually to an equipment manager or related innovator, technician, educator or engineer who has made a significant impact in the golf and turf business.

Nedin has been involved in the turf industry for more than forty years. He began his career as a golf course superintendent in the early 1970s and has taught turf industry-related seminars for more than thirty years. Nedin has provided technical support for a multitude of state, regional, national and international golf tournaments.

“Working in the turf industry has been much more than a job to me. It has been my life’s work and passion,” says Nedin. “There’s a picture of me standing behind my father’s reel-type power lawn mower when I was just 5 years old. At age 9, I worked in a lawn mower repair shop, and in my teens, I started working at a local country club, repairing golf carts and turf equipment. Eventually, I was promoted to assistant superintendent, then superintendent.”

“Being the recipient of this year’s prestigious Edwin Budding award is truly an honour,” says Nedin. “There are so many great people in this industry I’ve had the privilege of working with over the years. We get up every morning, go to work, and simply do our jobs. I am humbled and greatly appreciative to those who nominated me.”
Maxwell Amenity Ltd recently visited the FSB show in Cologne - the largest European exhibition for public spaces, sports and leisure facilities - and took a delegation of eighteen grounds managers from top independent schools in the UK.

The group were amongst 28,000 visitors from 128 countries and saw for themselves new products and innovations yet to reach the UK, whilst also experiencing unrivalled exciting stand designs from over 565 exhibitors.

Marketing and Sales Director, Dan Hughes commented: “Independent schools have been an important and successful growth market within our business. The opportunity for this group to come together, not only to experience a European exhibition, but to spend time communicating the way they work and compare issues and experiences proved invaluable. Due to its success, we are keen to organise future events for other key sectors in the industry.”

The two-day trip also included presentations from key members of Maxwell Amenity including Consultant Technical Manager, John Handley and Technical Sales Area Manager, Mark Allen.

Curtis Allen, Business Development Manager at Redexim Charterhouse said: “The show has always been an important fixture in our calendar, and we’ve been coming for the past fourteen years. It brings visitors from around the world and provides a ‘one-stop-shop’ for us to see customers, manufacturers and suppliers alike. The strong international contingent allows us to invest in our stand and it’s proven a successful show year on year.”

Kevin Utton, Director of Sports Sales and Marketing at Harrod UK Ltd commented: “It was great to exhibit for our 5th time at one of the world’s leading trade fairs for sports and leisure. It was also great to welcome to our stand many new and existing customers and to successfully showcase several new innovations and products to key industry clients.”

Matthias Polilmann, Vice President of Koelnmesse added: “FSB raised its already exceptionally high level once again. By following a future-orientated concept and covering the latest major issues, it has succeeded in attracting even more industry experts to Cologne. It is a clear statement confirming that the event is the most internationally important communication and business platform.”

School grounds managers visit European exhibition

Maxwell Amenity delegation of independent schools on the Harrod UK stand

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First school grounds seminar a huge success

A recent school grounds seminar held at Charterhouse in Surrey has been hailed a huge success by all who attended.

The event attracted over 50 delegates from all levels as several topical issues were explored and discussed. Supported by prominent suppliers and manufacturers in the industry - ICL, Limagrain UK, Syngenta UK and Charterhouse Turf Machinery - attendees had the opportunity to find out more about key subjects such as fertilisers, pesticides and fungicides, grass seed and aeration.

At a time when the industry is witnessing increasing pressure on pesticide usage and when registrations are getting tighter, the presentation by Glenn Kirby, Syngenta’s Technical Manager for the UK Turf & Landscape, was well received. From this seminar, attendees became more knowledgeable on how to get the best out of their products and also gained a greater understanding of fungicide timings, correct calibration and sprayer set-up, and how to choose the correct nozzles.

Sam Horner, Amenity Seed Specialist from Limagrain UK, offered a fantastic insight into the thought process behind the development of a grass seed mixture. From initial breeding through to going to a customer, attendees received first-hand information on characteristics of the plant, growing, harvesting, germination testing, creating a mix, percentages and the trials which go into producing a final product.

Henry Bechelet, ICL Technical Sales Manager UK & Ireland, focused on new regulations for fertilisers which are set to commence in 2022. There has been a lot of uncertainty over the new forthcoming legislation and Henry was on hand to answer some all-too common questions and clarify the situation.

Stepping into the stunning school grounds, delegates then had the opportunity to see a number of outdoor product demonstrations from Charterhouse Turf Machinery. Attendees found out how to relieve compaction and improve drainage with the OxyShot air-injection unit, the Verti-Quake® and the Verti-Drain®. In particular, representatives from Charterhouse Turf Machinery focused on the three styles of aeration - deep-tine aeration, linear aeration and high-pressure aeration.

The idea for this unique new event was born following discussions between a group of grounds managers from schools - Charterhouse, Whitgift, St Paul's, Christ's Hospital, Cranleigh, Reed's, The Royal Grammar School (RGS), New Hall and Harrow.

Host for the day, Lee Marshallsay from Charterhouse, provided an insight into how the seminar came to fruition. "After going to various events and exhibitions over the years, we felt that many of the seminars were mainly aimed at managers or those in a senior position."

"Ultimately, we are a group of grounds managers that meet up to talk about the industry because we want to help. We have taken something by the scruff of the neck and tried to drive something which is specifically for our sector."

Gary Player To Receive 2020 Old Tom Morris Award From GCSAA

Golf legend Gary Player - one of five men to win the career grand slam and namesake of The Player Foundation that has raised millions globally for underprivileged children and education - is the recipient of the 2020 Old Tom Morris Award from the Golf Course Superintendents Association of America (GCSAA).

Player, 84, is among an elite group of golfers who have won all four majors. The others are Gene Sarazen, Ben Hogan, Jack Nicklaus and Tiger Woods. The winner of nine major championships, Player’s road to the career grand slam started when he won The Open Championship in 1959. He went on to win the Masters in 1961 and the PGA Championship in 1962, and he completed the grand slam in 1965 at Bellerive Country Club in St. Louis at age 29.

The OTM Award has been presented annually since 1983 to an individual who, through a lifetime commitment to the game of golf, has helped to mould the welfare of the game in the manner and style exemplified by Old Tom Morris. Morris, a four-time Open champion, was the long-time superintendent at St Andrews in Scotland until his death in 1908. The OTM Award will be presented Jan. 29 during the Opening Session of the Golf Industry Show in Orlando.

A native of Johannesburg, South Africa, Player’s dedication to bettering the world fits nicely with GCSAA’s highest honour.

“I have tremendous respect for all thefellas and ladies and all the staff that get up early in the morning and prepare a golf course for members. They do an incredible job,” Player said.

“So does Player - in many ways,” said GCSAA President Rafael Barajas, CGCS.

“Gary Player’s legacy in golf is known worldwide, but he should be equally recognised for his philanthropic endeavours through The Player Foundation,” Barajas said. “We are truly honoured to bestow the Old Tom Morris Award upon a consummate gentleman who has worked tirelessly for underprivileged children and impoverished communities around the globe. Gary Player embodies not only the best of golf, but the best of humanity.”

BASIS Points for magazine subscribers

BASIS awards two CPD points for ‘paid-for’ subscribers to the hard copy version of Pitchcare magazine, due to the “diverse range of content that relates to the control, management and use of pesticides”.

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It’s not just cricket!

Trafford Council and its partners have taken a major step forward in delivering ambitious plans to transform the area around the Town Hall and surrounding buildings into a new ‘Civic Quarter.’

The Civic Quarter Masterplan covers a 120-acre site taking in the Town Hall, Lancashire Cricket Club, the former Kellogg’s site including the University Academy 92 (UA 92) campus.

The Council’s proposals for the area include building a new leisure centre, an improved public realm, opportunities for new homes and offices and improved cycle and pedestrian routes. They also include the possible development of a new public piazza and ‘processional route’ linking Lancashire Cricket Club with Manchester United’s Old Trafford stadium.

Lancashire Cricket Club also announced its plans for further significant development at Emirates Old Trafford alongside the Council’s developing proposals.

The new 4,850-seater stand, which replaces the existing Red Rose Suite, is set to feature a pitch-view suite, enhanced members facilities, a heritage centre, ticket office and retail shop. It will take the capacity of Emirates Old Trafford to 26,700, making it the largest cricket ground outside of London.

Huge public support for new Everton FC stadium

The designs for Everton Football Club’s new £500m stadium have received a “huge vote of support” from members of the public, according to the club.

The Premier League club undertook a public consultation on the plans for the 52,000-capacity, which saw more than 43,000 respondents offer their feedback.

Analysis of the data revealed that 96% of the respondents want The People’s Project - the combined stadium development plan and redevelopment of the existing Goodison Park site - to continue.

In addition, 91% of people support the proposed mix of uses and scale of development at the club’s current home to create a community-led legacy that could include new homes, health, education, youth and business facilities.

According to Denise Barrett-Baxendale, Everton FC’s CEO, the results of the consultation means that the club will now file plans for the stadium - which will be built at the semi-derelict Bramley Dock - by the end of 2019.

“These results are a huge vote of confidence in our continuing plans for all aspects of The People’s Project,” she said.

“This is a really important milestone and having the level of support we have from the Liverpool City Region public means we can submit for planning before the end of this year with confidence.”

No.1 Court: more than a support act

Wimbledon’s second largest venue has undergone a number of upgrades since it opened in 1924

No.1 Court was originally attached to the west side of Centre Court and boasted a capacity of just 3,250. It featured an elegant balcony from which the AELTC’s great and good could observe at their leisure.

In 1997, the structure was deemed too small and was demolished. The Millennium Building now stands on the space it once occupied, providing facilities for media, players, Members and Officials - No.1 Court was replaced by a purpose-built 11,432-capacity venue in Aorangi Park.

Over the last three years, No.1 Court has undergone major refurbishment works including new fixed and retractable roofs allowing for uninterrupted play throughout The Championships.

A central consideration of the redesign was ensuring the right shape of roof opening was created to maximise the natural light levels on the court to support grass growth, whilst also retaining elements of the circular feel and character of No.1 Court - reflecting the iconic design of the original roof.

The complexity of working on an uncompromised sports venue for three Championships prior to completion required a very proactive, highly informed and motivated consultant and contractor team. The importance of very detailed 3D modelling during the design coordination and procurement process was fundamental to reducing risk and ensuring the contractor could meet both the qualitative and programme requirements.

The No.1 Court roof includes eleven steel trusses, each weighing 100 tonnes - two more moving trusses than Centre Court due to the larger roof aperture. Loading each of the prefabricated trusses required a 600 tonne crawler crane, with 300 tonnes of counterweight supported by significant temporary works in the existing basement.

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Keynote interview

Wentworth it

In his own words, Kenny Mackay ‘got lucky’, but it could only be through hard work and determination. He spoke to Kerry Haywood about his career path and life now at Wentworth Club.
I had an ambition to get to Wentworth and I got here. I’m still progressing my career within the business and I can’t ask for more than that.

Pitchcare: What is your official title?
Kenny Mackay: Since March this year, I have held the title of Director of Golf and Greenkeeping at Wentworth Club.

What sports were you involved with in your younger days - did you play golf?
I come from East Kilbride near Glasgow and football was ‘the’ sport we played the most. But I played everything really, usually depicted by what was on television at the time … when Wimbledon was on I played tennis and, when there were major golf tournaments, I wanted to play golf. I think that’s a trend that still happens with the youth of today which can only be a good thing!

How did you become a greenkeeper and what was your career progression?
It was through my love of golf. I played a lot when I was in my late teens and subsequently applied for a few PGA assistant positions, but they never amounted to anything. So, over the next few years, I got into the industrial trade and worked as an apprentice builder, but I didn’t like that, and it didn’t last long! I then turned my hand to bar work and anything really to pay the bills until, at the age of twenty-seven, my passion for golf was still at the forefront of my career wishes and I enrolled in a full-time greenkeeping course at Elmwood College. I was lucky enough to get a placement at St. Andrews on the Old Course and, from there, I moved to the London Golf Club in Kent, where they were constructing two courses. It was there that I worked my way up the ladder pretty quickly, gaining various qualifications along the way, including management levels, leading to my position as Deputy Head Greenkeeper at Hanbury Manor Golf Club. In 1997, six years after giving up the bar career, I was Head
Greenkeeper at Hanbury which was a really fast progression. I think my golf background helped and an element of being that little bit older as well as being in the right place at the right time!

Next, I moved to the Midlands as Head Greenkeeper of Forest of Arden Marriott Hotel & Country Club for two years and this led to me becoming the Group Golf Courses Manager for their sixteen hotels and courses. During this time, and now in my mid-thirties, I travelled round all the sites dealing with capital, investments, operational budgets etc. and I undertook a business school qualification. In 2005, Sean Quinn bought the Belfry Hotel and Golf Resort and my name was put forward to join the team. That was an important part of my progression to Wentworth as it’s 54 holes, a huge golf estate and meant I was working on European Tour events so, when this position came up, I was fully equipped to take on the opportunity. It was always my dream to get here as I consider it the Real Madrid of golf courses, so when I got this position all the hard work was worth it.

How long have you worked at Wentworth?
I started here in April 2012 and have held my current title since March 2019.

What would you consider has been the highlight of your career so far?
The pinnacle has to be getting to Wentworth. Over the last two years, we have taken the club to another level and it’s so rewarding to see that happen and be a part of it. Where else would I want to be?

How has the industry changed over the years?
It’s changed an awful lot; I think the biggest being in presentation. In the last ten years, machines and the technology behind them have improved so much, allowing us to present the course as we do. The biggest challenge for me is keeping up with the developments.

Do you find the skillset of youngsters coming into the industry is very different today because of the technology available?
Absolutely. With phones and apps being

This winter my aim is to do some presentations and get some energy going around the Wentworth Intern Programme and I’m hopeful that it will be strong and pave the way for the years ahead.

Golf Courses Manager, Dan Clarke
I played everything really, usually depicted by what was on television at the time ... when Wimbledon was on I played tennis and, when there were golf tournaments, I wanted to play golf.

So, what does your day consist of now you’re not doing the practical?

Dan Clarke, Golf Courses Manager has everything under control, but I still like to get out on the course - especially when there’s a big event coming up. I also liaise regularly with Grounds Manager, Paul Robinson, to ensure that everything is running smoothly across the site and that members are happy, as that’s our main aim! I’m based up in the Clubhouse now, so I have a lot of interaction with members, so the relationship is very strong and they like the fact they see me around to pass on any comments. I also oversee a lot of the customer service side of things such as concierge, retail shop, golf pros etc - there are a lot of touch points now and I oversee them all, so it keeps me busy. Currently, the retail side of things is my biggest challenge as I’m not so used to that. I’m very lucky that I live on site and I can just fall out the door, but that does also mean that I spend a lot of time

able to speak to machines and identify what’s wrong, the need for in-depth machinery knowledge is no longer a requirement ... which isn’t a bad thing, but it’s very different to when I trained.

What machinery developments have helped you the most?

I think the biggest thing going forward will be the use of GPS precision sprayers. The likes of the John Deere AutoTrac increases application accuracy and consistency, lowers input costs through reduced overlaps and misses, helps protect the environment and increases productivity by reducing operator fatigue.

What’s your favourite piece of kit?

When I was hands-on day in day out, I always loved using pedestrian mowers and hand cutting the greens; there was something walking behind the mower then standing back to appreciate what you had achieved. I also really enjoyed changing holes.

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at work - usually around twelve hours per day! That doesn’t matter though when you love your job as much as I do.

There have been many changes to the West Course over the past couple of years … have these all been finalised and received well?

In golf, you’re always looking to see what you can do next on the course, but it would only be minor changes such as fine-tuning woodland/heather or changing the cut around the green etc. The guys are currently carrying out drainage improvements, but we certainly wouldn’t be digging anything up again or adding bunkers.

I read you’ve spent over £165k per bunker. Is this true?

That’s 100% fake news. We spent nowhere near that! The biggest outlay and also the biggest improvement by far was the installation of the SubAir system. It wasn’t at the top of my list when I had it, but it’s absolutely fantastic. People know about it, people talk about it, and we’re lucky enough to have it. It’s not something you can do retroactively because of the sheer amount of power cables and disruption, so I’m so glad we did it at the time.

As home of the BMW PGA Championship, I presume this comes with a lot of added pressure?

There’s always pressure with tournament golf. We have delivered for the past couple of years, and we’re Wentworth so that comes with its own pressures of performing. In June this year, we were delighted to announce our partnership with John Deere in the exclusive supply of greenkeeping and grounds machinery.
This agreement represented a significant investment to ensure our fleet is always at the leading edge of technology and innovation and played a huge part in this year’s tournament.

**The 2019 tournament moved from May to September, how did this affect preparations?**

In all honesty it didn’t make much difference. The main change during the tournament was having to use lighting rigs from hole to hole due to lack of daylight and ensuring the players got round and finished before it got dark. Once they were all finished, the team were out there, making sure the course was ready for the next day - which was more challenging than before in the dark! Going forward, I think the timing later in the year is a positive. It means we’ve had a whole season of golf and growth, rather than getting it ready in April when it’s been wet and the course isn’t quite ready. Having said that, if we had a summer like 2018 and the drought that went with it, we might struggle.

**Is there anything you would have done differently, professionally and personally?**

I honestly don’t think so! I got lucky, but you equally have to work hard and prove yourself in order to get lucky. I had an ambition to get to Wentworth and I got here. I’m still progressing my career within the business and I can’t ask for more than that.

**What’s the best part of your job?**

The Club and the people at Wentworth are fantastic ... from the staff right through to members, and being a part of this is a great feeling. It’s an old club but it doesn’t have that...
traditional feeling and everyone that works here wants to be here and the members are so friendly.

And the worst?
The weather obviously is something beyond anyone’s control. There is no worse a feeling than when you have worked so hard in preparations for a tournament and then you get bad weather. We’ve been quite lucky (touch wood) but you just never know and can’t plan for it.

How would you raise the profile of greenkeeping and sports turf in general within the media?
I’m unsure what people outside of the industry think working on a golf course entails and I think they are usually shocked by the intricacies of the work involved. We’ve got a very big challenge as an industry to get into schools and promote ourselves. As well as trying to get a link into a couple of universities in the UK, we’re also actively talking to one of the big universities in the US who do intern programmes. It may not be the case that school leavers want to be greenkeepers, but if they want to be involved in the greenkeeping industry in some way, we want Wentworth to be at the forefront of driving this initiative. This winter, my aim is to do some presentations and get some energy going around the Wentworth Intern Programme and I’m hopeful that it will be strong and pave the way for the years ahead.

Do you think those steps would encourage young people into the industry?
We have already signed a couple of people onto the programme and we hope that it will pay dividends in the future. We are also keen to employ more local labour - mainly because we believe they are likely to train and stick around - rather than moving on to other positions. We recently held a recruitment open day, which the industry has never really done before, but was very successful. It was held on a Saturday and provided an opportunity for the interested parties to watch presentations, see how we work, have tours of the courses and ask questions etc. Of the twelve persons who attended, we hired eight and an instant bond was formed amongst them from going through that process. I would encourage more courses to do a similar thing for recruiting purposes and think a little differently about how we promote ourselves.

What advice would you pass on to youngsters getting into the industry?
Work hard and learn as much you can. Always ask questions of peers as they should always want to pass on their knowledge. Education and networking are so important. I’m such a dinosaur when it comes to social media and youngsters do it so well they show me up!

Thank you for your time.
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Lowers water surface tension for improved infiltration and drainage.

Aids drainage to potentially help maintain surface firmness.

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Wakefield Golf Club

Loop the loop

Wakefield Golf Club is an undulating parkland course in West Yorkshire. It comprises two loops of nine holes, both of which start and finish at the clubhouse. This is where Lee Williams met with Matt Booth, the club’s Head Greenkeeper.

Matt Booth has been Head Greenkeeper at Wakefield Golf Club for the last four years, after leaving Howley Hall Golf Club where his career in greenkeeping first started twenty-six years ago. “I just fell into greenkeeping really; I was doing bits of all sorts beforehand. Then a job for a trainee came up at Howley. Over the years, I gained my NVQ Levels 2 & 3 in Sports Turf (studying through Askham Bryan College), chainsaw certificate and spraying licenses PA1, 2 and 3. After working my way up the ladder, I eventually became head greenkeeper; a role I performed for seven years before coming to Wakefield. Whilst I have been here, I have taken out a tree surveying course with Lantra.”

One of Matt’s first priorities was to get the team back up to speed with their qualifications and training. “Most of them had their NVQ Level 2 but, for one reason or another, had stopped any further education. One of them has been here for the last twenty-five years and not taken out any further training or qualifications for the last eighteen years. So, we have just got him through his Level 3, alongside one of the other lads, through Myerscough College. Most of them now hold their chainsaw licences, and one of them has been on a mole course, as you must be qualified now in the safe use of aluminium phosphide for vertebrate pest control. The club has been very supportive and not turned down any requests so far. All we ask is they put a letter of interest in, stating why they would like to take the course.”

Helping look after the course is James...
Heaton, Deputy Head - four years’ service, NVQ Level 3 in Sports Turf, spraying certificates PA1, PA2 & PA6 and CS30, 31/38. John Hampton, First Assistant/Mechanic, eight years’ service, NVQ Level 2 (currently working towards Level 3), PA1, PA2 & PA6 and CS30 and 31. Dean Ward, twenty-six years served, NVQ Level 3, PA1, PA2 & PA6, CS30, 31/48, and first aid. Andy Smith, seven months, NVQ Level 4, PA1, PA2 and PA6.

Matt works with the STRI who collect data once a year from the greens and carry out a general overview of the course. “Our last visit was in January with Gwynn Davies to discuss sustainability. Once the results came back, Mike Brear and I put a preventative fungicide and fertility programme together, which seems to have done the job so far this year, after having a big outbreak of anthracnose last year. It is good to have the STRI’s support and, if there’s anything we are unsure about, I can pick up the phone and speak to them. The club had Jonathan Gaunt from Gaunt Golf Design come in before I joined. He provided an architectural report on the course, which mainly looked at bunker reshaping on the course.”

Matt tells me they aim to apply two

To try and put the greens back to finer grasses would see our budgets go up massively and our maintenance schedule increase

Team talk

JAMES HEATON (SHAGGY) - DEPUTY HEAD GREENKEEPER

How did you first make the decision to start a career in the sports turf industry? I played golf from the age of around ten, so quickly gained an interest in what went into maintaining and preparing a golf course. I did work experience at The Manor Golf Club and decided it was a career I wanted to pursue. After leaving school, I enrolled at Askham Bryan College to study Level 2 in Sports Turf and started an apprenticeship at Howley Hall Golf Club.

What are the biggest challenges you face? As with most outdoor based careers, the weather is always the biggest factor followed by budgets.

Are you currently working towards a qualification or taking any extra training? In the coming months, I am looking to do a 360-excavator course and a chainsaw refresher training.

What do you enjoy most about the job? I have always been an outdoors person, so for me that is the best part of the job as well as seeing the results of the hard work that goes into preparing a golf course to the highest standards.

What do you find the most difficult part of the job? The ever-changing weather is the biggest challenge as that is one of the biggest factors in how well the course can be prepared.

How could the industry as a whole help support and help further your career? I think there could be more funding available for courses, as I know golf clubs don’t always see training as a big priority when budgets are already stretched.

Do you attend industry shows or educational days? I attend BTME every year to see what new things are happening in the industry.

Are you a member of any industry bodies? The golf club pays our BIGGA membership.

Do you read Pitchcare magazine or visit our website? I do read Pitchcare as I think it’s one of the best magazines - usually full of new machinery and ideas.

Where do you see yourself in the future? I am currently happy in my role as Deputy Head Greenkeeper but, at some point in the future, I would like to take the step up to Head Greenkeeper.

Is there anyone person in the industry who has inspired you so far? I would say the Head Greenkeepers I have worked under; Mike Bussey and Matt Booth. I have had the chance to learn different things and ways of doing the job from both. It also shows there are different ways to set up a golf course, whilst still achieving high standards of presentation. Luckily for me, both of them were keen on training and education which has got me to where I am today.
hundred tonnes of sand on the old push up greens per year. “The last soil sample came back at ninety-two percent sand, but that is just in the top four inches. Below that is blue clay and pockets of sandstone; this gives us a few issues on some of the greens that flood quicker than others. But the nature of the beast is that they were built to retain moisture. We don’t do too bad and manage to stay on the greens all year. We are looking to do some drainage work on some of the problem greens we have identified – the worst being the fourth and the seventeenth - once funds are available.”

“The club has a policy of no temporary greens, so the thing we do now, rather than the course be closed, is to cut a hole in the fairway, so when the frost is in the green, and it is starting to come out, golfers have an option to go out, whereas normally we would have shut. To say we don’t shut would be a lie; if there is snow on the ground, it shuts...
Getting Personal

Matt Booth - manners don’t cost anything, especially when you’re naked in hotel corridors

Who are you? Matt Booth, Head Greenkeeper at Wakefield Golf Club.

Family status. Married to Alison with two boys (not so little) Joe and Jack and my dog Ziggy (the naughtiest Boston terrier around).

Who’s your hero and why? My mum, for working three jobs so we didn’t miss out on anything.

What's been the highlight of your grounds career so far? Becoming head greenkeeper and proving that I can do it at more than one golf course.

If your younger self saw you now, what would they think? You haven’t done bad.

Which famous people wind you up? Most of them.

What job would you love, other than your own? A PE teacher, but I didn’t have much dedication at school.

What was the most embarrassing moment in your life? I have a tendency to sleepwalk. I once found myself naked in the corridor of a hotel and had to ask the receptionist to let me back in my room.

Brexit or remain? Brexit.

What is your favourite film? Any gangster movie - preferably with Robert de Niro or Martin Scorsese directing.

What scares you? Something happening to my family or, running out of cider on a Friday night.

What would your autobiography be called … and who would play you in the film? More than just a grass cutter. Jason Statham.

Do you have a lifetime ambition? Being mortgage free.

Which three people, living or dead, would you invite to a dinner party? My uncle Sean - who passed away before I could really get to know him, Neil Young and Audrey Hepburn.

What's the best advice you have ever been given? Manners don’t cost anything.

What's your favourite piece of trivia? Elvis never performed a single encore, so when he left, he wasn’t coming back. Hence the phrase ‘Elvis has left the building’.

What's your favourite smell? Sex panther (Anchorman).

Which three albums would you take to a desert island? Neil Young - Harvest, Marvin Gaye - What’s Going On and Van Morrison - Astral Weeks.

What's the daftest work-related question you have ever been asked? Are the greens so wet because of the wetting agent?

What's your favourite piece of kit? Toro ProCore 648.

What three words would you use to describe yourself? Conscientious, irritable and loyal.

What is the single most useful thing you could tell a 16-year-old groundsperson/greenkeeper? Take in as much as you can from the older hands, go on as much training as we can. It’s a matter of trying to keep a percentage of bentgrass in the greens, so they don’t go more in favour of the meadow grass. I’m not one of those who believes poa is all evil; we must work with it.”

“...the greens back to finer grasses would see our budgets go up massively and our maintenance schedule increase. We have done a lot of work to try and refine the meadow grass and, if you look at it now, you would think it was a fine grass species. Obviously, the seed heads are an issue, but we use Primo Maxx to stop it reproducing as quickly as it wants to. As well as this, we will go out every fortnight and verti-cut using our Greentek Thatch-Away units, varying that between two and three millimetres depending on what we are trying to do. We recently invested in a set of harrel rollers so we can just open the top up a little. This is followed by topdressing with a quarter...
tonne of sand a green and brushed in using our new Charterhouse speed brush. Like any parkland course, we are governed by the seasons. Sometimes, there can be a lot of seed heads no matter how we try and control it.”

The remainder of the course is built on a sandstone/clay base with only six inches of topsoil in places. This can cause issues with drainage which Matt is trying to address. “Some drainage work has been carried out on the fairways in the past, and we have done some drainage work to try and catch the worst areas. When I first joined the club, I put a vertidrain plan in place, which is carried out by Chappelow Sports Turf twice a year. The beauty of that is they bring in four machines and can be in and out in a day. When we first started, we were probably getting a depth of eight-inch; now we are getting down to twelve inches. This has made a massive difference on the fairways drainage-wise. There was once talk that you couldn’t grow grass on them, but now we have good coverage on all the fairways.”

The irrigation system was put in during 2011 and is a fully automatic Bailoy Gemini system, with Toro heads around the greens and into the aprons, Rainbird and Hunter heads in the tees, and two sprinklers in the first fairway. Matt has a few issues he would like to resolve. “In their wisdom, they decided to put the sprinklers in the middle of
some of the tees. This is an issue when undertaking various maintenance tasks, which is a bit frustrating, especially when you go to other tees and they have put them on the edge. We have already done the 18th tee and hope to move more to the edge as we move forward, but the issue is when the club spent big money on the system, they are reluctant to re-invest. There will come a time when they have to look at upgrading or replacing the system, but it did cope well in the summer of 2018.”

Matt talks me through cutting heights, maintaining speeds and aeration on the greens. “We cut every day using the Toro Greenmaster 3250 D’s at a height of 3.5mm, which gives us the scope to go a little lower if we want to. We have been down to 3mm, but we have found that we can maintain the speeds at 3.5mm when combined with using the vibrating rollers. The speeds the club are looking at on the stimpmeter are nine and a half to ten according to the course policy document. We are regularly ten to ten and a half. Sometimes we must re-in them in a bit because of the shape of the greens. We will cut as and when required in the winter months at 5mm, and occasionally put the vibrating rollers over if we have done any slitting or ProCoring. Through the summer, we will use 8mm micro-tines at a depth of four inches with two-inch centres using the Toro ProCore 648. To get around the course and minimise disruption, I have a good set of lads that will come in at 2.00am in the morning to get them done. Chappelow’s come in every March and September to undertake a deep verti-drain, achieving depths of twelve inches using half-inch tines. With all the maintenance practices combined, we have managed to reduce the organic matter massively since I have been here.”

The club has always bought their machinery outright, either new, second-hand or on hire purchase as required. They are currently looking at a replacement deal. "With the amount
of cutting we do and the hours we can put on the machines, we are looking at a three or four year deal with either Toro through Yorkshire Turf Machinery, or John Deere through Balmers GM, who are just down the road. We invested in some new Toro kit when I first started in 2016, and now it’s a matter of keeping up to date and adding to it as required. It will be about what best suits the course, and if it can cope with the heavy amount of work we put on them. I have always leaned towards Toro, but I must admit the John Deere machinery has come a long way.”

Matt is lucky to have two of his lads who look after the general servicing on the machinery in-house. “John Hampton has been messing about with engines since he was a little lad. He amazes me with what he can fix and has just been made up to first assistant/mechanic. He’s supported by James Heaton aka Shaggy! They both see something once, and they are away; there’s no scratching their heads thinking how do we do that again. The dream would be to invest in our own grinders as, with the amount of sand we put down, the cylinders, are being sent away five times a year to be reground. In the long run, our own grinders would give us more flexibility and, over time, save us money.”

Matt and his team are set to continue with their bunker programme this winter, to try

It’s great when you see the wildlife; we have been lucky enough to see badgers and deer. Moving forward, we are looking to introduce heather in some areas around the course
and achieve some consistency. “It’s a matter of removing the sand, lining them the best we can with clay to stop stone contamination coming through, drain and refill with sand. We have currently done five holes to that spec, and they have been great, not holding any water with the wet spell we have had so far this year. The plan is to get all the bunkers done in the next five years. We are looking at reshaping some of them further down the line but, with the costs involved, the club will have to decide if that is the way they want to go.”

James Hutchinson from BIGGA was called in to instruct on how best to improve the ecology around the course. “We have cleared some coppices out and grown the grass up in-between, so the birds and the beasties can live in peace. A great site this year, that I have never seen on a golf course before, was a snake near the sixth pond, which made me and Dean Ward jump. It’s great when you see the wildlife; we have been lucky enough to see badgers and deer. Moving forward, we are looking to introduce heather in some areas around the course. I’m led to believe they had it years ago, so it would be nice to reintroduce that. We have put bird boxes up and a feeding station at the side of the sixth pond. The ponds on the course are inhabited by Great crested newts which are a protected species. DEFRA come in every year to count them, and I believe the population is going up.”

What’s in the shed

Toro ProCore 648
Toro Greensmaster 3250-D
greens mowers x 3
Green Tek Dyno-Core
Toro Reelmaster 5610 fairway mower
Toro Reelmaster 6500 fairway mower
Toro Greensmaster 3500
Sidewinder
Toro Rough Mower 4500-D
Iseki mini deck mower
Toro 7210 zero turn mower
John Deere Gator
Toro Workman
Kubota L3830 tractor
Kubota L3600 tractor with front loader
Pedestrian sprayer
Pedestrian sprayer (60 Litre)
Toro HoverPro
Hayter Harrier rotary mower
Honda Pro rotary mower
Amazone GHL-T 150
Charterhouse Speed Brush
Toro Sand Pro 2040Z bunker rake
STIHL chainsaw/pole saw
Husqvarna 560 XPG chainsaw
Husqvarna 550 XP chainsaw
Husqvarna brushcutter
STIHL BR 600 backpack blowers x 2
STIHL BG 86 handheld blowers x 2
Agrimetal leaf and debris blower
STIHL 81R hedgecutter
Bernhard Rapid Facer
Greentek roller cassettes

Club history

Wakefield Golf Club was first established at a meeting held at The Bull Hotel, Wakefield in August 1891. It is among the oldest private members clubs in Yorkshire. Nine holes were laid out on common land at Heath and play commenced on 2nd April 1892.

By 1910, many members were dissatisfied that it was not possible to extend the course to 18 holes, combined with the disadvantages connected with playing on common land used as a recreational area by the public.

The desire to leave the Common was not unanimous on financial grounds that there were not 200 members that would be in a position to pay an annual subscription of three guineas. Despite this, the proposal to build an 18 hole course on old pasture land at Woodthorpe was adopted by a majority. The dissenters subsequently formed Heath Golf Club and continued playing on the original links until the mid-1930s.

The late 1930s saw the demise of Heath Golf Club, the final straw being the opening of the municipal course at Lupset. There is little evidence of its existence after 1939. In 1938, Wakefield accepted about one hundred Heath members without payment of any entry fee. The original clubhouse remains today as a residential property.

The parkland course, now situated of Woodthorpe Lane, Sandal was first laid out by Alex Herd in late 1910 and work commenced on its construction soon after. Dr Alister Mackenzie was commissioned in 1911 to advise on bunkering. The course opened for play on 30th September 1911. The length of the course at that time was 6,721 yards, 58 yards longer than the current 6,663 yards.

Easy to walk, it comprises two loops of nine holes, both of which start and finish at the newly refurbished clubhouse.
NEW powerful systemic difenoconazole plus fludioxonil contact action delivers reliable control whatever the weather - apply and it’s rainfast in 30 minutes! Two applications per year.
As Turnberry is to Ayrshire and Gleneagles is to Perthshire, Castle Stuart Golf Links has been conceived to be for the Highlands, a stunning championship links course opened in 2009, overlooking the Moray Firth. Head Greenkeeper James Hutchison has helped shape the golf course into what you see today. Lee Williams reports.

I was intrigued to know how James first got into the industry and how he found himself getting involved in such a big project like Castle Stuart. “At the age of sixteen, I started my career as an apprentice at Boat of Garten Golf Club, travelling twenty-two miles on a moped for the first twelve months I was there. I enjoyed working at the Boat - unlike some clubs up here, it had money, education was good and they were using a lot of the latest machinery. The head greenkeeper was keen that all team members carried out a variety of jobs, so that you weren’t just doing the same thing all the time. He would explain why we were doing a certain job and why they were applying fungicides and wetting agents. It provided a good education, as well as a good job, and I managed to work my way up to deputy head, six years before I left for Castle Stuart.”

“That was twelve years ago, and the course had been undergoing construction for a year. I was back and forth to Castle Stuart at least once a week, bugging Course Manager, Chris Haspell for a job. A greenkeeper position finally came up (which would be part of the construction team), so I had to take a pay cut, but the opportunity, for four or five of us, would be the chance to become deputy head if you were good enough - so, I took the risk. We were all part of the building process for a year and a half until, in the last six months before opening, four of us went for the deputy head position. As part of the process, we each oversaw the whole site for two weeks which included thirty-tonne dumpers, breakdowns, getting the sand in, getting it shaped up and getting it ready for hydro-seeding on a Friday. In all fairness, my fortnight had the most breakdowns of the whole lot but, thankfully,
He taught me that you have a job to do and you will do it to the best of your ability, but don’t drag yourself down if you’re having an awful day; at the end of the day when you’re working with nature, you can’t predict it.
I must have done something right to get offered the job. Then, after that Chris and I worked closely together with a small team of twelve. We like to think we are in the higher bracket of golf courses, some of whom have at least twenty greenkeepers, but we have a good team who work hard and make up for that.”

“Visitors see a new golf course and think it’s finished, but that couldn’t be further from the truth; drainage alone has taken eight years to get right in some areas. Chris left two years ago for another course which is not yet open, and I took over as Head Greenkeeper.”

Since then, the knowledge James gained from helping to build the course has been priceless. “Being part of the project from scratch means I have a much better understanding of the course itself. You know exactly what is underneath the surface; the depth of the rootzones, where the drains are and the irrigation system. The thinking process becomes different, for example, when we’re shaping areas I’m cautious and aware of not making pinch points to force everyone to walk the same way or balls collecting in the same place on a hole - you have to have movement so balls can shed left and right.”

James also took inspiration and knowledge from greenkeepers he has worked with throughout his career and has a lot of respect for two of his past bosses. “Firstly, Alan Dobie at the Boat - his whole demeanour was so calm and he would never get wound up or get low about things (or at least he didn’t let it show). He taught me that you have a job to do and you will do it to the best of your ability, but don’t drag yourself down if you’re having an awful day; at the end of the day when you’re working with nature, you can’t predict it. Second is Chris Haspell; he is very well-educated man when it comes to sportsturf management and, like Alan, he would always try and explain everything and encourage us to ask questions. The course is made up of pure fescue and his knowledge on this subject is unbelievable. I have certainly gained an understanding from him about how it grows and what is needed to make it work.”

“This course is a lot different to the Boat (featured in our October/November issue),

I think networking at shows during the day, and even at night whilst you are at the bar, allows you to gain a lot of knowledge from your fellow greenkeepers around the country and overseas.
We’re based in the Highlands of Scotland so we honestly didn’t think it would be such a problem, but now the process is forced, and we are going have to find water for ourselves.

which is heathland including bent, fescue and poa, but here we are mostly fescue. People have a tendency to think it doesn’t need much water, and whilst it doesn’t need as much feed as ryegrasses and other species, it still requires a little bit. Changing my mindset from a heathland to a links course, and the different skills required has been a challenge, but I’m enjoying it.”

James continues to gain knowledge and qualifications through the Jacobsen and BIGGA Future Turf Managers Initiative and previously obtained his NVO levels 1, 2 and 3 in sportsturf at Elmwood College.

James likes to network with greenkeepers from surrounding areas. “I’m lucky that there’s a group of greenkeepers nearby, from the likes of Kingsbarns, Skibo Castle, Royal Dornoch and Trump Turnberry, and we meet up whenever we can to bounce ideas off each other. It’s not like the old days, when everybody used to keep themselves to themselves; we generally put any issues or problems out there and ask each other ‘have you come across this’, ‘what products are you using’ etc.” As well as seeking advice locally, James takes the long trip down to Harrogate for BTME every year. “I think networking at shows during the day, and even at night whilst you are at the bar, allows you to gain a lot of knowledge from your fellow greenkeepers around the country and overseas.”
James Hutchison - can someone explain what shinty is please?

Who are you? James Hutchison, Head Greenkeeper at Castle Stuart Golf Links.

Family status? I have two children.

Who’s your hero and why? My parents - for keeping me on the straight and narrow.

What’s been the highlight of your grounds career so far? Hosting the Scottish Open.

If your younger self saw you now, what would they think? Old git.

Which famous people wind you up? Footballers.

What job would you love, other than your own? Moto GP rider.

What was the most embarrassing moment in your life? Holding up a flight, then being cheered by all the other passengers.

Brexit or Remain? Remain.

What is your favourite film? Bad Boys.

What scares you? Brexit.

What is your favourite sport? Shinty.

What three words would you use to describe yourself? Fun, passionate and focused.

What is the single most useful thing you could tell a 16-year-old grounds person/greenkeeper? Don’t be scared to ask lots of questions.

What talent would you like to have? To be able to see into the future.

What law/legislation would you like to see introduced? A three day working week.

Castle Stuart covers eighty hectares, which includes two and a half hectares of greens, two hectares of tees and eighteen and a half hectares of fairways. James tells me about the soil profile of the course. “There is 600mm of sand rootzone over the whole course on fairways and tees, on the greens there is 600mm of medium/fine (which is our rootzone) and underneath that is a metre of pure sand. This was on site when we started the construction and we mined an area up at the 13th for all our rootzone for the greens and surrounds. That obviously saved us a lot of money, but what we are finding is it tends to flush. We have been open for ten years now and we have developed a small thatch layer in the greens but, ironically, we could probably do with a little bit more thatch so that we can hold on to stuff. At the moment, product is still going through too quickly, but if you look at it on some greens you can see the collapse of thatch - so it’s just about getting a happy medium. So far, we have found that a solid tine isn’t breaking it as a knife tine would, but then the knife doesn’t give you the surface afterwards for the golfers.”

Soil samples are taken from the greens annually when STRI visit; however, if there is an issue, they will visit mid-season to gain an additional sample and determine what’s going on. “The whole site suffers from barsideous fungus and it fluctuates with moisture levels; if the levels change within five and six per cent, either way up or down, it’s enough to trigger it off. We sometimes get questioned on why we are putting the irrigation system on when we’ve had 20mm of rain overnight but, with temperatures rising to twenty-six degrees over
summer, it would zap at least five to six per cent of the water which could flare up the barsideous. So, I choose to put on a little bit of water to just slow that procedure and hopefully keeping the disease at bay.”

The irrigation system is wall to wall Toro, with around eight hundred pop-ups, but they are in a strange situation when it comes to the amount of water they can use. “When the site was initially built, we dug boreholes but couldn’t find enough water, so we share our water supply with a local farmer. We pump in from around 2km away from a small reservoir that collects water from the hills around us, but it often doesn’t replenish itself quickly and, if both of us are pumping from it, it is no use! The farm has been here much longer than us and they get first dibs so, from April to October, if they want the water, we can’t pump. In 2018, this meant we weren’t able to put anything on the fairways, so we just had to watch them dry out. We’re based in the Highlands of Scotland so we honestly didn’t think it would be such a problem, but now the process is forced, and we are going have to find water for ourselves. We are working with SEPA and various other authorities but, in the meantime, we are trying to obtain licences so that we take water from other local areas; even if it was only fifty cubic metres a day, it would help. A 2mm watering programme on the greens alone uses forty-eight cubic metres, which is a fair bit.”

James talks me through the general maintenance of the greens, tees and fairways. “On the greens, we try to stay at a

### With the climate changing, it means that we generally experience wind all the time here
cutting height of 5mm. Fescue is a fine leaf plant and it doesn’t slow the ball up as much as poa green, but depending on conditions we may have to reduce that height. We typically apply one-hundred and sixty tonnes of topdressing to our greens each year but, over the last couple of years, we have changed our regime twice. In 2018, I did a light topdressing more often, but last year we went heavy at the start and then just one dressing a month rather than two. That didn’t work as well, so we are now going light more often and matting it in. We will try and pick a dry night so that you will hardly see it the next morning; this also helps with the machines, as the heavier dressings were killing the units.”

“Once a fortnight, we will solid tine the greens and tees using a Toro ProCore 648 with 6mm tines. We have tried other machines, but they don’t compare to the ProCore; it can turn pretty much on itself which is useful when some of our greens have infinity edges. The way the 648 works is ideal for us and I don’t think there is anything on the market that beats it.”

“In September, and right at the start of the season, we will overseed the greens using our Vredo disc seeder, using a 100 per cent fescue mix at 5g/m². We don’t undertake any scarifying on greens as fescue grass doesn’t like it; you basically bruise it, stress it and that’s when you get disease and reduced grass coverage. Instead, we have both a firm and medium brush to do the equivalent but, in another four years when the greens are more mature, there might be an argument. At least once a year, we scarify the fairways to get rid of some of the rough grasses; we have a little Yorkshire Fog, Poa etc. in them. Fairways are cut at the height of 9mm; at the start of the season we try and cut them at least twice a week just after the feed goes on, but generally when growth slows down, we cut once per week. Tees are cut at 10mm and get the same treatment as the greens. Every now and again we get Dollar Spot, which leaves some scarring, so a light scarification on that in the next year or so might be the way forward.”

James has a fertiliser programme in place for the greens and tends to use low inputs, but he doesn’t always stick to what is set out for the year. “At the start of the season, we will use a 6:5:10 with magnesium and iron, but sometimes we find we don’t need an awful lot. With our flushing out process, we need to ensure we have got all the main ingredients because, if not, we just end up suffering somewhere else. Then, after that, it’s a lot of liquid feeds, seaweeds and chelated iron to harden it up and tickle it through. Six to eight weeks after that initial feed, we use the ICL Greenmaster Pro-Lite Invigorator 4:0:8 which won’t give us flush growth, but will keep things ticking over. Then, we may spray another 6:5:10 going into winter and, our overall aim over the year is to apply around 40kg of nitrogen and 70kg of potassium.”

The club leases all machinery over a five-year period and they are not dedicated to any one manufacturer. They will look at what is the best piece of kit for the job in hand. James continued: “We do have a lot of Jacobsen equipment and work closely with them, as we found other main dealers didn’t have the backup that Jacobsen had when we were doing the main purchasing of machinery. We didn’t have our own mechanic, so it was peace of mind that, if
Changing my mindset from a heathland to a links course, and the different skills required has been a challenge, but I’m enjoying it...

anything went wrong, within a day or two someone would be here to fix the problem. Since then, things have changed a wee bit and other manufacturers have more of a northern presence, therefore we have more of a mix which now also includes John Deere and Toro, but things change on a yearly basis. John Deere has brought out a new triple mower for the greens (which a lot of people are raving about), so we will certainly look at those when ours given up.

The course is a business and we have to have it looking its best every day, therefore, if a different machine is going to give us a better cut or finish, we would be silly not to buy it.”

“With the climate changing, it means that we generally experience wind all the time here, so we have purchased a new Jacobsen sprayer. The decision wasn’t just because of the brand, but for the technology in the nozzle; it pulses about forty times a second, meaning we can be out spraying in thirty miles an hour wind without getting any drift. If we were going for engineering finish, I would have probably chosen Toro, but they don’t have the pulsing technology.”

As well as looking after the general maintenance of the main course last year in spring and summer, James and his team had the task of building a new par 3 in-house. “All the lads had a hand in creating it and put in a lot of overtime, which meant some

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of them had last January off as owed leave. We are closed from the middle of November and don’t open again till March and, although we are still busy, it gave us the opportunity to give the lads their time back in lieu - some of them had nearly 700 hours they had to get back.”

“I’m the only one left from the original construction team, but the lads had heard all about the fun we had and what was involved, so they were desperate to get their teeth into the new par 3 project. It was basically just flat fields, so we had to undertake the same process as when initially building the course - but on a smaller scale.”

“We had to strip the soil to see what we had underneath then, shape the subbase to one per cent so it was all falling for drainage. Next, we put in 20,000 tonnes of sand giving us 500-600mm blanket in each area. We hired a local firm to come in with heavy plant machinery to help us; I didn’t want to take 30-tonne dumpers in, due to there being a lot of movement, so we used 14-tonne dumpers instead. Robert and I were on the diggers spreading out and then we had our own team come in with the hand rakes, tracking in with the Sand Pros. Finally, we turfed it all and we hope to have it open soon … it was a hard process, but one we have all enjoyed.”

Background of the course
Scotland, the home of golf. History and diversity make Scottish golf courses famous throughout the world. As Turnberry is to Ayrshire and Gleneagles is to Perthshire, Castle Stuart has been conceived to be for the Highlands - a beacon reaching out to golfers throughout the world.

The centrepiece for this Scottish destination golf resort is Castle Stuart Golf Links, a championship links course overlooking the Moray Firth and well-known landmarks that are synonymous with Inverness and the Black Isle - Kessock Bridge and Chanonry Lighthouse perhaps the most notable.

Castle Stuart’s goal is to add to the rich fabric of golf in the Scottish Highlands - a fabric made rich by Royal Dornoch, Nairn, Brora, and many other fine Scottish golf clubs. The cornerstone links course enjoys a setting and topography that combine to make the golf experience visually memorable. The golf holes are 18 compositions that place the notable landmarks of the Moray Firth directly into the player’s perspective.

For the holes immediately abutting the sea, the Kessock Bridge, Chanonry Lighthouse, Fort George (home of the Black Watch) and Castle Stuart. Atop the ‘old sea cliff,’ these same Black Isle landmarks are often presented from towering heights that offer palpably different and perhaps even more spectacular visual aspects. It would be impossible not to enjoy these Highland landmarks when seen through greens with seemingly nothing beyond but a shimmering firth and the landmark itself.

Surrounding the golfer is a rugged and natural landscape comprising vast expanses of gorse, broom, heather and sea marram. This mosaic often tightly frames the vistas beyond and combines an immediacy of natural surrounds with a grand sense of distant vistas. Enjoying the visual experience on any given hole is a private pleasure, as other holes and conflicting inland views are out of sight. Castle Stuart’s presentation of its manicured playing surface within its rugged natural beauty harkens back to a simpler era of golf, the ‘transitional period’ 1890 to 1935. Wayward shots and thin wispy fescue and pockets of bare sand where balls are easily found and recoveries manageable.

The bunkering is characterised more by open sandy areas with pockets of light vegetation than by formally revetted (stacked sod or turf) manicured bunkers. And from some tees and greens, the 1930s style white ‘Art Deco’ clubhouse can be seen sitting prominently atop its viewing.
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Less than three miles from Harrogate in North Yorkshire, Rudding Park Golf Club was originally part of the Forest of Knaresborough and still retains some of the ancient oak trees. Since the course opened in 1995, it’s developed into a popular Yorkshire retreat with over 700 strong active members.

In a slight twist to our usual format, Lee Williams sat down with Danny Millar, the Deputy Head Greenkeeper to discuss the day to day running of the course whilst Richard Hollingworth, the Head Greenkeeper was unavailable, I caught up with him briefly on the phone; he told me how he got into the industry and that I would be in good hands when I met Dan. “My dad was the head greenkeeper at Horsforth Golf Club and I took my interest from there really. I started as an apprentice at Moortown Golf Club where I gained a lot of experience and then applied for the head greenkeeper position at Rudding Park. When I started, the course had only just been built, so it’s fair to say that I have evolved with it over
I feel we need more exposure and people need to be made more aware of the technicalities of our profession.

The past twenty-five years. Although my title is Head Greenkeeper, I do a whole lot more around the estate, which includes being responsible for all the maintenance budgets. It’s only when I require larger items, such as new machines, that they have to be approved by owner Simon Mackaness who, thankfully, rarely says no if the proposal is strong enough. Dan runs the day to day things around the golf course and he’s an excellent team leader. If I weren’t here, the place would be very safe in Dan’s hands, as he proved three years ago when I was off for two months with a broken leg.

Arriving at the 18-hole, par 72, parkland course, I’m given a warm welcome by 33-year-old Danny Millar, Deputy Head Greenkeeper, who has been at the course for seventeen years. “When I reached sixteen, I knew I didn’t want to stay in education, but my parents told me I couldn’t just leave and do nothing or end up in a dead-end job. So, I visited Harrogate College and asked them to point me in the right direction for being able to work outside - I always knew I wasn’t an office type person! It just so happened that the tutor knew Richard and that he was on the lookout for an apprentice, so he put me in touch.”

“Whilst still at school, I did a day’s trial and..."
and really enjoyed it, so they agreed to take me on. I wanted to be working straight away, so I completed my last school exam on a Friday and started at Rudding Park the following Monday. Over the next two years, I completed my NVQ level 2 in Sports Turf and I've never looked back. I've gone on to gain a further nineteen work-related qualifications and became Deputy Head in 2009. I'd like to be a head man someday, but Rudding never sits still and there is always something new on the horizon, so I'm more than happy with where I am.

Helping Richard and Dan look after the facilities are Jonathan Jubb (33) - ten years' service, John Meredith (38) - eight years, Geraint Sims (36) - seven years, Gareth Buttler (36) - six years, Jason Norwood (30) - three years, Jakob Schur (23) - eighteen months and Matt Milligan (22) with six months' service.

The club support Dan and Richard with offering training to all their groundstaff. "We like the guys to be fully trained and competent in all aspects of the job. One lad started with us last year and, within six months, we put him on a tree climbing course and now he does all the tree climbing and felling. Similarly, Jason Norwood has just finished his NVQ Level 2 in Sports Turf and can look after the course and now he does all the Tee trimming and felling. Similarly, Jason (picted with his award below) commented with his award below."

Golfing Dream Team

Left to right: Danny Millar, Richard Hollingworth, John Meredith, Gareth Buttler, Geraint Sims, Jonathan Jubb, Jason Norwood, Matt Milligan and Jacob Schur.

Let's work hard for it, it's not a given, and you have to work within our profession - but if you want it enough, there are many roads you can take. So many roads you can take. I think internally the industry is doing well with lots going on. For aspiring greenkeepers, I think internally the industry is doing well with lots going on. If you want it enough, there are many roads you can take.
of who would win the title. In the build-up, I felt very privileged to have a large support network - both at home and at work. The club gave me time off to attend seminars and shows throughout the year and also gave me more than enough time to maximise my college tutor visits, whilst my wife supported everything I did, including helping to fine-tune my finals presentation. It took a good week for me to get over the shock of winning and the realisation of what I’d achieved. I’m looking forward to my visit to America and continuing my learning whilst there.”

This extensive site covers three hundred and twenty acres and includes a full-size Par 72 course, a six-hole Par 3 short course with four academy holes on the side and an eighteen-bay floodlit driving range covering 270 acres, which the greens staff are also responsible for. The rest is covered by the holiday park, hotel and spa which is looked after by a separate grounds and gardening team.

The course is built on clay and Dan tells me it used to have the nickname ‘Pudding Park’. “The course used to be stupidly wet but, over the last fifteen years, we have purchased our own Kubota mini digger that has enabled us to install over five thousand metres of drainage, comprising both piped and French drains, depending on whether they are in play. Drainage work is ongoing, with us installing approximately four to five
hundred metres of drains per year, concentrating on walk-offs, tees and greens as these get the most wear.

We are now open every day of the year, which is unusual around Harrogate and we never close the doors now, unless you literally can’t get on the course.”

The greens are USGA spec with a 80/20 rootzone mix and we generally suffer from heavy thatch levels, which has seen the team undertake some significant maintenance over the last five years. “There is a requirement to play on the greens all year round, as we have too many hotel guests to be using temporaries or closing the course, therefore, we had to put a programme in place to improve the drainage. Starting in March each year, we hollow core using 12mm tines at a depth of 4 inches - taking out around three tonnes of soil per green. Then, we topdress using 60 tonnes of kiln-dried sand. In May and August, we hire in the Air2G2, and the work is carried at 3.30am to avoid any disruption in play. In October, we will do a big verti-drain, and that normally sees us through the winter. Like most clubs, we used to have a renovation week in August, but the greens would take too long to recover, so we stopped that.”

The work on the greens over the last five years has

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Danny Millar - he wishes he was a joker

Who are you? Danny Millar, Deputy Head Greenkeeper at Rudding Park Golf Club.

Family status. Engaged with two children; Noah 4 and Chloe 1.

Who’s your hero and why? David Jason - he’s just a comedy genius and we all need to laugh!

What’s been the highlight of your grounds career so far? Seeing the young lads who have trained with us become head greenkeepers at other courses.

If your younger self saw you now, what would they think? Stop being so serious.

Which famous people wind you up? Any politician - because they’re all full of lies.

What job would you love, other than your own? A comedian. I would love that natural ability to make people laugh.

What was the most embarrassing moment in your life? Walking into a glass door when trying to impress a girl on holiday when I was about fifteen.

Brexit or Remain? I’m really not bothered about it anymore. They’ve moved the goalposts too many times to really care.

What is your favourite film? Law Abiding Citizen.

What scares you? Heights.

What would your autobiography be called… and who would play you in the film? Myself, me and I. And I would play me!

What is your favourite sport? Cricket and darts.

What would you cast into Room 101? On a serious note, war and poverty. On a personal lighter note, people who don’t indicate or say please and thank you.

Which historical time and place would you most like to visit? When God created Adam and Eve. There were far less people and things to be angry with.

Do you have a lifetime ambition? Just to see my children be successful in anything they do.

Which three people, living or dead, would you invite to a dinner party? David Jason, Jeremy Clarkson and Lee Evans.

What’s the best advice you have ever been given? If you ask a question you’re a fool for five minutes, if you don’t ask a question you’re a fool for life.

What’s your favourite smell? Sunday dinner cooking!!

Which three albums would you take to a desert island? Not all that hot on music, so just anything that I can actually hear the words to.

What’s the daftest work-related question you have ever been asked? Not to me personally, but one of the lads got asked which part warmed up on our turf iron ...

What’s your favourite piece of kit? Probably our mini digger. You look at any hole and it has made an impact somewhere ... be it drainage, removing tree stumps or a bunker. It has made the hole better at some point.

What three words would you use to describe yourself? Caring, loyal and reliable.

What is the single most useful thing you could tell a 16-year-old grounds person/greenkeeper? Save as much money as you can.

What talent would you like to have? To be able to speak in different languages.

What law/legislation would you like to see introduced? Eye for an eye, life for a life. We are too soft in this country.
worked so well that they now feel they may have gone too far. “Perhaps our greens might just be a bit too porous now. We currently use a liquid feed programme, as opposed to granular, and we think it is tailing off too soon. We’re losing feed as it’s getting through the profile too quickly because of the sand columns; however, the thatch levels have dropped massively and are far better than they ever were. STRI are happy with our progress but, potentially, we are victims of our own success with nothing staying on the plant. Any rain after we have fed the greens is gone.”

Dan may feel that they are the victims of their success, but this work enables them to keep the course open 365 days a year. They now average around 40,000 rounds of golf a year, which is double the average of most member clubs around the country. “I do sometimes wonder how we get anything done. By no means is this a negative thing. Being so busy is why we can afford decent machinery, chemicals and anything we need.
Dan talks me through the general maintenance of the greens. "During summer, we cut with the Toro 3250s at a height of 3.5mm then, in winter, we cut with the Toro Greensmaster Flex hand-mowers at a cutting height of 4mm. We verti-cut, star slit and carry out pencil tining as often as possible, using our Toro ProCore. We think we have found the right balance with this work, combined with what we do in March and August. At the start of April, we will overseed with a mixture of bents and fescues; we are not committed to any one supplier for our seed as Richard likes to shop around for the best price."

The course has a twenty-five year old, fully automatic irrigation system on all the tees and greens, with three tanks fed via a borehole. "Last year, we spent £20,000 on a new control system for it, and we regularly replace our heads using Hunter i20s and i30s. We recently dug a 600 metre pipeline from our shed to the hotel, to supply water for the new award-winning spa and this has seen us get an extension on our extraction licence."

I asked Dan if they have regular soil samples taken and a fertiliser programme in place. "The STRI take soil samples annually, then they will advise what fertilisers and inputs we should be using. But, Richard has got his own methods and techniques so we don’t have a set programme in place - much of it depends on the weather and the upcoming forecast. Also, we can’t always apply when we want, or do everything we want to, as the vast amount of golf dictates this. When we spray, we go out at six o’clock in the morning to get in front of the golfers to reduce any disruption to play."

I posed the question ‘why do you keep away from the use of granular fertilisers?’ "It’s peaks and troughs and we do use them if we feel the need, but we feel granulars give us a flush of growth and then we lose so much speed. We sit comfortably at about nine and a half on the stimp and our greens are massively undulating; any faster and it’s just not fair to an average golfer. If we put a granular on, we are disrupting play. Therefore, through summer, we like to stick to liquid feeds with other nutritional products. Plus, we are big advocates of Primo Maxx"
We have realised the tees are too small, so we are going to close them again in the winter and build a whole new tee and complex for both holes.

As a rule, the club like to buy all their machinery outright through Cheshire Turf Machinery, but occasionally they have obtained the odd machine elsewhere if it’s been at the right price. For example, the club recently purchased a contra-rotating brush for brushing in the topdressing. “We get excellent service from CTM if something goes down; they can be here at 5.00am the next day if required, which is fantastic.”

Nearly all the machinery maintenance is carried out in-house, except sharpening of blades and cylinders. Having said that, they are looking at a cylinder grinder which would give a lot more flexibility.

Dan and Richard communicate to the 700 strong active members through the weekly newsletter and via email. “After the March renovations this year, we had a real cold spell and the greens were taking longer and longer to recover which meant the members were not happy. So, I wrote a large piece that went out to all the members through email and put up on the notice board to explain why the greens were struggling like...
History

Originally farmland adjoined to a country house until 1972, the estate was acquired by the Mackaness family who remain the owners to the present day. In recent times, the family have slowly developed the estate - first with the opening of Rudding Holiday Park in 1973, alongside the renovation of the grade I listed Georgian hall for use as a conference and banqueting centre in 1987.

In the early 18th century Rudding was owned, in turn, by Messrs Williamson of Wetherby, Craddock, James Collins (who enlarged the house and planted avenues in the park) and Thomas Wilson. In 1788 Alexander Wedderburn, Lord Loughborough, the future Lord Chancellor, acquired the estate and called in the garden designer Humphry Repton to remodel the landscape.

In 1805 the estate was purchased by the Hon. William Gordon, who demolished the original house and commissioned the building of the present house in a new location. In 1824 the estate was sold to Sir Joseph Radcliffe, Bt. with the new house still unfinished and he secured architect Robert Chantrell to oversee its completion. London architect A.E. Purdie designed a Gothic Revival chapel which was added in 1879. Several generations of the Radcliffe family then occupied the house.

The Granada television series which screened in 1971 called Seasons of the Year was filmed here. This consisted of six plays involving the various occupants of the house over a 150-year period from the Napoleonic wars to the 1970s. In some ways, this series was almost a precursor to the later TV series Brideshead Revisited, where the house was almost a character in its own right.

In May 2017 a new spa building was completed with rooftop spa and gardens designed by Matthew Wilson. A gym was also added to the spa in October 2017.

they were. We have tried Q&A evenings to get interactive with members and these started with over twenty members, but then, after just four meetings, this dropped down to three members. We have done everything we can to try and communicate, but sometimes it’s hard to get our point across.”

Ten years ago, the club was given planning permission to build another nine holes. With only having that permission stand for two years, they built two new holes in the middle of the course which would keep the planning open. “The holes have continually been looked after but never used. Our Managing Director decided there is approximately £120,000 tied up in the holes so, in April 2019, we decided to put them in the main loop. Although they were ready to play golf on, they weren’t ready to be included in a set of eighteen. There is a lot of remedial work to do around the woods etc., so we’re currently working on making them more playable. We have realised the tees are too small, so we are going to close them again in the winter and build a whole new tee complex for both holes.”

Whilst on the phone with Richard I asked his opinion on the industry. “I think internally the industry is doing well with lots going on for aspiring greenkeepers. If you want it enough, there are many roads you can take within our profession - but it’s not a given, and you have to work hard for it.”

“Where I see the issue is how we are thought of. People often think that we sit on our backsides for twelve months a year and suddenly we have a golf course. Members aren’t interested in what we do or why we do it, as long as their £1000 gets them as much golf as possible. I feel we need more exposure and people need to be made more aware of the technicalities of our profession. Image is massive nowadays; so much so that people make an actual career out of it. Our image needs bringing into the 21st century.”

Are greenkeepers and groundsmen valued? “Yes, by our fellow turfcare professionals. No, by management in a lot of places, although we feel very valued here. For anyone outside the industry, they just don’t understand what we do and the labour involved.”
For me, the decision was easy; Johnsons J Premier Fairway, along with J All Bent, has moved our sward composition towards our ultimate goal of providing our members with the heathland characteristics we all aspire to.

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Jewson Groundsman of the Year winner in 1994
Don't suffer in silence

Life changing

Some of you may have read editor Kerry Haywood's book review of Ian Darler's Life's a Pitch in the last issue. It's in Chapter 11: Life Changing that Ian speaks about the life-threatening incident that nearly ended his career and plunged him into a very dark place. Here, Ian describes the incident in detail and explains the intensive surgery and recovery process he faced.

I remember the date vividly although, at first, it seemed like any old day at work. It was 6th August 2013 and life was just about as good as it gets.

I was working on the pitch when my volunteer secretary phoned to ask if I could go to the club office and collect an advertising sign that had just been delivered.

I made my way to the office, checking all the corridors were clear as I went. I took great care in picking up the thin metal sign, which was about five feet by two, and was careful how I carried it too - these things can be very sharp, as we’d often found when fitting them around the pitch perimeter.

Meanwhile, someone had placed some boxes in the walkway in the direction that would take me back towards the pitch. I never saw them. Stumbling over the boxes, I nosedived forward and hit the deck. It was over in a second but I remember watching, as if in slow motion, the sign’s sharp edge heading towards my face and throat as I was falling. A thought flashed through my mind: if I fall on that my time could be up.

The last thing I heard before the darkness descended was an almighty crash. Then, the club marketing manager was holding my head and telling me to lie still. I’d smashed my head on a wall and terrible pain was slicing through my hip and stomach. Some teeth were broken and there was blood all round my mouth and neck. Gingerly, I felt my throat to see if I’d cut it open.

A first-responder paramedic was on the scene within a couple of minutes. He administered some morphine for the pain and stabilised me, and an ambulance crew then whisked me off to Addenbrooke’s, where more tests were carried out. Before I was discharged several hours later, I was told I was passing blood.

There followed a night of terrific pain and precious little sleep, and by the morning I was wondering if I’d had a stroke. I had no feeling in my right arm and three fingers of that hand, and the neck pain was excruciating. The problem, which later proved to stem from a neck and back injury which plagued me for months, until I had surgery.

It would be weeks before I could return to work on light duties. Even then, I was limited in what I could do due to hip pain and had to get friends to help out. I knew almost from day one that something besides the physical damage was very wrong, but I couldn’t put my finger on it. I just tried to get on with things.

In January 2015, every small club’s dream came true for Cambridge United: a home draw in the third round of the FA Cup against...
the world’s biggest club, Manchester United. It was fantastic for the club and supporters but a nightmare for me. I would have to prepare the pitch in what I knew would be sub-zero temperatures. Still, at that time, I was matchday safety officer and I would need to schedule a series of meetings with the local authority and police. A number of staff had just started working at the club and had no knowledge of what working big games required.

We knew we were facing a battle with Mother Nature. Temperatures were forecast to drop as low as minus seven and frost could have put the fixture in peril. The BBC, anxious not to risk losing such a high-profile live match, asked us to cover the pitch with an inflatable balloon and pump hot air under it, and I complied.

Before we knew it, match day was upon us. The Beeb’s Match of the Day host, Gary Lineker and his pundits were casting admiring glances at the playing surface and commenting on how good it looked. In view of what happened after the game, their opinions were helpful.

The evening was very challenging with supporters trying to force their way in all over the stadium: attempting to surf over the turnstiles, climbing over walls and even the Supporters’ Club roof, and invading neighbouring residents’ properties.

During an incident when the turnstiles were stormed, one of my stewards was injured, pinned against a bridge. But, it was what happened after the game that would later cause me immense emotional distress, whilst also perhaps helping me to find a long path to aid my recovery.

During the debrief, the injured steward described what had happened and showed me his injuries. He said he’d been so scared at one point that, pinned against the bridge’s steelwork and struggling to breathe, he thought he was going to die. Those words echoed in my head and refused to go away.

I’d known that all was not well in my mental processes from a few weeks after the accident, but it wasn’t something I wanted to talk about. As I finished the debrief, I felt dark shadows closing in around me. I had known A number of very close friends started coming round to see how I was. I appreciated these visits but found them enormously difficult experiences.
that I had been wearing a mask making out that I was fine, over compensating how I felt by throwing in extra smiles, when really I was climbing a greasy pole and never reaching the top; the harder I tried to climb the more tired and fed up I became. Before the accident, whilst always happy to help anyone out, I would have my say if I felt I was in the right. Now I felt I had become like a limp, wet lettuce and would do anything to avoid confrontation in any form.

I know now that the cocktail of drugs I was taking to combat the pain from my injuries and various surgical procedures was a major contributor to the way I was feeling. Waking up every day in pain and discomfort takes its toll. Little was I to know that I would be diagnosed with post-traumatic stress disorder and would undergo harrowing, intense therapy that would challenge me to the very core of my soul.

As if I didn’t have enough problems ... the day after the Manchester United game, I was made aware that their manager, Louis van Gaal, had complained about the pitch. I found that mystifying when his backroom staff had nothing but praise for the surface, but my surprise and gratification when the media came out in support of me.

I’ve never had the pleasure of meeting Mick Dennis, at that time the football correspondent of the Daily Express, but if I ever do I’ll shake his hand. I’ll always be grateful for his support in the story published four days after the game, from which I’m quoting large chunks below.

Under the headline ‘Louis van Gaal is the loser in this pitch battle’, Mick wrote: ‘Let me tell you about Ian Darler. He’s the man whose life’s work was gratuitously insulted by Louis van Gaal.’

The ‘supremely arrogant’ van Gaal was, he said, dismissive of all the hard work I’d done and too self-absorbed to offer any congratulations to our team. ‘Instead, a predictably familiar bleat about the referee was embellished with a needless and inaccurate moan about the condition of the pitch. And that traduced Darler’s achievements and efforts.’

It was after this game that I made the club management aware that I was struggling and that I had to undergo more surgery. I’ll be honest: I was disappointed that no assistance in any form was offered and I was left to fend for myself.

I was expected to be off manual work for six weeks, but I’d planned the appointment so that it would cause as little disruption as possible to the club. I wouldn’t be able to cut the pitch for six weeks, but I reckoned I would be back at the club to run the office side of things, act as Stadium Manager and matchday safety officer and cope with the other paperwork at home.

The operation went ahead, but I struggled with the after-effects of the anesthetic and was kept in hospital for an extra twenty-four hours. I was glad to get home, but then I was taken ill and the doctors were concerned that there was a blood clot on my lung. There were a series of tests and scans to endure, at the end of which they found that I’d picked up an infection.

I’m not exaggerating when I say that this experience was a life changer. I struggled for months with pain from the hip surgery and seemed constantly to be on antibiotics for the lung infection. I would finish each course believing the infection had gone, only for it to make itself felt again a week...
or ten days later. I was undergoing challenging physiotherapy for the hip recovery, and one day I broke down and wept in the middle of treatment. I just couldn’t cope with feeling so poorly and my frustrations at not being able to get on with my life poured out of me in a torrent.

I was experiencing frequent torrid flashbacks to the accident, although I kept them to myself. They were wrecking my sleep patterns and, when I did manage to drift off, I was restless and sweating, sitting bolt upright in bed and shouting. Lisa, my wife, kept asking what was wrong with me. I couldn’t tell her. How could I begin to tell anyone what had turned a proud, strong, fit man striding confidently through life into a shambling, shuffling, weeping, twitching and trembling excuse for a human being?

My physio had set me a number of exercises, some at home and one involving a short walk through the village streets on crutches. It was whilst I was struggling on one of these excursions that a solution revealed itself: all the excruciating pain, grief, mental torture, feelings of inadequacy and frustration would be over in seconds if I just stepped out in front of a car.

It was thirty seconds before I was able to banish the destructive thought. It was enough to think about what effect my suicide would have on Lisa and my children, Liam and Ruby, for me to snap out of it. I demanded of myself: what the hell is wrong with you?

I returned home shaken and called my GP, only to break down whilst I was on the phone. An emergency appointment was made for me at the surgery, and there I answered a series of questions about my state of mind. Everything around the accident had caught up with me; I sobbed. From the first day I’d struggled with pain and discomfort. I was told that what I was experiencing was not uncommon and I was put on the list for an appointment at Cambridgeshire and Peterborough NHS Foundation Trust (CPFT).

Several more weeks, during which I continued to battle the lung infection, went by. It had knocked me for six and some days I was so poorly that I struggled to get up the stairs. And, without me being aware of it, I had become snappy, raising my voice and generally being unaware of what was going on around me. I can now see, and admit, that I was very scared.

The appointment with CPFT came through and I had to summon every scrap of courage I had left in order to attend. But at least I was acknowledging that I couldn’t get through this nightmare on my own and needed help.

At the first appointment, the therapist asked me to recall, in minute detail, every second of the accident and its aftermath. I found it incredibly difficult to relive an incident that had devastated my life, but I managed to struggle through
It was thirty seconds before I was able to banish the destructive thought. It was enough to think about what effect my suicide would have
one was more difficult than the last. Time after time, Dr Mann asked me to consider medication to help me sleep, but I declined. Then, one day, I said the solution to the whole sorry affair was simple: I just needed to ‘man up’. Wrong answer, but it was a turning point. It wasn’t easy, but Dr Mann convinced me that trying to ‘man up’ wasn’t a helpful approach. Finally, I surrendered to her advice. Finally, I accepted that I was suffering from depression. Finally, I agreed to take the antidepressant mirtazapine.

The next few weeks were some of the toughest of my life. The thought of setting foot outside the house filled me with fear. I would avoid anywhere where there were likely to be other people, which is pretty much everywhere.

A number of very close friends started coming round to see how I was. I appreciated these visits but found them enormously difficult experiences. My matchday medical officer and deputy safety officers visited several times and, to my surprise, one of them revealed that he had been through depression himself and knew exactly what I was going through. One of my most loyal friends, a steward at the club for forty years, came round and told me he had suffered terribly during his depression.

Whilst these reassurances went some way towards persuading me that depression is a distressingly common disease, I’m sorry to say that at the time they were like water off a duck’s back. I couldn’t see a way out of what I was feeling; I had no interest in anything; if somebody had presented me with a million pounds and asked what I would like to do with it, I would have replied ‘nothing’. My life had no meaning and even less purpose.

But, I had another huge surprise when one of my visitors, before I’d said a word, described my symptoms in precise detail and said he’d also been through a rough spell. I wasn’t alone, he stressed. He was a serving police officer and real hard nut who was always the first to put his head above the parapet and deal with crowd disorder; he was the last person I would have suspected of suffering from depression. His revelation had an impact on me and I found it so much easier than usual to talk to him.

It sounds ridiculous now but at my lowest point I couldn’t get out of the house, so I was set a challenge: going to the Co-op twice a day to start engaging with people in public places. But I found myself cheating. If the car park was busy I would wait until it was quiet, and I would have the right money ready in my pocket for a quick exit at the till. There were times when my lips felt three times their real size, I had the shakes and panic attacks were common. Having dealt with large crowds at work for decades, I found these especially hard to deal with but there I would be, struggling to breathe, convinced I was having a heart attack and was going to die.

At one appointment a colleague of Dr Mann’s was in the room. Dr Kim asked if I would return to the clinic with a family member or friend. I couldn’t bring myself to ask Lisa as I knew I’d already put her through hell, so I asked my good friend Andy if he

Since my challenge with life, I have helped two people who were struggling in silence with depression and pointed them in the right direction - one of whom said that I saved his life
If you have a family member or member of staff who appears not to be working to their normal ability, don’t think they are being lazy or on a different planet - ask them if they are alright.

Common, behind my stadium, with the floodlights in full view. All the distressing symptoms came flooding back. Then an ambulance siren shattered the air and in an instant I was back at the accident.

But gradually the sessions on the Common began to help and I felt my life was finally beginning to improve. It wasn’t the end; it wasn’t even the beginning of the end; but it might have been the end of the beginning.

Then came the acid test: Dr Kim asked if I could arrange a treatment session in the stadium’s control room. At the point at which I was reliving falling over the boxes, Dr Kim created a deafening crashing sound by dropping a large bag of steel cutlery, I was

The 1992 letter from manager John Beck, that confirmed the Abbey Stadium pitch was too good for his team’s style of play.

Merry Christmas pattern

would come.

We were both asked a series of questions and Andy said I’d had an amazing memory before the accident; something had changed since then. Once again, I was asked to relive everything that happened on the day of the accident and, as I recalled the events of those awful hours, I broke down in a flood of tears. Dr Kim asked why the tears had come, and for the first time I talked about the flashbacks to that terrible moment when I thought I was about to die. It was likely that I was suffering from PTSD as well as depression, Dr Kim told me.

There followed weeks of exhausting therapy that involved reliving the accident several times a week, as well as exercises to be completed at home, and the trips to the Co-op continued. But I found it impossible to go anywhere near the Abbey Stadium and I couldn’t bring myself to watch football on TV.

In the latter part of the treatment for PTSD, Dr Kim asked me to relive the accident on the council sports pitches on Coldham Common, behind my stadium, with the floodlights in full view. All the distressing symptoms came flooding back. Then an ambulance siren shattered the air and in an instant I was back at the accident.

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instantly paralysed. In my mind the accident had just happened all over again, with terrible clarity.

I was hypersensitive to crashing sounds and noise, the good doctor concluded. My brain recognised these noises as signs of danger and reacted accordingly.

As I was going through this treatment, I was made aware that the pitch at United had deteriorated, and I was asked what could be done to improve it. I’d only seen the pitch from a distance during my therapy, but I could identify the problem and was able to call in a few favours to help improve it.

Then, following a meeting with club officials, I took a phone call out of the blue, followed up by a letter, informing me that the club had engaged an occupational health nurse who would be in touch to see when I would be back to work following my hip surgery. I stopped her there. ‘Are you telling me,’ I asked, ‘that the club think I’m off work just because of my hip?’ Her affirmative reply staggered me and I almost dropped the phone.

I spent well over an hour recounting yet again what had happened: I’d been through seven medical procedures; I was still fighting an infection; I was still undergoing post-operative physio; I was undergoing treatment for depression and PTSD. Despite all that, I’d been working from home and had processed more than 1,200 emails whilst away from the stadium, whilst the club had received sick notes containing all the necessary information. I finished by explaining that I’d asked the doctors several times when I could return to work and had been told that I was nowhere near fit enough.

‘Right,’ said the nurse, ‘you’ve told me quite enough. I’m stopping any further work from home whilst you’re receiving treatment for PTSD.’

She called a few more times, saying my doctors at CPFT had provided her with documentation of my therapy and had confirmed that they were very disappointed by the letters I’d received from a manager at the club. Considering my condition, they were unhelpful.

My treatments continued and I continued to improve. Finally, it was agreed that I could get back to work on a phased return basis. I believe that I am now a far better person who is far more considerate and understanding and would ask that if anything comes out of this article it is this ... If you have a family member or member of staff who appears not to be working to their normal ability, don’t think they are being lazy or on a different planet - ask them if they are alright and then ask them ‘again are you really alright?’ It is so easy to dismiss the first enquiry when someone asks - believe me, I did it several times when friends asked how I was doing. Since my challenge with life, I have helped two people who were struggling in silence with depression and pointed them in the right direction - one of whom said that I saved his life.

Remember, you are not alone, with one in four suffering from some form of mental health issue, but you need to let somebody know how you are feeling.

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Inverness Caledonian Thistle Football Club began life in 1994 and came to prominence, or perhaps notoriety, when the still considered minnows took on the might of Celtic at Celtic Park in the Scottish Cup, running out 3-1 winners. The Scottish Sun’s headline the following morning read; “Super Caley go ballistic, Celtic are atrocious”. Lee Williams packed his umbrella and headed up to the Highlands to meet the club’s Head Groundsman, Dale Stephen.

Inverness Caledonian Thistle Football Club was first founded as Caledonian Thistle F.C. in August 1994 by the merger of Highland Football League clubs, Caledonian and Inverness Thistle, and adopted its current name two years later. They compete in the Scottish Championship, the second tier of the Scottish Professional Football League, and host home games at the Caledonian Stadium with a capacity of 7753.

Tasked with keeping the stadium pitch in tip-top condition is Head Groundsman, Dale Stephen. "The stadium pitch was first constructed in 1994 and, since then, it has always had problems with holding water,” Dale explains. "The way I look at it is there wasn’t much of a pitch construction; at least not what you would talk about in the modern sense. There are things out there that you would never do if we were to rebuild the pitch now. It was built on a gravel raft, and the rootzone was mixed out on the car park - three soil, two sand and one peat! Why you would ever put that down, I don’t know? The pitch has a 400mm camber from the centre to the sides. It originally had four main auxiliary drains and is meant to drain laterally into the gravel raft, but every time I take the manhole covers up in heavy rain to check the flow, nothing is running through them."

"The pitch has had umpteen drainage solutions tried out over the years by different contractors. Eight new drains running the full length of the pitch, which has never really worked or hit their full potential. After this, the pitch had fifteen sand slits put in to help pull the areas in between the drains together, and it has also been sand banded in four different directions. But none of these solutions, so far, have helped significantly improve percolation through the surface."

Unfortunately for Dale, this is not the end of his problems when it comes to drainage of the pitch. The undersoil heating pipes that were laid in 2003 as a requirement by the Scottish Premier League, when the club gained promotion, have not made the situation any easier to manage. "The pipes were laid in December of that year and the pitch was like porridge, the tractor wheels

One thing led to another, and I was lucky enough to end up getting the position. I have not looked back since, even when things have got tough in the winter months."
were spinning when they were trying to pull the pipes in. The pipes are all up, down, left and right. They are not uniform and are meant to be down at a depth of nine inches across the whole pitch. But there are many areas where we are lucky if they are six and a half inches down. We are unable to go any lower than a depth of five inches when using a verti-drain or the Toro ProCore. Ideally, I would like to be going in a lot deeper to try and get a link from the surface to the drains below. Another problem we are having with the pipes is they are baking the heavy content of soil we have in the pitch. So, three to four inches around the pipes is like concrete, which I am unable to try and cure due to the restrictions of depths we can aerate.”

In the 2017/2018 season, the club had to call off five first-team games and two youth ties, which was costing the club money. This set off the alarm bells and Dale was asked to come up with a plan to help improve the drainage and overall quality of the pitch. “We had to put our thinking caps on, as money is everything. We can’t afford to put in a custom-built rootzone or Fibresand pitch. After much thought and obtaining outside advice from a long-term consultant, we put a plan in place. We started by Koroing off the pitch to remove all the Poa Annua which covered at least 90% of the surface and removed the heavy thatch layer that had accumulated over the years. We located five heating pipes going the full length of the pitch and excavated them out and installed 100mm drains right down into the gravel raft. Then the pitch was rotavated to relieve as much compaction as we could and dressed with 540 tonnes of sand. The pitch was then power harrowed to try and improve the water retention of the surface. Gravel bands were then installed across the pitch to help connect the new drains and hopefully link in to some of the old drains. The Graden box was then used to re-level the surface and reinstate the camber. Finally, we overseeded with a 100% perennial ryegrass mix and applied a pre-seed fertiliser. I can’t wait now to see if what we have done this pre-season will pay dividends this year. I have already seen some slight improvements in the percolation rates since we completed the work six.

The weather has been rather rainy; I can’t remember a week without at least a day or night of rain. We have had some numbers in the gauge ranging from 5mm, to the gauge overflowing at 30mm plus
Dale took advantage of the significant work done this year to help improve his dated irrigation system. “The system was installed when the pitch was built and comprised hydrant points and hosepipes. At a later date, but I’m not sure when, there was a ring main installed with valves and outfield Rainbird pop-ups fitted, but no sprinklers were installed in the middle of the pitch. This has meant that we have had to pull hoses on to the middle of the pitch connected to hydrant points situated at the side of the pitch. When it comes to a matchday, it’s a nightmare. You have coaches asking you an hour before kick-off and at half time to get the water on, and we simply can’t do it. So, with all the work being done on the pitch, I saw the opportunity to approach the club and explain that this would be the ideal time to add pop-ups into the middle pitch because we are digging trenches for drainage anyway. I was luckily permitted to add eight Rainbird pop-up sprinklers into the middle of the pitch. So, we can now do what the coaches are asking on match days, and it also gives me more control to water the pitch correctly.

Dale talks me through his current regime. “I cut the pitch using an old Dennis G860 and a Triple mower, setting them up at the same height of 25mm, at least four times a week in the growing season.”
Getting Personal

Dale Stephen - I think he likes Tom Hanks!

Who are you? Dale Stephen, Head Groundsman at Inverness Caledonian Thistle Football Club.

Family status. Married to Amanda and father to Lily and Bella with a dog called Lola.

Who’s your hero and why? My old man; (Stumble) he’s always there when I need him.

What’s been the highlight of your grounds career so far? Last year’s Scottish Cup semi-final at Hampden Park. Reaching there made the three games and one penalty shootout on the pitch worthwhile. We were only drawn at home in the competition once!

If your younger self saw you now, what would they think? I’d hope they would be proud of what I’m doing and the family I have.

Which famous people wind you up? Various people. Most of which are from reality TV.

What job would you love, other than your own? I love being a groundsman so it’s a hard question.

What was the most embarrassing moment in your life? I once cycled into the back of a parked van on my way to school! That was pretty embarrassing in front of a group of other kids and a couple of people walking past.

What is your favourite film? Anything with Tom Hanks. From Turner and Hooch to Saving Private Ryan - he’s a class act.

What is your favourite sport? Football. I can’t play it but I like watching it.

Which three albums would you take to a desert island? Queens greatest hits, Blink 182’s Take Off Your Pants & Jacket and Big Country’s The Crossing.

What is the single most useful thing you could tell a 16-year-old groundsperson/greenkeeper? Keep things simple. Do the basics and do them as best you can. Have pride in your work.

What talent would you like to have? To be a talented singer would be good.

Do you have a lifetime ambition? No particular ambition, other than being the best dad I can be to my daughters.

Which three people, living or dead, would you invite to a dinner party? Tom Hanks and Freddy Mercury for the entertainment value. Plus Rita Ora - just because.

What’s the best advice you have ever been given? It’s not really advice, but I was told by my mum and dad I wasn’t allowed to leave school without a job. It gave me the drive to go get one. I’ve been lucky enough to be in work ever since.

What’s your favourite piece of trivia? Reindeer like to eat bananas. Absolutely useless info and no idea if it’s true.

What’s the daftest work-related question you have ever been asked? Can you do my garden next. Happened on the golf course and now working the stadium.

What’s your favourite piece of kit? Got to be my Dennis G860. Great bit of kit that leaves a nice finish.

What is your favourite smell? Suncream. It reminds me of summer.

Which historical time and place would you most like to visit? The 1980s. I think the decade I was born in looked pretty cool. Being an Aberdeen fan I’d love to go back to the glory days of 1983.

What three words would you use to describe yourself? Tall, dark and handsome. The wife told me to write that!

What law/legislation would you like to see introduced? I’d love to get back to common sense prevailing in aspects of the workplace and life in general. I think some people take health and safety too literally these days.

time with me working on my own at the stadium I will use the triple, but I do try my best to alternate between them to balance out the weight. If I have a tight schedule with a game Saturday then Tuesday, I will divot the pitch on a Sunday and pick up any debris with the Toro Timemaster rotary on a Monday. In summer, I will cut with the triple as I can double cut the pitch in the same time that I can single cut with the Dennis, but I will use it before a game. When I have more time between games, or in winter, I do tend to use the Dennis. With the pitch being koroed off, I plan on making use of the scarifying cassette I have for the Dennis to lightly scarify the pitch once a month to help keep the surface clean.”

Since I visited, Dale has reported that the pitch has come on leaps and bounds.

“The weather has been rather rainy; I can’t remember a week without at least a day or two worth of rain.”

PC December/January 2020
night of rain. We have had some numbers in the gauge ranging from 5mm, to the gauge overflowing at 30mm plus. This has given me numerous headaches, as I’m sure groundspersons and greenkeepers all over the country have experienced. I’ve lost at least two feeds due to heavy rain that’s not been forecast.”

“At the end of August, I had a game which was changed to a Friday night for TV. I planned to feed that week with a 15:5:15 slow release and, due to different things, I couldn’t get it applied. The forecast for that evening said rain so, I decided to stay late after the game to get it down. This would give me the two days of the weekend to give it the best chance to wash in. I’m pretty sure it rained for the next twenty-four hours! Hence, I’ve been pretty unlucky with some feeds.”

“It’s not been all bad though! The pitch is handling water very well after the renovations and, a few weeks ago, a fellow groundsman was good enough to loan me a Blec dimple seeder and I managed to get nine bags on the pitch. I have also earthquaked the pitch going down to a depth of 5 inches - which is as deep as I dare to go with the undersoil heating pipes in at various depths, some as shallow as 6 inches. It was badly needed after we had a community fun day with five hundred children on it plus parents!”

“The pitch has been getting some great comments from the team, coaches, opposition, directors and fans. So that’s always good to hear. It’s been a pleasure to work on and is in pretty good shape going into winter.”

Dale has an average fertiliser budget for the pitch, so he likes to make use of slow-release granular products and liquids. But he expects the inputs needed to maintain the pitch this season will dramatically increase with having a clean surface to wash in, plus the extra drainage work. “Last year, I used applications of ICL Proturf, Sportsmaster and Sierrablen. I found I got great results using these products and they gave me the longevity I was looking for. I will continue to use them this season. The pitch is only six weeks in, and I have applied two granular feeds and one liquid feed, which includes seaweed and chelated iron. This leads me to believe the pitch is leaching nutrient through a lot quicker than in previous seasons. It is a good indicator that the work done in pre-season is working, but at the same time, my fertiliser budget will increase.”

The machinery Dale must work with is getting dated, and he would like to be able to update it in the future. “I have inherited everything I have got; the Jacobson T3 ride-on mower was bought in May 2016 on hire purchase a few months before I started. The Dennis G860 is from 2002 and was bought secondhand and is in desperate need of replacement, and the cylinder cassette has only one or two more reigns left in it. I have an Iseki tractor which is around ten to twelve years old and was bought on hire purchase at the time. A piece of kit I wouldn’t be without is the Toro Pro-core, which was also purchased secondhand, and I have a sprayer which I don’t even know how old it is.” I asked Dale what would be first on his wish list if he was able to replace a piece of equipment and if there is one piece of kit he believes would help improve the surface. “I would love a new Dennis G860; this would enable me to hand mow the pitch a lot more often as our current machine is on its last legs. For clean-up, after a game, I would like a PC December/January 2020

I can’t wait now to see if what we have done this pre-season will pay dividends this year. I have already seen some slight improvements in the percolation rates
Dennis Pro 34R. I believe these are the business.”

Dale was inspired to start a career after finishing school in the sports turf industry while playing golf with his dad and his godfather, who was a greenkeeper. “I just liked being out on the course. So, in January of 2003 whilst still at school, I applied for an apprenticeship at Forest Golf Club. I got an interview in April and, by the time I had cycled home from the club, they phoned my house to tell me I had got the position. I hadn’t even sat my high school exams, and I already knew before I got my grades that I had a job to go to, which I started in June of that year.”

“I spent seven years at the Forres GC gaining my qualifications at Elmwood College in Fife. I then applied for a Deputy Head position at a new build 18-hole golf course with a little par three course, as I didn’t feel my career would progress if I stayed at Forres. After a year at the new build, I got the opportunity to move to Kinloss Golf Club, a small family run course, and become the Head Greenkeeper. In my time at Kinloss, I helped improve the quality of the course and it allowed me to do things I would not have done at my previous clubs. I first heard about the role I’m in now through my old Head Greenkeeper at Forres GC, whom I remained good friends with. He knew I was looking for a new challenge and he was aware that I had always been interested in moving into groundsmanship. He had heard that the Head Groundsman was retiring and told me I should get my CV in. Between Ross helping and my mate Peter knowing Tommy, I was lucky enough to end up getting the position. I have not looked back since, even when things have got tough in the winter months. I must thank Tommy Cumming, the former Head Groundsman, for his support in my time so far at the club.

**History**

Inverness Caledonian Thistle was formed in 1994 by the merging of two Highland League clubs, Caledonian and Inverness Thistle. Between 1994 and 1996, the new club played their home matches at Telford Street Park, which had been the home ground of Caledonian. However, one of

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Three to four inches around the pipes is like concrete, which again is effecting what depths I’m able to aerate the pitch at
the pledges made to gain entrance into the Scottish Football League (SFL) was that they would move to a newly built ground by August 1995. Four sites were considered until finally, early in 1995, the Highland Council approved a site called East Longman, next to the A9 road and the Kessock Bridge. This site had to overcome concerns of the local Harbour Trust that the stadium floodlights would interfere with traffic in the Moray Firth and the need for an access road to relieve traffic from the A9. Inverness District Council approved the plans and authorised £900,000 of public funds to cover a funding gap.

The SFL extended the deadline for a new stadium to 1996, but the District Council was given legal advice that the public funds could only be provided under set conditions, which caused further delay. The club threatened to resign from the SFL if the funds were not forthcoming, but eventually, the District Council granted the funds in December 1995. The new stadium opened in November 1996 and hosted its first SFL match, a 1–1 draw between Caley Thistle and Albion Rovers. The stadium held 5,000 supporters at the opening and cost £5.2 million. This was partly funded by selling the old grounds of Caledonian and Inverness Thistle for £1.1 million, the grant from Inverness District Council, £500,000 from the Football Trust and the rest was provided.

The pitch has been getting some great comments from the team, coaches, opposition, directors and fans. It’s been a pleasure to work on and is in pretty good shape going into winter.
by the Inverness and Nairn Enterprise Board, sponsors and supporters. The local authority retained ownership of the ground, with Inverness Caledonian Thistle being given a 99-year lease on the site.

When the club won promotion to the Scottish Premier League (SPL) in 2004, they faced a problem in that the Caledonian Stadium did not meet an SPL requirement for stadiums to have 10,000 seats. At that time, the Caledonian Stadium had a total capacity of 6,280 and only 2,280 seats. The club agreed to ground share with Aberdeen at Pittodrie. The SPL initially rejected the ground-sharing application, but accepted it on appeal. The SPL also voted to reduce the 10,000-seat requirement to 6,000. Inverness CT played at Pittodrie for the first two rounds of fixtures of the 2004-05 season, whilst redevelopment works were carried out at the Caledonian Stadium.

The redevelopment in 2004-05 included the construction of two new stands at either end of the ground, which made the stadium all-seater and increased its capacity to over 7,500. These stands were built in a remarkable forty-seven days by the Tulloch Construction Company who are also the club’s biggest shareholder. As Tulloch also paid part of the development cost, the stadium had the Tulloch name added to it on completion of the work and the lease on the site was transferred to Tulloch. The lease reverted to the football club in December 2017, except for the stadium car parks. In February 2019, the stadium was renamed the “Caledonian Stadium” after long-time sponsors Tulloch gifted the stadium to the club.

In 2007, the club added a very small stand opposite the Main Stand - called the West Stand. It has a capacity of around 400 and was initially intended to be a ‘singing section’. The highest football attendance recorded at the Caledonian Stadium is 7,753, set on 20 January 2008 against Rangers.

In mid-2018, Inverness CT swapped out the original manned turnstiles for more modern barcode scanning ones, becoming one of a handful in Scotland to use these turnstiles, and the first in the Highlands. The ground hosted the 2019 Scottish Challenge Cup Final, played between Highland club Ross County and Welsh side Connah’s Quay Nomads.

*FOOTBALL*

**What’s in the shed**

Jacobsen TR3 triple mower  
Iseki compact tractor  
Dennis G860 cylinder mower  
Toro timemaster  
Toro ProCore  
Farmer 600l sprayer  
Spray jet linemaker  
Transfer wheel linemaker
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At the time of writing, Oxford United lie seventh in the League One table, with ambitions of gaining promotion to the Championship. The club recently moved into their new dedicated training facility in Cowley, a few miles south-east of the city and a stone’s throw from BMW’s Mini factory. Lee Williams met with Scott Humphries, the training ground’s twenty-five-year-old head groundsman.
Scott Humphries has been interested in grass from a young age which, he says, “is very strange!” Being an Oxford United fan, and with the club’s old training ground in Milton the next village to where he lived with his parents, he took it upon himself to meet up with Nick Baldwin, the club’s then head groundsman, and asked if he could help out.

“I was thirteen years old at that time, and I was lucky enough to be allowed to help the groundstaff at the stadium on match days. I did this for a few seasons until Nick left the club to join Brentford Football Club. Then, nine years ago and out of the blue, I got a phone call from Nick offering me an apprenticeship, and I jumped at the chance. Whilst at Brentford, I did my NVQ Level 2 in Sports Turf and also my spraying certificates.”

“After three and a half seasons working at Brentford, there were a few issues with the stadium pitch and the club brought in contractors. We were then transferred over to Sportsturf, who looked after numerous clubs in our area at the time. I worked with them for twelve months, but that didn’t feel like that. ‘The first year back was difficult. The old site, which is just across the road from the new one, had one pitch for the first team and four for the academy. I was told that, in the previous season, the first team training pitch had been so bad they had to train off site for most of the season, so there was my first challenge. With the help of the management team, some tough love and some clever movement of the training drills, we managed to keep them on the pitch all season, but it was a struggle, I can tell you. We have now moved to the new site and it has numerous problems which challenge me every day.’

When the new site was built, it was going to be a community hub with football, cricket and softball, until Oxford United bought the whole site and made it into their training facility.

The new training ground used to be an allotment and is built on clay with an inch of sand on the top; this brings lots of problems and challenges for Scott to work around. “When constructing the pitches, they used what materials were on site and, in my opinion, it was poor. We have drainage that was put in every five metres, but that doesn’t really work because of the volume of clay. We have drainage that was put in every five metres, but that doesn’t really work because of the volume of clay. The water does not get through and sits in the top three to four inches, even though we spike every week to try and keep it open. Ideally, I would dig them all out and start again; it’s just a nightmare.”

“We don’t have any irrigation here, which is a bugger in the summer months. We have two water points on the cricket square, which we won’t have access to much longer with no cricket coming here. Ideally, the manager would like us to water the pitch before training, but it’s not possible. When we koroed off the pitches in May, we hired in a temporary 10,000-litre water bowser from a local farmer. Then, Rob Green Irrigation came in and managed to wire up a

I believe if we don’t get it right at the beginning, it will just come back and bite us. If we can’t afford to do it right this year, save the money for next year. Do it once and do it right.
As soon as people realise it’s not just sitting on your jacksie on a ride-on mower, and that it is a profession which involves a lot of thought, planning and skill, we will all be better off.

Scott, alongside his apprentice and two part-time staff working sixteen hours per week, must maintain two old cricket outfields (which are used for warm-ups), five full-sized pitches, two smaller 9 v 9 and 7 v 7 pitches. The club is also looking to extend the site by installing three more full-size pitches in the next twelve months. “We have already got the land, and the chairman’s vision is to put a state of the art pitch in where one of the cricket outfields is situated so that they can play under-23 games.”

So how will the new pitches be constructed? “That’s the argument we are having now. We are looking at Desso, SIS, Hero and a few other options but, in the end, it all comes down to money. If you don’t spend it, you don’t get the pitch. I believe if we don’t get it right at the beginning, it will just come back and bite us. If we can’t afford to do it right this year, save the money for next year. Do it once and do it right.”

There are no frost covers available to Scott, but it is rare that training won’t go ahead on a frosty morning. “We are pretty lucky here, to be honest. It’s not very often the frost will stay in the ground; most of the time it is gone by ten o’clock.”

Scott took the brave step to carry out a substantial renovation on the first team pitches this season to try and alleviate some of the problems they were having.
“We brought in an outside contractor who took the first inch of the two pitches with the Koro. They then applied sixty tonnes of sand, forty tonnes of rootzone and then ten tonnes of zeolite per pitch. This was all turned over to break up the clay and help a little bit with the drainage. It was then relevelled, overseeded with a disc seeder four ways - using nineteen bags of a ryegrass mix per pitch - and then we applied an 8:12:8 pre-seed fertiliser.”

“On the academy pitches, we used our tractor-mounted Browns spring tine rake three ways per pitch. We picked up the debris with our Kubota 48-inch cut and collect, spread and brushed in forty tonnes of medium sand per pitch, overseeded and applied pre-seed fertiliser. I would like to have done more but, without the water, it is just not feasible. We were fortunate to get the top pitches re-established with the water we did have. Still, in all honesty, I would not like to try and risk it again as the summers seem to be getting hotter and hotter.”

With limited staff, resources and machinery, all pitches are not treated equally when it comes to their weekly maintenance. “The two first-team pitches are very similar to the stadium pitch, as we mirror the height of cut at 25mm, and the bays are the same size. The manager is very particular about this as he has a good eye for detail. We rent the stadium pitch for I was told that, in the previous season, the first team training pitch had been so bad they had to train off site for most of the season, so there was my first challenge.”
People see pictures on the television of top clubs, and then look at pitches in the lower leagues and grassroots level and don’t understand why they are not in the same condition.

“We don’t have any irrigation here, which is a bugger in the summer months.”

matchdays from the previous owner of the club, and a contractor is responsible for the upkeep of the pitch. Luckily, I have a good relationship with the head groundsman there, Mark Walker, who has been there for eighteen months now. We are in regular contact and sometimes, on a match day, I will go and give him a hand. There have been numerous times when he has lent me equipment for here, and it’s a nice relationship to have.”

“We cut the pitches using our Baroness LM2700 fairway machine, and we let the grass fly, I would like to box off, but I don’t have enough staff. But we do vacuum up the pitches a few times a week with the Kubota G21, so the way I look at it is the majority of grass clippings will get picked up. We also rake it regularly with the spring time rake which helps keep the surface clean. We will divot the first team pitches when we get the chance.”

“I aerate the first team pitches every ten days with our Charterhouse 7316 Verti-Drain using 18mm tines at varying depths between four and ten inches. The academy pitches are spiked every six weeks, but they do drain better than the first team pitches for some reason.”

Scott doesn’t have the biggest of budgets for his fertiliser programme so, like his maintenance regime, the first team pitches take priority. “We use a couple of applications of a 3-4 month slow-release polymer-coated fertiliser with three applications of a liquid feed on the academy pitches per season to give them a boost. I have not yet had any soil samples taken from the first-team pitches or any other tests for that matter, as I have

“People see pictures on the television of top clubs, and then look at pitches in the lower leagues and grassroots level and don’t understand why they are not in the same condition.”
nowhere to store my records not having a groundsman’s shed. Most of my paperwork is done in the car or at home, which is not fair on the family. There is only so much I can store in my car. Hopefully, this will all change in the next twelve months as there is talk of building a dedicated groundsman’s shed with a brew room and office; fingers crossed. It would be nice to have somewhere we can call base.”

“I tell my fertiliser rep each season what budget I have available for the first team pitches and ask him to put the best programme possible together. This will generally consist of four applications of a slow-release polymer-coated granular, topped up each month with a liquid feed consisting of carbohydrates, seaweed, amino acids, fulvic acids and a bit of nitrogen.”

Machinery is on a five-year deal with local dealer George Browns Machinery Specialists, most of which are kept outside as Scott does not have anywhere to store them, although he was recently given a large shipping container, so at least some of his equipment can be stored safely.
What’s not in the shed
Baroness LM 2700 fairway mower
Kubota G21 ride-on-mower
Hayter Harrier 56
Kubota LM 242 tractor
Browns rake
Charterhouse 7316 Verti-Drain
Gambetti 400 litre sprayer
SISIS Flexi brush
Trimax Procut
ICL SR2000 spreader
Transfer wheel linemaker
Trailer

Does Scott have a wish list? “I would love a Dennis G860, the versatility of the different cassette options is great, and it is reliable. If I’m being cheeky, I would also like a Dennis PRO 34R for cleaning up the pitches after training. If I could have one of each it would be like winning the lottery.”

Scott feels groundsmen are majorly undervalued and are taken for granted, especially in the lower leagues where the budgets are a lot tighter. “People see pictures on the television of top clubs, and then look at pitches in the lower leagues and grassroots level and don’t understand why they are not in the same condition, especially in winter when, for example, a League Two game is being played on a mud pitch and the game in the Premier League is being played on beautiful grass.

I think, as an industry, there has to be more transparency on the financial differences between clubs. I also feel clubs and fans can be too quick to blame the groundsman and use them as a scapegoat when, unfortunately, it is not down to the skill of the groundsman but the lack of funds.”

“I don’t know how we do it, but it would be nice if people didn’t see us as grasscutters; that is just a small part of the job. What you do between cutting is the vital part. As soon as people realise it’s not just sitting on your jacksie on a ride-on mower, and that it is a profession which involves a lot of thought, planning and skill, we will all be better off. As groundsmen, we all have a passion for the job and are very proud of what we do. We all want to achieve the best standards we possibly can with what we have available to us.”
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Founder of Turf Tonics, Colin Wilson (left) with Head Groundsman, Sean Woodley
Wycombe Wanderers FC

Just the tonic

EFL League One side Wycombe Wanderers are currently exceeding all expectations sitting top of the division, with hopes of promotion to the dizzy heights of the Championship. Adams Park Stadium is their home ground, which is where Lee Williams met with Turf Tonics employee and Head Groundsman, Sean Woodley on, what was, a very wet and windy morning in November.

Sean Woodley found his way into the industry through Colin Wilson, one of Turf Tonics founders and directors who was course manager at Wycombe Heights Golf Centre. “I’d been working in the kitchens at Wycombe Heights Golf Centre for twelve years and was at a point where I was getting frustrated and wanted a change. I knew Colin well, and I admired the work they did out on the course and it looked like a career I could get my teeth into. So, for months, I was hounding him for an opportunity to join his greenkeeping team but, unfortunately, there were no positions available. Colin then left the club to set up Turf Tonics with Steve Gardner. Then, one day, Colin phoned me up out of the blue and asked if I wanted a job? The opportunity was too good to miss.”

Sean was thrown in at the deep end and was immediately set to work as a groundsman looking after the Adams Park Stadium pitch. But he needn’t have worried as Steve’s dad Jim, a former groundsman for the club, was prepared to show him the ropes.

“Jim took me to the training ground, showed me how to mark out a pitch, string out and generally how to set a pitch up. Then it was up to me to put that into practice on the stadium pitch. Along the way, I have had lots of help and guidance from Colin and Steve, who have been very supportive. I took on board everything they had to offer me, and the hard work paid off in 2017 when they made me the Head Groundsman, which was a very proud moment for me.”

I was surprised to find out that the stadium pitch was an eighteen-year-old Desso with a medium/fine rootzone. This is the same age as the Desso at Oldham Athletic which I worked on during my time as Head Groundsman, so I can sympathise with the issues and challenges Sean now faces.

“London Wasps helped install the pitch when they were here eighteen years ago, so it does have undersoil heating which still works. It does cost a fortune to run so, before we switch it on, we have to send a report to the club who will then give the go-ahead as the cost to run it is not in the contract. We have a Hunter irrigation system with sprinkler heads around the outside, but not in the middle, which isn’t ideal, although we were recently given the budget to update the heads.”

I asked Sean if he had recently checked the depth of the Desso fibres. “Funnily enough, we looked at this a few months ago, and they are now at depths varying from 5-6 inches. This has started to affect the stability of the pitch and how it plays, but is just something we have to work with.”

The pitch has a lot of use through the season as they host Reading Ladies who use it as their home ground. Reading’s under 23s play four or five fixtures and they are to host

I would like a full set of SGL lighting rigs. They would make a massive difference to the playing surface. In all honesty, even one lighting rig would make a difference
an England under 20s qualifying game against Iceland.

Sean tells me the stadium has its own climate and suffers heavily with shade because of where it is situated. “It can be zero degrees down the road whilst, in here, it will be minus two degrees! We have a period in winter of nine weeks with no light as the sun does not rise high enough to get over the bank with the trees behind the main stand. We did a shade diagram for the EFL four years ago and, every day for nine weeks, we just shaded it all in! We have looked at lighting rigs, and discussed it with the club on numerous occasions but, like most things, it comes down to the cost of purchasing them and, once you have them, the cost to run them is not cheap. In the summer, we have the opposite problem. It can be like a sauna in here, we can’t get enough water on and it can start to bake the pitch off.”

Renovation on the pitch has been limited this season due to the financial situation. This meant they were not able to strip the pitch off with the Koro as they have done over the last four years. This is not ideal considering the amount of use the pitch gets through the season.

“I used the Campey UniRake and scratched the surface in many directions over two days and took as much rubbish out as I could. I then picked up the debris with the Kubota G23, which I think does a great job. It was then dimple seeded with ten bags of Johnsons Premier Pitch. We then applied forty tonnes of medium sand and brushed that into the surface with the Greentech tractor mounted brush. Six weeks after, we went over it with the Toro Procore 648 with 19mm tines at a depth of four inches.”

Sean Woodley - cat fearing magician

Who are you? Sean Woodley, Head Groundsman of Wycombe Wanderers FC.

Who’s your hero and why? Barney Curley. He masterminded a horseracing coup which cost bookmakers millions.

What’s been the highlight of your grounds career so far? Winning pitch of the year 2017/18.

If your younger self saw you now, what would he think? God you’re going grey!!

Which famous people wind you up? Floyd Mayweather Jr.

What job would you love, other than your own? Speedway rider/jump jockey.

Brexit or Remain? Brexit.

What is your favourite film? 21.

What scares you? When the cats are hiding ready to attack at my feet.

What would your autobiography be called... and who would play you in the film? Grumpy git.

What is your favourite sport? Horseracing/ speedway.

What would you cast into Room 101? Trophy hunting.

Do you have a lifetime ambition? To be a millionaire.

Which three people, living or dead, would you invite to a dinner party? Sir David Attenborough, Barney Curley and Sir Alex Ferguson.

What’s the best advice you have ever been given? Never be afraid to ask.

What’s your favourite smell? Seaweed.

Which three albums would you take to a desert island? Any Oasis.

What’s your favourite piece of kit? Dennis PRO.

What three words would you use to describe yourself? Grumpy, perfectionist and grumpy.

What is the single most useful thing you could tell a 16-year-old groundsperson/greenkeeper? Never be afraid to ask.

What talent would you like to have? To master the art of magic and illusions.
throughout the season; the only job he doesn’t carry out is spraying, this is carried out by other Turf Tonics staff. “Summer cutting heights start off at 32mm, and I will gradually lower that to 24mm for the start of the season. In winter, I take it up to 28mm. I use a Dennis G760 cylinder mower. I don’t tend to scarify the pitch throughout the season as I like to use the tractor mounted brush to stand up the sward and adjuvate the surface after every game and, after every couple of games, I will go over with the UniRake. I will hoover up the debris with the Dennis Pro 34R; I find this helps to keep the surface clean. I have just overseeded with four bags of a cheap ryegrass mix, on the vertical, to try and help us retain some grass cover over winter.”

“An important part of my general maintenance is aeration, but I have to be mindful of my timings around fixtures. I don’t want to open it up too much before a game and make the surface too soft. This week, I have been over it with the Toro Procore with 10mm tines at a depth of four inches and the Air2G2 with six-inch tines as this was the only gap I had for a while.”

Soil samples are taken a few times a season through their fertiliser supplier. Once the results are back, Colin and Steve will put

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**What’s in the shed**

- Dennis G760 cylinder mower
- Dennis Pro 34R rotary mower
- Dennis Premier cylinder mower
- Kubota G23 ride-on mower
- Kubota STV40 tractor
- Campey UniRake
- Greentech tractor mounted brush
- Toro Procore 648
- Air2G2
- Scotts Spreader
- Stihl backpack blower
- Toro Sprayer

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PC December/January 2020
the fertiliser programme together depending on what budget they have available for the season. They will also look back at what has worked in previous seasons. The programme generally consists of a 50/50 split of granular topped up with a liquid fertiliser mixed with bio-stimulants and turf hardeners. They aim for around 250 to 300kg of nitrogen a season as the budget allows but, at the same time, they believe this helps reduce disease. They are now trying to go down a biological and mechanical route to try and strengthen the plant rather than use fungicides.

“To try and help suppress disease, I will put the dew brush over the pitch in the mornings before I cut. It’s hard work but, on the upside, it keeps you fit; the downside is I’m blowing out my backside by the end of it!”

Wycombe have a training ground comprising two and bit pitches and a goalkeeping area on. This has very little done to it apart from being cut and marked and then a couple of fertiliser applications per year. In winter, we will try and get the pitches verti-drained and shockwaved to help keep them dry. We don’t have a pop-up irrigation system, so it’s a real battle in the summer months.

The machinery Sean uses is owned by Turf Tonics who like to try and find the right machinery for the job and are not committed to any one manufacturer.

I put the question to Sean that, if money was no object, what piece of kit would help improve the quality of the pitch? “That’s easy. I would like a full set of SGL lighting rigs. They would make a massive difference to the playing surface. In all honesty, even one lighting rig would make a difference.”

History
The club plays at Adams Park, which is situated on the western outskirts of High Wycombe, and traditionally play in quartered shirts of navy (Oxford blue) and pale blue (Cambridge blue). The club’s nicknames are “The Chairboys” and “The Blues”.

In 1887, a meeting held at the Steam Engine public house in Station Road, High Wycombe saw the formation of Wycombe Wanderers F.C. It is highly likely the club was named Wanderers after the famous Wanderers, winners of the first FA Cup in 1872. The club played friendly matches between 1887 and 1896. It first entered the FA Amateur Cup in 1894 and the FA Cup in 1895.

In 1895, the club moved to Loakes Park, which would become its home for the next 95 years. In 1896 the club joined the Southern League and competed in the Second Division until 1908.

The club has played at the stadium since 1990. During the 2003-04 and 2004-05 seasons, the stadium went under the name of the “Causeway Stadium” for sponsorship reasons. The move was financed almost solely by the sale of the club’s former Loakes Park stadium to the health authorities to facilitate the expansion of Wycombe Hospital.

The stadium has a capacity of 9,448 with four stands. The original seating stand (Beechdean Stand) is on the north side of the stadium, with a capacity of 1,267. The largest stand in the stadium is the Woodlands Stand on the south side of the ground, which was built in 1996, replacing a covered terrace. It has two tiers, the upper tier being known as the Frank Adams Stand (like the stadium, named after former captain Frank Adams); the lower tier is the Origin Family Stand. It has a total capacity of 4,936, including sixty brand new ‘2020’ seats, which can be used by both seated and standing spectators.

The away section of the ground, on the east side, is the Hillbottom Stand (Lords Builders Merchants Stand) with a usable capacity of 1,816 (although the physical seating capacity is actually 2,059). This stand was rebuilt in 2001, almost doubling its previous size. The stadium also has one terrace, on the west side, which is the Valley Terrace (BMI Healthcare Terrace) and is the home supporters’ end. It has a capacity of 1,429.

What’s in the shed?

All the hard work paid off in 2017 when they made me the Head Groundsman, which was a very proud moment for me.
We have an average of 3 games a week and no undersoil heating, so we are very excited to use our first ever grow light to aid recovery and germination this winter.

First UK university to use SGL grow lights

Kris Nurse, teamlead ground staff at Loughborough University, was the lucky one to win a 3 month trial of the BU50, the first grow light in the Basic Line lighting range from SGL. Never having used grow lights before and keeping an intense playing schedule, Kris is excited to have access to extra light and heat during groundsmen’s toughest months of the year.

The Loughborough University stadium is home to Loughborough University Football Club, the Loughborough Foxes and for 15 games a year also the Derby County under 23’s. Additional tournaments, student fixtures, the occasional rugby and lacrosse games make for a very busy schedule. Naturally this presents considerable challenges to the grounds team. Kris Nurse: “The biggest challenge we have is keeping the standard we need to host high profile games at the stadium. We have already hosted 30 games from August until the end of November and have an average of 3 games a week throughout winter. With the sunlight gone and no undersoil heating, we struggle with recovery in the stadium.”

SGL’s BU50 is developed to be affordable for sports clubs or venues with limited budgets. The BU50 was launched at Saltex as the first product in the SGL Basic Line range. Saltex visitors could sign up to win a free 3 month trial. Loughborough University was chosen out of almost 100 competitors and will now be the first ever university to use SGL grow lights.

Kris: “We have never used grow lights before and can’t wait to use them to improve recovery on our goal mouths and other high wear areas. We will also be overseeding and will use the BU50 together with germination sheets to aid growth.”

The BU50 adds light as well as additional heat to the surface, enabling grass growth and recovery throughout the winter months whilst improving grass quality all year round. The trial will run from the beginning of December until March. Curious about the results? Follow Kris Nurse on Twitter: twitter.com/goals99

www.sglsystem.com/BU50
King’s Ely

Keeping busy all year round
King’s Ely sits in the shadows of the city’s splendid cathedral and its location and history demands high standards are maintained at all times. Blair Ferguson went to meet Will Temple and Chris Young, the two men who, along with their eight-man team, continue to surpass all expectations.

A common factor of maintaining the grounds of any independent school site is constant use. Autumn turns to winter followed by spring and then into summer without little pause for breath for the sports pitches, gardens and other areas that fall into the grounds and gardens team remit.

King’s Ely is no exception. This historic site is home to sports pitches, cricket tables, multiple gardens and flower beds and public areas - all of which sit in the shadow of the spectacular Ely Cathedral.

Sixteen years ago, Will Temple joined the school as a gardener and, for the past eleven years, has been in his role as grounds and garden manager. That year, into his new job he made his way around the fence to neighbouring Ely City Golf Club to recruit his Head groundsman, Chris Young. Both attended the College of West Anglia, with Will studying as a gamekeeper and forester before moving into horticulture, and Chris in countryside management before moving into sports turf management. Neither had aimed to work in the jobs they’re now in but, having seen their impact on the site, it is to King’s Ely’s benefit that they did.

For just over a decade, both of them have worked with a team of eight dedicated individuals to bring this richly historical site into a condition befitting of its stature. This school sits within 80-acres of rural...
Cambridgeshire in the small city of Ely, and it’s been in place since 1541. In that year, King Henry VIII founded a College of Canons at Ely Cathedral to replace the monks whose monastery had been dissolved in 1539 and the school received its Royal Charter. Through the decades it has grown and now hosts just over a 1,000 pupils and counts King Edward the Confessor, Olympian Goldie Sayers and current Burnley FC goalkeeper and England International, Nick Pope, among its alumni.

To maintain a site like this to such a high standard requires several attributes and, while speaking to Will and Chris, one topic quickly comes out on top - being proactive. During his time in charge Will, along with Chris, has worked to establish a connection with the staff in the school and build a relationship with the sports department to make sure there’s always open communication, allowing him to plan far in advance and make space for last-minute requests around events.

“I think we’re proactive and, organisationally speaking, we have our routines, and that plays a big part,” Will explained. “Often, we’ll know what’s going to happen before the sports teachers do and that really helps because we’re thinking about open days, the soapbox race, a swimming gala or the district cross country three of four weeks before a teacher will email us for a gazebo or something like that, but that’s just experience really.”

Chris adds: “Working like that means we have everything ready so, when we do get requests, they’re easy to deal with. We’re big on keeping on top of things as opposed to letting them build-up - we’d rather do an hour’s leaf clearing every morning than a whole day once a week and that makes a big difference.”

Will continues: “Because we do all of the tree management and handle the spraying..."
We’re big on keeping on top of things as opposed to letting them build-up - we’d rather do an hour’s leaf clearing every morning than a whole day once a week and that makes a big difference.

contractors, swimming pool contractors and crickets nets in the sports hall or whatever is going on, we know the times when they have to happen, so we’re continually planning around that, and we have to. I already know what’s going to happen to the trees next May, and the planning consents have to go in, and there are projects that we’re planning two-years in advance because there will be something, whether it be a wedding somewhere or an unexpected swimming gala or we decide to host a county championship for something, then we have to be able to react to it, and I think being organised helps that.

“The sports pitches especially benefit from our proactive approach because we have such a tight turnaround and we don’t have training areas, so all of the pitches and cricket tables are used for fixtures and training.”

“From the gardeners’ point of view, we don’t have to grow all the plants ourselves, but it’s nice that we do and you get the sense of satisfaction and, once people know that you do it, it picks everyone up. The teachers don’t believe that we make

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season. We have a full season of rugby now and then a full term of football and then, all of a sudden, you need nine cricket outfields - on pitches that have been churned up for the last six months - on a three week turn around. During that three weeks, you've got to do the pitch maintenance, get the goals away and you've still got to plan in cutting all the beds, putting out the 4000 bedding plants, swimming pool tests, tennis courts to clean, astros to brush, hedges to cut and trees to maintain. So, there's always something happening."

"It also gets exceptionally busy during the cricket season after the May half-term. You have open days, and every house has its summer barbecue or summer party, and it does get relentless from that point of view with cathedral services, governors meetings and all the balls we have - the summer term does explode, and if we’re not on it, we can suffer."

When talking to Will and Chris, it’s clear they don’t fully appreciate how well their operation is run. In the space of ten minutes, we talk about the winter term being the most difficult, before talking about how the cricket season is the hardest. It’s taken a lot of time to get them to where they are now, both in terms of well-executed routines and
gaining the respect of the wider school. One thing that has helped this progression is having a clear set of priorities, and that is to always focus on what the parents are paying for, as Will explains.

“It has taken a while to get it to this point - definitely, but I think in the last five or six years we’ve had it right. A lot of the time you have to be quite straightforward with people. I suppose it’s getting people’s mentalities right, it’s educating people that the priority is the children and the events that they put on. Yes, we’ll look after your personal space, but we have to get this running - if they’re not playing cricket then they’re not getting what they pay for, then that’s an issue, and that’s the same wherever you are, so that’s the priority.”

“On the gardens side, the biggest thing is the Leavers’ Ball in the summer at The Old Palace, and it has to look good for these events as there are a lot of expectations surrounding them; it has to be perfect. We can put four gardeners in there for two weeks, as well as having to do everything else just to get that looking exactly how it should be for that one night.”

With priorities in place and a plan to match them, the grounds and gardens team have gained the trust of the school, and with that has come investment, both on machinery and on new cricket tables. A defining moment in this period was when The Old Palace Garden was put in the control of Will in 2012. What made the project that bit more special is the over 300-year-old London Plane Tree that sits in the centre of the garden.

“The Old Palace was quite a big shift because we had a new budget created for us when it came on board, which focused more on the estates side of it, like fencing, trees, hiring machinery to build a road and uniforms,” Will explained. “Before, quite a lot of that came out of the grounds department which was then money that wasn’t being spent on turfcare so, rather than spraying the fields, we’d go and build a patio, whereas now they’ve been good to us and we can use the money for what it’s there for.”

“It was a brilliant project to do because it is one of the original London Plane trees in

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It was a brilliant project to do because it is one of the original London Plane trees in the UK, planted in around 1680 and it’s definitely the largest in the UK if not Europe

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Ely Cathedral from The Old Palace Garden

Clara’s Garden which also remembers other members of the King’s Ely community

The spectacular over 300-year-old London Plane tree in the Old Palace Garden
the UK, planted in around 1680 and it’s definitely the largest in the UK if not Europe. It’s just over 40 metres high now and over 10 metres girth. It’s on the National Heritage register and is one of the top fifty trees in the UK, and people come from all over the world to see it. We’ve had people from China, a couple last week came from Holland, some from America and all across Europe and they all want to see it. During the summer, they’ll come and knock on the door and ask to see it - so it’s known worldwide.”

“We’ve entered into a project with Barcham Trees to propagate from it, so there is a direct line of London Plane that are coming from it. They are under attack at the moment from a fungus called Massaria which is leading authorities to remove thousands of them in Europe, and now in the UK, so it’s quite important that we promote the species, get the tree noticed and more of them planted.”

“The Sue Ryder Charity (the previous incumbents) had been gone for four or five years before we came in, so it’s obvious things were going to get out of control. They had a gardener and Ray did a lovely job in there, but when we got control of it, we wanted to put our own stamp on it. Over the last four or five years, every person in the department has had legitimate input into that garden, whether it’s digging the path out, pulling the trees out of the pond or laying some turf - everyone has played a part.” This has also led to a memorial garden within the Palace grounds for ex-governor Clara Taylor (Clara’s Garden) which also remembers other members of the King’s Ely community.

“The tree has got its own problems, and the school has invested in it heavily already. These things come at huge costs, so we’re fortunate that our current chief operating officer, Mark Hart, and the bursar before him, are really on board with what we do and they understand it, so we’re very lucky from that perspective. And it’s not just that tree, it’s all the trees on the site, some of which are hundreds of years old. It’s essential to look after them and educate people about them. We do educational classes with the junior school, assemblies, do little tours with the nursery children and take them to the yard to plant plants and Chris has done things with them as well.”

“Doing things with the children and showing them the area gives them a new respect for it and they know not to walk under a tree or cut across the lawn and stuff like that. We’ve been lucky, on the grounds side the department got invited into a junior school assembly, and they did the whole assembly on us, and the garden side has recently had theirs. It shows their appreciation for us and shows we’re doing what we do right, which is nice.”

The restructuring of budgets following the Old Palace project has helped the grounds operation be more agile, but it is the investment in machinery that has played the most significant part. When Will first took over, there was a pick and mix of equipment at his disposal and he, along with Chris, has worked at getting a range of machinery that suits the site and allows them to carry out routine maintenance as and when they need to do it.
“When I was working at Ely City Golf Club, we used John Deere mowers so, when Will said he wanted to get everything from one dealer and one manufacturer, I recommended that was the way to go. That investment has paid off because there is a noticeable difference in quality since we’ve had the new equipment,” Chris began.

Will continued: “It’s been our focus to get that equipment and it works into our proactive approach. When I first took over we were able to invest. The first time around we weren’t able to get any of the equipment we wanted, but it was still a significant improvement on what we had. We were quite keen to get it all under one umbrella as far as a dealer and manufacturer, and as Chris said, he had experience of using John Deere quite a lot at the golf club, so we went that way.”

“The one that’s really made the difference is the large 15ft Progressive tow behind mowing deck because we can cut volume. There are times where we just need to cut volume and still present the pitches right. Chris went out on it this morning when it was pouring with rain, and it still did a lovely job of cutting the pitches. We just got a five-gang fairway mower, and we had a triple last year because, with the new cricket tables, we needed to cut more volume of grass.”

“We used to hire in a verti-drain, but we’ve managed to pick up an old one, and we’ve just got a Trilo scarifier and collector, so over the last ten years we’ve built up necessary core machinery which enables us to be in...
control of stuff. I think that’s the biggest thing, when we want to put the verti-drain on we can do it rather than having to wait.”

“We’re lucky, our budgets are healthy, the school does invest well in us, and they do allow us to do our job. Obviously, we have a consultation, we’re not just running around doing what we want when we want, but on a day to day basis they know we work well with the sports department, so they let us get on with it. It wouldn’t matter if we didn’t speak to anyone else for a month, they’d know things are happening and they can see it. From a grounds perspective, it has been a big thing to build up towards this.”

Whilst the machines play an important role in the operation, it is the staff who make the biggest impact. Trevor Mott and Stacy Squirrell have been at the school for a combined fifty-five years, with other staff members coming from diverse backgrounds ranging from being a forklift driver, golfer, cleaner and bus driver.

With a large site and always plenty to do, both Will and Chris place a lot of importance on the character of their staff. They’d both rather someone who is willing to pitch in and put in the effort, but this approach has presented one of the bigger challenges.

“One of the biggest challenges has been to get people to think for themselves,” Will explained. “You might have to repeat yourself three or four times on one thing, but I think you can only get to that when you allow people to do it in some regards. But it’s challenging because a lot of it is a confidence thing because they don’t want to get it wrong, not because we’re horrible bosses, but because they care.”

“I’d like to think they get that from us, and that’s because our management care and our bosses will walk around and talk to us and tell us what a great job we’re doing. More so in the last few years, we’ve got a lot wider appreciation, whether it be an email or a thank you card or whatever, we are getting more and more of that and more involvement as a department in other activities.”

Chris continues: “By doing these things we aren’t just the guys walking around in the green tops marking pitches, so it’s a big thing that helps everyone, especially with their confidence.”

“We know people are going to make mistakes. One of newest guys hadn’t been with us long when he cut our long grass at the 20mm outfield height. It looked a state when he did it, but when he came to me, I just laughed because these things happen. It’s not that I like them making mistakes to learn, but when they do make mistakes, it’s important they learn from them. Sometimes, they’ll have their own ideas about what will work best and, even though you think there’s a better way, you let them try it because, once again, they learn from it.”

Will concludes: “Every morning there are ten people that want to come to work and, in any profession, to have ten people who want to come is great. It’s not a trade where you benefit from big financial reward or pay, it’s not a glamorous job, but it’s a job they, and we, get satisfaction out of, at a place we all like to work at, with people we like to work with - if you don’t have that, you can forget about it.”

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Keeping a lid on turf care

Durham University
The finishing touches were being applied to Durham University’s expansive new Sports and Wellbeing Park when I met up with Paul Derrick, the facility’s Playing Fields Supervisor to find out more.

Adding to the plethora of pitches, natural and synthetic, is a £32m health and wellbeing centre, complete with indoor cricket hall, 12-court multi-use sports hall and gym. A wellbeing trail snakes from Durham centre to Maiden Castle on the city outskirts, part of a sport and health strategy the university is promoting.

The university’s 2017-2027 masterplan identified Maiden Castle as “capable of absorbing further concentrated development”. Delivery of new facilities would allow it “to compete sustainably at the highest levels of British university sport” whilst also “supporting increasing overall levels of student, staff and local community participation in sports and physical activity”.

The rise in Durham’s student population, and consequent upsurge in demand for sporting provision, has brought fresh challenges to Paul and his team of two as the fixtures calendar burgeons.

Paul has worked here twenty-eight years, leaving the then Leyland Vehicles sportsground after DAF acquired the manufacturer. “Lancashire Football Association bought the pitches but we lost the cricket ground - the team played in the Northern Cricket League,” he recalls.

Paul left school at sixteen, starting work for the Central Lancashire New Town Agency before a stint at a tree nursery. “They sent me to Myerscough College on a four-day block release course in Amenity Horticulture,” he explains, “but I was keener on sportsturf management although I was not a player as such.”

“My brother-in-law worked at Leyland and tipped me off about a vacancy there after the groundsman just upped and left one day. They really threw me in at the deep end as the college hadn’t prepared me for sports turfcare.”

One early mishap is still sharp in Paul’s memory. “I remember the two crown green bowling rinks had a worm problem. I applied Chlordane, which was permitted in those days, but I overcooked it, miscalculating the dosage, and the grass turned yellow.”

“I learned a hard lesson that day. But, you know what, after that we never had a worm problem in all the eleven years I worked there,” he smiles ruefully.

“By April 1991, DAF had acquired the site and they planned to build houses on the ground, but a problem occurred and nothing happened.”

Word got around about Paul’s turfcare prowess and High Wycombe Cricket Club approached him to fill a March-October position as head groundsman. “I bumped into my interviewer in Antigua ten years ago when I was following the England team’s tour of the West Indies,” Paul says.

“The Durham University opportunity appealed to Paul more though, partly due to the upheaval in moving south to Buckinghamshire. “As all my family lived locally in Leyland, I decided to take up the post here.”

The grounds team’s job has intensified and increased in Mark’s time at the university grounds, he notes. “Maiden Castle has changed beyond all recognition from my early days. Facilities were pretty sparse then.”

“In the early 1990s, Durham had 4,000 to 5,000 students - that’s risen to 17,000 today, with plans to rise to 21,000. I lived on site up the hill until the university changed its policy and they rented it out, so we moved away offsite to Spennymoor.”

“The grounds never opened on Sundays or even weekends. We’ve moved to a 24/7 schedule now - with club, juniors and students football training round the clock.”

That’s not all. “Durham Women’s FC is to make us their base,” Paul reveals. “The FA visited recently to accredit the facility.”

Another sign of how the university is shaping provision to match demand. Maiden Castle’s outdoor provision first included a sand-based hockey pitch installed in 1989, three grass hockey pitches - two of them later replaced with water-based synthetic surfaces, 3G pitch, a cricket square, rugby pitch and three football pitches on the bulk of the site.

Included in the latest improvements are a new 3G pitch, upgraded hockey pitch, more grass playing areas and dramatically
Maiden Castle, so named because of its position in the shadow of a hill once topped with a Roman fort, lies next to the river Wear - peat in the water creating a distinctive dark chocolate colour - a naturally tranquil setting turned into a thronging sports hub humming with humanity most of the week, particularly on Wednesdays when British Universities and Colleges Sport (BUCS) fixtures devour the peace.

“This is certainly an atmospheric place,” Paul ventures, “with a sense of history helped by our location so near the hill. It’s sheltered too; 10% warmer here on average than our other site - the Racecourse ground.”

The bridge spanning the river takes you from the main site to more provision - two rugby, two lacrosse and two football pitches. American football is a growing phenomenon here and has switched from a natural pitch on the far side of the river to a floodlit synthetic playing surface.

“We had a right palaver transporting bleacher seating over there for matches,” says Paul. “That’s all changed now with the new designated playing area this side of the Wear.”

“Did you know the game is named because the length of the ball is twelve inches - a foot?” I didn’t, but it’s one of those engaging slices of trivia you take forward.”

Flooding has presented a double-edged sword, whilst helping create a fertile, alluvial soil profile, Paul says. “The river has come onto the site twice since I’ve been here - the last time eight or nine years ago.”

Maiden Castle’s main rugby pitch hosted a visit from Shenkyo University in the early 2000s. A tree commemorates the game, recording that ‘rugby creates lasting friendships’. “The first 15 play here,” says Paul, while Durham City Rugby Club use two other pitches for their first, second and junior fixtures.”

Lacrosse is particularly popular with both women and men - Durham acting as a regional hub for the sport - played mainly on 3G as well as the two grass pitches, with a team coach on hand.

“We’re standing on the sports centre upper tier, courtesy of the facilities manager, who guided us here to gain a more panoramic view of the grounds. The upgraded four- and six-lane athletics track gleams bright brick red in the sunshine, enclosing a sword of green that has also undergone recent change. “The old grass football pitch has given way to a new 3G surface,” Paul says, “to cater for the level of demand.”

As if reading my thoughts, Paul adds: “Just trying to keep up with grass growth is a challenge. The warm, wet weather encourages growth almost all year round.”

Did you know the game is named because the length of the ball is twelve inches - a foot?”

I didn’t, but it’s one of those engaging slices of trivia you take forward.

The new sport and wellbeing centre

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**Hand-arm Vibration/Noise Assessment**

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<th>Points per meter (dB-A equivalent)</th>
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<th>Sound Pressure Level (dB(A))</th>
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*Actual vibration levels may be higher depending on surface/mass characteristics.

Right: Noise assessment forms help ensure the team works within safe vibration limits.
Over in a quiet corner of the grounds stands the shed, where I’ll later meet Paul’s colleagues - assistants Rob Taggart and Stephen Brown.

A contractor’s van stands outside, evidence that I’ve chosen the day when Paul’s supplier services the machinery.

Another major challenge presented itself to further stymie the team’s efforts to keep pace with the university’s turfcare programme. “It came to a head a few years ago,” says Paul. “I started to experience problems with my hands. I had it checked out and was diagnosed as suffering from white finger and carpel tunnel syndrome. I’m on medication now.”

“We all use our hands so much in this job, including pushing mowers around. You have to be so careful as issues can build up over time, almost without you being aware of them.”

Fortunately, the university acted swiftly to alleviate the problem, Paul notes. “They added vibration meters to the machinery, introducing a points system that imposed a threshold on how much time we spent using it.”

Fitted to mowers and hand-held kit, the meters allow the team to record accurately their exposure. “The national health and
You can’t just go to the job centre and pick one out, so we decided to hire in one for twenty hours a week, starting last year.

The protective measures have introduced a welcome control to prevent risk of overexposure to potentially harmful whole body vibration. “We fill in forms to record weekly equipment use,” Paul explains, “then submit these to the estates department.”

However, the safety code has impacted the team in another way. “The limit is low enough to bar us from some machinery after only half an hour’s use,” Paul adds.

“The old Ransomes Mastiff and Dennis machines we were using all day have been replaced with newer machinery and we have discussed battery-operated kit with the HSE. The team completes the basic maintenance, with external contractors coming in as and when we need help.”

Cold weather rarely interrupts fixtures these days. “We use vacuum dried salt from a local dealer and applied from a fertiliser spreader at notch 4, but we last had cause to use it three or four years ago, usually when a big game’s on.”

“One winter, several years ago, we cleared snow this way as we were under pressure to ensure the match went ahead. We lost a host of fixtures that year but nothing recently, except a couple of days when ‘The Beast from the East’ bit us. That said; December and January can cause problems before the sun has any power in it.”

The cricket season starts the third week in April and there’s play almost every day until the third week in June, when summer term finishes. “Finding time to prepare wickets is the challenge,” says Paul.

“Two weeks before a fixture, we designate a wicket - water, roll and scarify it then cut with a Dennis, fitted with the appropriate cassette, preparing a little bit each day, all the time praying for decent weather.” The artificial strip also comes into play, staging the inter-college Twenty20 match.

Paul’s original team of three assistants shrank after one of the groundsmen took voluntary severance two years ago, leaving him short of a cricket specialist.

“You can’t just go to the job centre and pick one out,” he says resignedly, “so we decided to hire in one for twenty hours a week, starting last year.” Beckenham-based self-employed specialist Andy Pierson was selected. “My priority was to be able to let him crack on with the job and he performed brilliantly.”

But good peripatetic cricket groundsmen are in high demand. Andy also works on North East Premier League Division 1 club Sacriston Colliery Cricket Club and Philadelphia Cricket Club, near Washington. “I wanted to bring him in again this year but he was unavailable,” bemoans Paul.

‘Extracurricular’ duties

The university is a community of sixteen colleges and most of them have some form of sports provision, but none on the scale or scope of Maiden Castle. Collingwood College, for example, boasts cricket nets - “for their use only” - and extensive botanic gardens. “A bequest from alumni. One even runs a mini golf course,” Paul notes.

“The grounds team used to maintain them, particularly the tennis facilities,” Paul recalls. “Durham Archery Club was one of the earliest tennis clubs in Britain,” which sounds counter-intuitive until you research back to the mid-1800s, when the two sports often sat side by side.”

“The grounds and gardens department have a huge task. They’re a different section - we come under sports. There’s just not enough time in the day for a single
department to tackle everything.”

Several ‘extracurricular’ turfcare duties sit in Paul’s lap - his remit including Durham Cricket Club (“we cut their outfield twice a week”) and Durham Rugby Club. Also, the team tends two more rugby pitches since acquiring land at Shincliffe, with the club as sitting tenants.

As a university ECB groundsman of the year, Paul’s passions are the ten strip square at Maiden Castle and the eleven at the Racecourse. “Money was pumped into improving the cricket provision several years ago and I was able to start a rolling programme of wicket improvements at the Racecourse,” he says. “Umpires mark us for pitch quality, so keeping standards high is important.”

Synthetic pitch provision is something of a necessary evil in Paul’s eyes. “We’ve sacrificed grass surfaces on the altar of artificial, but I accept that this is the way forward to raising intensity of participation. In an ideal world, how much better to have natural turf.”

Sports surface manufacturer and contractor SIS Pitches recently resurfaced one of the hockey pitches they installed in 2007, complete with a vibrant purple and green colour scheme and perimeter fixtures to create a colourful focus for what is a highly popular university sport.

The new pitch perimeter tree planting has created a softer setting for sport, which “looks good on an architectural plan,” Paul points out, “but is not necessarily practical from a maintenance stance,” and may add to day-to-day duties on and around the synthetic areas, he fears.

“We sweep them daily to clear any rubbish and debris, then use the purpose-built John Deere X300 compact tractor to dragbrush after every ten hours’ use. Pop-up sprinklers flood the hockey pitches before a game - essential as the short carpet fibre can feel a little like Velcro when dry.”

“You have to hire boots to even tread on the pitch, that’s how highly we value correct maintenance.”

Aside from that, their upkeep is “pretty routine”, Paul adds. “Touching up the penalty spots on the 3Gs occasionally, which stage first team college football, is the only other task really.”

Team dynamic

As efficiencies have come in, the four full-time staff and summer part-timer aiding Paul when he arrived in 1991 now number two. “Lad” Stephen Brown had joined in 1976 straight from school, training up at Houghell College. “He maintains the cricket squares and practice wickets.”

Robert Taggart works mainly at the Racecourse ground, preparing pitches and cutting Durham Cricket Club outfield, football and rugby pitches.

“Joe Simpson worked here for a year to give us a hand - an enthusiastic amateur putting his hand to gang mowing mainly”. Paul reports to facilities manager Laura Green, also liaising with head of sport Mark Brian when occasion demands. “My weekly events meeting with Laura covers private bookings, college sport fixtures and cleaning priorities, whilst the facilities meeting airs any issues or problems.”

“On such a dynamic site, with so much activity, the team needs to know which pitches to focus on and when,” Paul explains. “With a compact team tending two sites on this scale, we have to turn our hands to everything.”

EU Directives have kicked in to further challenge the demands of the working week. “The 39 hours when I started here have been reduced to 35 and is a flat rate, with no overtime.” Added to that, the university’s two sports sites are geographically close but require road access between the two.

The expanded car parking capacity at Maiden Castle has resolved what had been a “massive” traffic co-ordination issue.
EDUCATIONAL ESTABLISHMENTS

Putting the site in a far stronger position to manage the huge programme of indoor and outdoor sporting activity.

With the likes of Darlington FC, amongst others, training on the 3Gs, keeping the customer satisfied is a key priority. “First, second and junior teams were looking for top-notch training areas and we could provide them,” says Paul.

Mondays and Tuesdays are both manic for the grounds team as they prepare for the Wednesday BUCS games. “We’re mainly harrowing in winter - one to one and a half inches for football and two to three inches for rugby.”

“Mondays we usually spend replacing divots from weekend fixtures, then Tuesdays, marking out. I prefer transfer wheel dimple markers.”

“Wednesdays we dress the pitches. With all manner of festivals and tournaments, we have goals galore. Checking nets and dragging lacrosse goals [no wheels on them] takes time, and having to squeeze eight, five-a-side goals on to one pitch is a task in itself. When so many local schoolchildren play at Maiden Castle, the logistics of ensuring they cross the river safely is challenging.”

Machinery budgets are tight, so maintaining the existing fleet in good order is critical, says Paul.

“We have to duplicate machinery for each site - two cricket rollers, two Lloyds Leda 3 gangs - they were here when I came; indestructible and still going strong - two harrows and two compact tractors.”

“Our Kubota L5030 diesel tractor hauls the Wessex RMX 240 roller mowers. We sold the large Dennis and Mastiff walk-behinds as they took three and a half hours to cut a cricket field and we had reached our 100-point limit before we’d finished and that meant we couldn’t use another machine that day.”

“By using gangs in the cricket season, we can mow in the morning to give each eleven the same playing conditions if we run several games.”

“We box off cricket squares but not the rest as there is simply too much acreage. We’re cutting pretty much all year, right up to the Christmas break; then it’s straight into the New Year programme, but snow and frosts can strike in April or even May. After using the harrows for winter pitches, we top off with the Wessex if the weather’s mild.”

Flat sheets and mobile covers serve the team well for Maiden Castle. “Our three Water Hogs are quite effective at removing water off the sheets.”

“Two Ransomes Auto Certes cylinder mowers cut the cricket squares, whilst the Dennis 21” mower removes organic material when the thatch control reel is fitted. I like the Dennis as it’s simple to use and needs just one power unit.”

With no ride-ons, the team use the sturdy Lloyds gangs for mowing the large areas year-round.

Servicing has caused Paul issues over the years, mainly through unreliability, but not since he brought in Shorts Turf Machinery, a local specialist that arrives at the end of June and again at the end of February or early March to check and repair, including cylinder mower grinding the gangs and replacing mower bottom blades. “They
deliver the personal touch and provide a quality service - just what we need.”
Paul identifies the restrictions on machinery the point system imposes.
“Forty minutes on a leaf blower, with backpack and you’re done for the day. Ten minutes with the SiSiS Auto Rake takes you over the limit.”

Once Stephen has cut the cricket square and practice wicket area, he’s done for the day. Neither Rob nor I am allowed to use hand-held kit. Contractor Turf Care spike the squares down to three inches, depending on compaction levels, so that’s a big help. Another contractor handles hedge trimming.”

Disease outbreaks are, thankfully, rare due to the sites’ favourable setting. “Our Barenbrug dwarf perennial rye is hardy and germinates well. A touch of red thread strikes occasionally, but nothing to speak of. We seldom, if ever, suffer any fusarium outbreaks as the climate is drier and cooler so we don’t really need to spray fungicides.”

“When worms proved a problem one year, we brought someone in to electrocute them,” Paul reveals. Newcastle United were training here at the time [1993-1997] and Peter Beardsley asked what was going on. When we told him, he looked genuinely shocked. We swept them up afterwards to sell on as bait.”

Crows are “the big culprits”, Paul adds.

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“They’re clever and follow you around, digging. A few years ago on the cricket outfield, they caused massive damage rooting out chafer grubs and we had to reseed and topdress.”

“Last year, little maggots infested the Racecourse ground. A quick spray ended the problem, with no impact on the square thankfully. Round-up treats fencing bases. Moss isn’t an issue but can take hold on the artificial surfaces.”

Paul prefers quality when choosing his fertiliser. “I’ve applied Evolution microgranular slow-release for several years. I find it works better in cooler weather - not the cheapest, but good. The autumn/winter feed for football and rugby we apply in October or November, then the spring/summer feed in April, with a July top-up if necessary.”

“We apply across the squares, outfields and practice areas about four times a year - October, December then March and through the season.”

Racecourse ground

A short drive takes us from Maiden Castle to the Racecourse ground, approached from Durham centre’s high ground, with its Norman cathedral, medieval castle and prison overlooking, one of the most attractive sport settings I’ve witnessed.

Paul knows the back roads well enough to avoid the single track thoroughfare that wends its way through Durham’s ancient marketplace, costing drivers £2 for the privilege of enjoying one of the first toll roads in Britain.

The entrance road curves down to the classically cream and green clubhouse, looking across to the cricket square in front and a rugby and two football pitches to its rear, fringed by the river Wear. The racecourse is long gone but this is home to university first eleven cricket.

We walk across to the square, relaid in 1989 by industry doyen Keith Boyce, now lying fallow until next season, and gaze across to the escarpment overlooking the fine stretch of green sward.

“This is the only sportsground in Britain where you can include a cathedral, a castle and a prison in a single photograph. A favourite spot with photographers.”
where you can include a cathedral, a castle and a prison in a single photograph,” Paul states. “A favourite spot with photographers.”

The cricket festival held here for so many years has given way to Durham Miners’ Gala. “The all-day jamboree attracts 20,000 people. Labour leader [at the time of writing] Jeremy Corbyn spoke at it recently,” Paul reports.

Durham CCC played their first four-day game here (against Leicestershire) after election to the county championship in 1992, and also practised here. “I recall then head groundsman Tom Flintoff flitting from ground to ground while the club was building the Riverside Stadium.”

“They installed our scoreboard and practice wickets, before playing their last game at the Racecourse in 1995, when Ian Botham played for them,” Paul says.

Paul applies four or five bags of topdressing a season to the square, repairing wicket ends as needed. “I prefer Surrey medium loam as it’s easy to work, but have left the original heavier Barbary loam in place on one of the strips.”

“If you start mixing different loams and layers, the pitch can absorb ball bounce differently and can develop unevenness. You end up with a Liquorice Allsorts. My message is; always be consistent with your dressing.”

Such an open 20-acre site can create security issues, Paul explains. “We’ve suffered problems here - people coming in, worse for drink, removing things and causing extensive damage. One year, a small roller was found dumped in the river. This is an alcohol-free zone now.”

Here is also home to St Cuthbert’s Rowing Club. “In its 170-year history, there have only been two years when rowing has been cancelled - five years ago and this year,” says Paul.

Chatting in the period changing rooms transports you straight back fifty years, when a hook and a bench seat was all you’d expect by way of provision, along with a line of chilly-looking open showers. Quintessentially quaint in its own way. “I relax here to eat my lunch,” Paul notes, “usually home-made sandwiches.”

“I’ve enjoyed my time working in this beautiful environment, with, frankly, very little interference. You can’t say that about many jobs, can you?”

Time to leave Paul, mounting the Trimax Striker 190, ready to speed-mow the turf in warm, bright sunshine.

A wave of nostalgia washes over me at what is such a classically English sporting scene, too seldom seen now, swallowed up in the country’s relentless race to intensify provision and boost participation.

But as songstress Joni Mitchell wrote: “Something’s lost, but something’s gained, in living every day.”

Images © Speedmediaone
A popular Warwickshire equestrian sports venue has been revitalised by enthusiastic young teams using modern techniques to make the most of its natural attributes. Jane Carley meets the husband and wife team running the facility.

Set in historic parkland to the south of Royal Leamington Spa, Offchurch Bury Polo Club in Warwickshire is an idyllic place to spend a summer’s day, and a focus on the grass roots is bringing a host of new devotees to the ‘sport of princes’. Polo came to Offchurch, where the manor house dates back to the 16th Century, in 1989, when Diana Johnson established the club after playing the sport in India. It was also one of the pioneers of arena polo, a winter sport played by teams of three on an enclosed synthetic pitch (rather than the four who play the summer sport on a full-sized grass pitch).

Since 2008, the club has been managed by Diana’s daughter Tessa and her husband, professional three-goal polo player Grant Collett. “We wanted to offer a grass roots polo experience,” explains Tessa. “We aim to introduce new players to the sport and provide cost-effective, enjoyable polo.”

The original full-size pitch had an area of ‘dead space’ behind it, and when negotiating a contract with the Schools and Universities Polo Association (SUPA), was proposed that the field could be rejigged to create a full-size pitch and a three-quarter size pitch, the latter suitable for chukkas (practice) and matches for younger players. The pitches sit side by side with the commentary box at the centre for fixtures.

A further re-boarding of the main pitch in
EQUESTRIAN

Offchurch Bury Polo Club manager Tessa Collett and polo professional, head groundsman and husband Grant Collett
The pitch in play, with Tessa on the left on the grey horse.

2018 has widened it slightly to improve the playing experience. “The pitches were originally grazing land and, in the early days, continuing to graze with sheep was an important part of the maintenance regime,” explains Grant. “But sheep do make distinct tracks in the turf, and another issue was the prohibitive cost of temporary fencing, so they have now gone.”

One benefit of the parkland turf is that it never gets very hard, but with safe, enjoyable play the priority, sanding to improve the polo ponies’ grip is an important task, with 300 tonnes of sand applied last year.

“The larger clubs will put on 500-1000 tonnes a year, but it is expensive, and works best with aeration or coring.”

“It takes quite a lot of maintenance to keep the pitch playing well,” comments Grant, who in addition to playing polo also gives all of the polo lessons that are a key part of any club’s bread and butter. “We mow with a Major topper with rollers front and back to a height of 2.5cm - the topper is 3m, but 4 or 5m would be better to cover the large area of ground. A light Cambridge roll then presses down the divots without going too deep, and a flat roll evens out the surface.”

With mature trees surrounding it, the smaller pitch suffers more in wet conditions. “If there’s a lot of rain, we’ll also use a slitter to help water get away - I usually work lengthways along the pitch and it now needs doing the other way. I’d like to hollow core, but it is a slow job on such a large area of turf.”

Granular fertiliser is applied in May and at the end of the season, and overseeding takes place in the autumn. “We last seeded in 2017, simply because finding the right mixture for polo is so difficult. You need species with good rooting to withstand the traction of the horse’s hooves, and the current sward’s roots are a bit shallow so it’s easily damaged.”

The junction of the pitches, marked by the boards, and the area between used for the commentary box at matches.

The main polo pitch was established in 1989 by manager Tessa Collett’s mother Diana Johnson.
Grant explains that damage is mainly concentrated in a diamond pattern, between the goal areas and centre sides, with the corners faring better.

The season starts officially on 1st April, but Tessa comments that it is often the end of April before they can get on the pitch, whilst in a dry season, such as 2018, play can continue into November.

Chukkas are held on a Thursday with matches on Saturday and Sunday throughout the season.

Offchurch Bury Polo Club currently has twenty-eight playing members, so SUPA and arena polo are important sources of income.

Students from Birmingham, Leicester, Nottingham, Warwick and Coventry Universities can access lessons, chukkas and fixtures in summer and winter, with the climax of the season being the Universities Summer National Championships and their Alumni equivalent in June.

Regular taster days are also held and, contrary to the traditional image of polo being an elitist sport, Grant has thirty ponies for hire so players don’t need to be horse owners.

A 94 x 47m arena offers a safe, enclosed area for teaching, as well as competition, and has undergone a major refurbishment this year. Railway sleeper-type solid fencing keeps the ball (a larger, softer version of that used in the turf game) in play and has all been treated and painted.

A new surface from Andrews Bowen is a mixture of sand, fibres and wax, Grant explains.

“There’s more wax than is used for other equestrian disciplines to give additional grip, and the underlying drainage has also been updated so that play can continue in all weathers.”

Maintenance is mainly down to a pigtail tine harrow supplied by Andrews Bowen and used daily, pulled by a 54hp JCB 354, the club’s main tractor.

“We can also use the one tonne roller, but I try not to roll too much as it can produce...
At the start of the season, I slit everywhere, harrow and roll; a month before each competition, I’ll slit again to ease any compaction. If the root structure is good, the turf will cope with the impact of the hooves, even given the variable weather undulations in the surface,” he says. “A certain amount of the surface is carried out on hooves and when horse droppings are removed, so the supplier recommends topping up every seven years.”

In use for four to five hours a day, soon to increase to six hours a day, the surface certainly earns its keep.

For many of these hours, Grant is also working hard, training young polo ponies whilst teaching at the same time.

“I’m from a farming background so, while I have focused on polo, I’m able to look after the grounds to keep our costs down. The beginning of the season can be tough - there are just not enough hours in the day.”

Tessa agrees: “In the summer, everyone wants to play and it’s hectic, and a few of our members now want to play year-round. But the students are very keen to play in winter and the new arena surface should make a big difference.”

For the local equestrian community, Offchurch is also synonymous with cross country riding, the ‘old turf’ and rolling hills in the parkland ideal for testing the horse’s ability to gallop and jump. Changes in specifications for affiliated one-day eventing meant that the existing cross country course fell out of use towards the Millennium but, more recently, event organiser and course builder Lloyd Hunt has revitalised interest in Offchurch as a venue.

Lloyd founded LandS Eventing with the idea of bringing high quality equestrian events to Warwickshire, after being involved with eventing as a rider since starting in the Pony Club back in the early 1990s. He is a British Eventing (BE) course builder, was one of the repairs team at the London Olympics in 2012, and organises equestrian events at multiple venues throughout the county.

Instigating a programme of grounds maintenance to make the parkland more resilient to damage from countless hooves in the course of a competition, he has combined permanent and portable cross-country obstacles, and prepared dressage, show jumping and horsebox parking areas.

“We started by hosting Pony Club camp in the park in 2012, and moved onto unaffiliated competitions and Pony Club area championships before approaching British Eventing to see if Offchurch could host affiliated eventing again,” he explains.

“At another local venue had closed so we were able to secure their former date in the calendar, and British Eventing returned to
With equestrian events in March, June, August and October, plus a Wolf Run using the venue, Lloyd says that his greatest asset is the old parkland turf, which recovers well from damage.

“At the start of the season, I slit everywhere, harrow and roll; a month before each competition, I’ll slit again to ease any compaction. If the root structure is good, the turf will cope with the impact of the hooves, even given the variable weather,” he comments.

“I also use a lot of portable fences which can be moved to fresh ground while any damage recovers, but the plan is to expand the amount of permanent fences as conditions improve.”

The river crossing, a feature of many events in the past, has gone out of use, partly as it is difficult to meet British Eventing specifications on water depth with a natural watercourse, but also as it is on a public footpath. An artificial water complex has taken its place.

Most of the 2000m long cross-country track is mowed, although one field benefits from being grazed by sheep or cattle.

“Sheep are brilliant, because they are less selective in what they will eat than cattle and you can really see how the grass has thickened up where they have been,” he comments.

Dressage and show jumping arenas are mowed, but mindful of the risk of clippings clogging the surface, Lloyd may slit again afterwards, while he says that he also finds a Verti-Drain useful to get the optimum footing required for jumping.

Long hours are required to keep turf surfaces in pristine condition for equestrian events, whilst building the sward’s resilience to constant pounding by iron-clad hooves, but the dedication shown by Lloyd, and by Grant and Tessa, should ensure that riders will continue to enjoy this historic equestrian venue for many years to come.
A day away is a day wasted

Chartwell
Roughly thirty acres of formal gardens, and about forty acres of woodland and pasture beyond, are spread out to the south and east of a house indelibly linked to our darkest and most glorious passages in history. It’s a great sight on a late autumn morning. As winter beckons, there is still a wonderful pallet of colour wherever you look.

Churchill bought Chartwell in 1922 and, years later, said he did so for the view over the Weald of Kent, which remains largely the same after nearly a century. The real beauty of outdoor Chartwell is that the formal abuts naturally and very openly to managed countryside with magnificent vistas. It always did. The National Trust’s Tim Parker, Gardens and Countryside Manager here and at two other Trust properties in the area, has the job of keeping it so.

I’m invited into the National Trust offices in the house to talk to Tim about the gardens and grounds at Chartwell and the work that goes on here.

He tells me that the Trust has actually now owned Chartwell longer than the Churchills did. Its heritage is taken very seriously.

“The ultimate aim we have for grounds care at Chartwell is to present the gardens and the wider estate as the Churchills would have known it,” he said.

“What we try to do is keep alive the image of it being a home outside as much as inside the house.”

The balance between being authentic and yet sympathetic to the needs and pressures of maintaining a much-visited National Trust attraction is a constant challenge. Getting on for a quarter of a million people came to Chartwell last year and the aim is to get that up to at least 260,000 in the next twelve months.

“Visitor numbers do drop a little after the House is closed each November for the winter months, but we are putting a big effort into enhancing interest in Chartwell’s outdoor beauty as well so that the flow of visitors keeps on growing all year round.”

“A day away from Chartwell is a day wasted”. That’s what Sir Winston Churchill said about his family home near Westerham in Kent, which has been in the care of the National Trust since his death in 1965. Neville Johnson went there to learn why its gardens and grounds are just as treasured as the house itself.
said Henry Jarvis, the National Trust’s Senior Marketing and Communications Manager at Chartwell.

“The house is closed each November over the winter months whilst the National Trust team complete significant conservation work to the Churchill collection.”

The gardens and grounds at Chartwell are very much the focus of a new initiative just launched by the National Trust. It comes in the form of a hand-held audio guide now freely available to visitors.

Tim Parker explains the thinking behind of the guide:

“Chartwell became a place where Churchill could pursue his fascination for nature and wildlife. From the Rose Garden, much loved by Clementine Churchill, and the fruit and vegetables framed by the walls that Sir Winston helped build, to the tree-house inspired by one constructed for the Churchill children, the outdoors here is a canvas touched by the lives and memories of the family. The guide helps paint the picture for visitors.”

He goes on to describe the venture as ‘leading edge’ in the way the Trust promotes the outdoors at its properties.

“How do you make gardens and grounds look authentic without telling visitors what’s what? It’s been an abiding issue for us at Chartwell, and it’s a challenge for many a National Trust property,” added Tim.

“We don’t do plant labelling, as some attractions do, so that’s where the new audio guide is such a plus. It informs about what’s here, why and how in a very personal way.”

The new audio guide features memories and untold stories with excerpts from Nicholas Soames, Churchill’s grandson, Heather White-Smith, secretary to Winston Churchill from 1953 to 1956, and Martin Drury, Churchill family friend and former National Trust curator. It also uses letters and documents that piece together life outdoors at Chartwell.

Narrated by actor Christian McKay of The Theory of Everything, Tinker Tailor Soldier Spy and ITV’s Churchill’s Secret, the one-hour audio guide is offered as part of the admission charge or National Trust membership.

On top of this, it also includes ‘seasonal picks and tips’ from Tim Parker, highlighting changing nature around the year at Chartwell.

Further topics will be added to the guide in 2020, including a tour of the views Churchill painted, the landscaping work Churchill undertook, and more seasonal plant highlights.

All of the audio guides are funded by the National Trust’s Churchill’s Chartwell Appeal, which enables all things Churchill to be acquired, maintained and seen at his home in Kent. This flourishes thanks to support from the National Lottery Heritage Fund, The Royal Oak Foundation, the National Trust itself, plus private donations from members of the public.

Tim Parker heads up what the National Trust calls a portfolio operation. As well as the extensive grounds at Chartwell, he is in charge of the upkeep of Emmetts Garden, a few miles away, and Quebec House in nearby Westerham, which was the childhood home of famous 18th century soldier James Wolfe. He’s now in his fifth year in this role, after nearly seventeen all
told working for the National Trust. Groundcare and garden equipment and machinery housed at Chartwell ‘does’ for all three properties and, therefore, more than earn their keep, I learn.

“We like to think we make efficient use of everything we have,” said Tim. Only occasionally does he hire in equipment or specialist services, like the tree trimming in progress that very day as part of National Trust tree safety management. A team of arboriculturists, using a high-production chipper, were trimming back some overhanging branches near the Chartwell car park.

Recent developments at Chartwell include the introduction of a plant quarantine area to prevent any influx of disease that may spoil the collection in the heritage gardens here, and the complete refurbishment of dilapidated glass houses with electric bench mat heating. The latter means Tim is able to...
What came out of the plan was that it was possible we were over gardening parts of the site, and it brought about what we call ‘the spirit of place’ which means concentrating on the fundamentals that enriched the site in its heyday.

grow on site many more of the plants he needs, and this further reduces risk of importing disease. Tim describes this as one of the best advances in recent times. Chartwell is Grade 2 listed and these wooden glasshouses had to be restored rather than replaced. They are very impressive.

There is a six-strong full time National Trust team looking after the gardens and grounds, plus an apprentice. Tim is proud that Chartwell has the privilege of being chosen by the Trust to help future groundcare professionals working for the organisation because of the wide variety of work and conservation activities here.

“It’s an important time for all of us at Chartwell in terms of making sure we continue the story of the Churchill home and all it meant,” he said.

A Conservation Management Plan for Chartwell was commissioned by the National Trust in 2016 to establish an ongoing blueprint for all work on the house and its grounds. This involved scrutinising archives and talking to members of the Churchill family.

“What came out of the plan was that it was possible we were over gardening parts of the site, and it brought about what we call ‘the spirit of place’ which means concentrating on the fundamentals that enriched the site in its heyday,” said Tim.

“Other sites, like say Cliveden, require a much more exact regime of clipping lawns and hedges and neat precise bedding to fit its particular spirit. Not so here at Chartwell where, for example, the grass in the orchard area, still featuring the fruit trees planted by Churchill himself, was being mowed more frequently and tightly than it had been in his day.”
“We are now managing the orchard area as a meadow with natural wildflowers.”

Time and resources saved here is allowing Tim and his team to put more into improving the lawns closer to the house and, in particular, one of Lady Churchill’s favourite areas, the croquet lawn, which abuts the south facing side of the House. The croquet lawn emphasises the family aspect of Chartwell. Lady Churchill was an accomplished player and it always played a big part in family life here. Actually it had originally been a grass tennis court, Clementine Churchill being a pretty good tennis player too. There had been a smaller, cramped croquet lawn also near the house, but as Lady Churchill grew older and less mobile tennis was abandoned in sole favour of croquet, and the tennis court became a larger croquet lawn with the original one switching to an ornamental lawn.

Croquet can be - and is - played at Chartwell, and Tim’s aspiration is to get the lawn’s surface into even better condition. He does core and aerate and it has been verti-drained, but a resurfacing may be on the cards sometime. It looks pretty playable even on the threshold of winter, but work on it will definitely be stepped up next year, Tim says.

Obviously, the National Trust intends it to be a real playing surface as croquet sets are very much in evidence at the ticket office. Visitors can hire mallets and balls, and a number of visiting groups play here regularly. The surface may not quite be there, but the view certainly is. There cannot be many that offer such a splendid and far-reaching vista. No wonder the Churchills loved it here.

Churchill bought Chartwell to be his green haven, a retreat from the rigours of politics.
This time of year is our bread and butter project season. We need the weather to be kind right through until early spring to allow us to press on with the serious work that’s beyond routine tidying and maintenance.

which, until the onset of the Depression as the 20s closed, had him on the front benches at Westminster, either in government or opposition for close on twenty years.

Throughout the 1930s, during what are often referred to as Churchill’s ‘wilderness years’ when out of office, he was pretty hands-on when it came to outdoor maintenance and development of the estate. The scale of things meant he had to employ full-time gardening staff though and he came to rely on them totally after he was called to lead the wartime coalition in May 1940.

After the war Churchill, rejected at the ballot box and out of office, found the cost of running Chartwell too onerous. It however remained the Churchill’s home until his death in 1965, though ownership had passed to the National Trust in 1947 after a group of Sir Winston’s business friends had raised near on £50,000 for the purchase, on the understanding that he and Clementine could remain there and continue to enjoy it for the rest of their lives. This was truly an act of gratitude and affection for what he had done to help defeat Hitler.

Churchill was definitely connected to the natural landscape it seems. In particular, he had a passion for butterflies and sought the expert advice of renowned lepidopterist L H Newman about what plants to grow to attract certain species. In many ways, Sir Winston was very much a conservationist, and certainly a nature lover. Wildlife gardening and creating a water harvesting system for Chartwell’s walled garden made him a garden enthusiast ahead of his time.

The Chartwell grounds are open 363 days a year, so they have to be very good and, more than that, authentic all of the time, whatever the conditions.

“This time of year is our bread and butter project season, Tim went on to say. “We need the weather to be kind right through until early spring to allow us to press on with the serious work that’s beyond routine tidying and maintenance.”

“We’ve been working on a restoration...
Volunteers help with routine weeding, dead-heading, edging and the like. They also play a part in the bigger project work and make a valuable contribution to clearing borders and rejuvenating them.

The National Trust has a lease arrangement with a local farmer enabling him to graze livestock on some of the field.
More regular grazing of cattle and sheep has helped reduce this and encourage planted wildflower swathes to prosper. The aim is make the lower fields yet more floriferous and appealing to visitors when they are free of livestock.

The devastation caused at Chartwell by the 1987 ‘hurricane’

areas beyond the lake.

“Previously, these meadow areas have, if anything, been under-grazed, encouraging a build-up of thatch,” said Tim.

“More regular grazing of cattle and sheep has helped reduce this and encourage planted wildflower swathes to prosper. The aim is make the lower fields yet more floriferous and appealing to visitors when they are free of livestock.”

The National Trust is a conservation charity and, in dry summer conditions, there is no watering of grassed areas. Lawns are allowed to brown and restore themselves naturally. Composting is a big part of the work and absolutely everything that can be used for this is. Everything green stays on site.

Even though the house is closed through the winter, Sir Winston’s studio remains open and there is a strong interaction with the gardens and grounds, highlighted now by outdoor exhibitions in January and February, which began last year. Using the actual landscape to present these shows how much the grounds meant during his time here. His pictures are displayed at the exact point he painted them and visitors can also see what he saw through a blank frame. There cannot be friendlier grounds than those at Chartwell, surely one of the National Trust’s flagship sites.

Our thanks to the National Trust for providing some of the images. For more about Chartwell or any of the organisation’s properties visit www.nationaltrust.org.uk

Greatest Briton of all time

Sir Winston Churchill was voted the ‘Greatest Briton of all time’ in an extensive BBC poll carried out in 2002, beating off other notables such as Isambard Kingdom Brunel, Diana, Princess of Wales, Charles Darwin, William Shakespeare, Sir Isaac Newton and John Lennon.

Given the political turmoil the country has endured in the past few years, it is perhaps opportune to revisit some of the great man’s quotes:

“Politics is the ability to foretell what is going to happen tomorrow, next week, next month and next year. And to have the ability afterwards to explain why it didn’t happen.

It is a fine thing to be honest, but it is also very important to be right.

The best argument against democracy is a five-minute conversation with the average voter.

The English never draw a line without blurring it.

Socialism is a philosophy of failure, the creed of ignorance, and the gospel of envy, its inherent virtue is the equal sharing of misery.

Healthy citizens are the greatest asset any country can have.

The inherent vice of capitalism is the unequal sharing of blessings; the inherent virtue of socialism is the equal sharing of miseries.

A lie gets halfway around the world before the truth has a chance to get its pants on.

Courage is what it takes to stand up and speak; it’s also what it takes to sit down and listen.

Ending a sentence with a preposition is something up with which I will not put.

It has been said that democracy is the worst form of government, except all those other forms that have been tried from time to time.

The English know how to make the best of things. Their so-called muddling through is simply skill at dealing with the inevitable.

My most brilliant achievement was my ability to be able to persuade my wife to marry me.

I am prepared to meet my maker. Whether my maker is prepared for the ordeal of meeting me is another matter.

I like pigs. Dogs look up to us. Cats look down on us. Pigs treat us as equals.

Never hold discussions with the monkey when the organ grinder is in the room.

What is adequacy? Adequacy is no standard at all.

There are a terrible lot of lies going about the world, and the worst of it is that half of them are true.
**WATER MANAGEMENT**

1. **Premier Hydrate**
   A penetrant wetting agent that will help move water away from the surface and through the soil profile. Helping dry surfaces out faster.
   £95.50 per 10 L

2. **Bowdry MKIII**
   A revolutionary surface water removal machine, designed specifically to efficiently and effectively remove standing water from any surface.
   £695.00

**NUTRITION**

- **Bullet Duragreen 4-0-10 +10%Fe**
  Contains two types of iron. The sulphate gives the traditional rapid green-up, whilst the sucrate released in a more controlled, consistent way, making iron available to the turf over a number of months.
  £27.65 per 20 kg

**LINE MARKING**

- **MAX-LINE Platinum Pro**
  A premium quality line marking concentrate, producing exceptionally bright, weather resistant, durable lines.
  From £29.50 per 10 L

**DISEASE MANAGEMENT**

- **Dualitas 250 ml**
  A contact and systemic dual action fungicide for the control of Microdochium Patch, Red Thread, Anthracnose, Dollar Spot, Leafspot and Rust. Can be applied any time of the year.
  From £152.50 per 250 ml

- **Medallion TL**
  Fast acting, broad spectrum, contact+ turf fungicide, targets disease pathogens on the leaf, in the thatch and at the soil surface. Proven to give long lasting protection through the lower temperature months.
  £268.00 per 1 L or £718.50 per 3 L

**TURF HARDENER PACKAGES**

- **Colour & Prevent**
- **Feed & Prevent**
- **Maximise Resilience**

**3 PACKAGES AVAILABLE FROM £239.10**

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Sprayer nozzles

Hit the target

Syngenta Technical Manager Glenn Kirby explains the science behind sprayer nozzle choice to hit the target
The latest turf protection products are capable of achieving exceptional results. But it is the skills of the sprayer operator and developments in the technology used that can make the crucial difference.

Turf sprayer operators face a number of unique challenges to achieve accurate and consistent results, often whilst under the close appraisal of a critical audience of players and public.

Understanding the fundamentals of the mechanics of spray application, recognising the targets to be hit and the need for effective timing are all key elements of the ‘Art of Application’.

Furthermore, today’s operator has to be ever more mindful of the essential area of spray stewardship, avoiding problems of waste and minimising risk to the environment.

Sprayer operation involves balancing multiple aims and interacting factors with every application; there is rarely one right solution, particularly with tank mix applications. The key is making a conscious compromise, to aim to get the most important elements of any treatment into the optimum target zone.

Variable parameters for spraying
- Nozzle choice
- Water volume
- Sprayer operation
- Target zone

Nozzle mechanics

At the point of delivery, nozzle choice has a huge bearing on where the spray will end up.

All nozzles produce an array of droplet sizes; large nozzles tend to produce more large droplets with greater velocity, whilst small nozzles create more small droplets. In general, small droplets are well retained on the leaves of turf grass plants, whilst large solid droplets have a tendency to bounce or roll off.

However, the nozzles’ operation has to be understood in tandem with the water volume being applied and the sprayer’s operating pressure.

Syngenta research has shown that a large nozzle orifice producing higher proportion of larger droplets, such as an 08, is best for getting sprays down through the turf to reach the soil.

An 04 produces a greater proportion of small to mid-sized droplets that are good for leaf coverage, but some will also reach down to the crown and thatch.

Whilst a smaller nozzle, such as an 025, typically produces a greater proportion of smaller droplets that can be better retained on the leaf, with more effective coverage of the surface.

Using water sensitive paper laid out on sheets on the ground is a really effective way of looking at different nozzle sizes, water volume and operating pressures for individual situations.

One of the issues is that small droplets, with low velocity, are far more susceptible to drift. Targeting tight cut turf surfaces, such as golf greens, is especially challenging since there is very little area or volume to capture and hold the spray; small sub 50 micron droplets can be left suspended in the air, which can then be easily blown away.

Increasing the average droplet size will
reduce drift, but if the effect is to move more of the spray down to the thatch and soil, that could be counterproductive for a foliar targeted application, for example. Also, using larger nozzles typically utilises higher water volumes, which can lead to over wetting of the leaf surface and excessive product runoff and loss.

Of course, if your target is the soil for an insecticide or Fairy Ring fungicide treatment, then the larger nozzle, big droplets and higher water volume is exactly the option to reach the desired point.

**New technology**

Nozzle technology development has seen the advent of air induction (AI) nozzles, using a venturi mechanism to incorporate a bubble of air in each droplet. With this cushioning effect, the larger droplets, less susceptible to drift, still tend to be better retained on the leaf surface, compared to a large solid water drop from a flat fan nozzle.

Utilising this technology and evolving the droplet spectrum, the Syngenta Turf XC Nozzles now produce significantly more droplets per millilitre of spray liquid, compared to other AI or low-drift nozzles tested. This helps to ensure good coverage of the target leaf.

Importantly, tests have shown the 04 XC foliar nozzle, for example, produces less than 3% small sub 100 micron-sized droplets that are highly susceptible to drift, compared to 14% with a traditional flat fan nozzle.

The size of the nozzle orifice primarily dictates the spray water volume, within the parameters of the sprayer speed and the operating pressure.

Raising the operating pressure will also

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**The size of the nozzle orifice primarily dictates the spray water volume, within the parameters of the sprayer speed and the operating pressure**

---
increase the water volume but, as a result, will tend to increase the number of small droplets and therefore the risk of drift, especially with traditional flat fan nozzles.

Syngenta trials have demonstrated that even a small increase in pressure, from three to four bar for example, can dramatically increase the proportion of drifty fine droplets, with some nozzles.

Conversely, reducing the pressure will reduce the driftiness of a nozzle, but can compromise the spray pattern and the velocity of droplets to hit and stick on the target. Most nozzles are designed to work most efficiently at two to three bar.

The effects can be particularly apparent with auto rate controllers. Increasing forward speed automatically increases pressure to maintain a consistent application rate; that will alter the spray droplet pattern, and can inadvertently produce more small droplets susceptible to drift.

The tip is to mark an optimum two to three bar zone on the pressure gauge, and always moderate speed to stay in the zone. Forward speed also has an effect on the water volume physically applied. Reducing the speed from six to four km/h, for example, will increase the water volume and, therefore, the product application rate. This is a factor to consider when spraying greens, for example, where there is a tendency to slow down at the start and end of each run.

Whilst one nozzle size can deliver different water volumes by adjusting speed and pressure, you can be more efficient and precise in your accurate application of the most appropriate water volume by selecting the most appropriate nozzles size.

**Size options**

A good selection of nozzles to have available for consistent application in most turf situations, at two to three bar, would be a set of:

- 025 nozzles for greens, delivering a water volume of 200-300 l/ha at four to five km/h - targeting foliar treatments
- 04s applying 220-380 l/ha at five to seven km/hr on fairways for foliar and crown target treatments
- 08s that will deliver 450-770 l/ha at five to seven km/hr for soil target treatments

That is simple if you have a sprayer nozzle holder that accepts three or four bayonet housings, where you can fit the required types and simply twist around to the required nozzle.

If not, it is easier if you buy additional sets of nozzle bayonet holders, which are relatively cheap, and make them up in the workshop with the seals fitted. Store each set in a separate clear plastic box, with the name and size written on the top, and simply swap over the bayonets to change nozzles, rather than the time consuming and messy job of changing individual nozzles.

Always keep a record of the spray output charts for each of your nozzle sets, as these will be invaluable when calibrating the sprayer and establishing the optimum performance for your individual sprayer.

**Calibration check**

Calibrate your sprayer accurately for each set of nozzles, and check regularly for signs of wear or uneven patterns. Some liquid fertilisers, especially iron, can be especially abrasive and lead to high levels of nozzle wear. Once you get in the routine of checking calibration, it will only take a few minutes.

The rule of thumb is that if any nozzle output is +/- 5% from the average, then change the whole set of nozzles. The cost of nozzles is relatively inexpensive, given the value of treatments being applied, and the importance of getting the best possible results from them.

Machinery maintenance is crucial - including checking tyre pressures, the seals on pumps and valves and inspecting pipes for signs of wear or cracking. An annual National Sprayer Testing Scheme (NSTS) MOT is extremely good practice as a sprayer health check, but needs to be backed up with a routine look around the sprayer before every use.

**Art of Application**

Application Academy

Syngenta’s stand at BTME (21-23 January, Harrogate) features a practical demonstration unit to fully explain the fundamentals of spray application - including how to select nozzle types, water volume and sprayer pressure to give the best chance of hitting the target.

Visit the stand to register for a chance to join an unrivalled education opportunity at the pioneering Syngenta Application Academy. Get the opportunity to learn the science behind spray technology from leading industry specialists, along with in-depth practical skills required to become a top sprayer operator.

**Application Academy tutorial videos**

To watch Glenn Kirby’s advice for targeting turf applications, scan the QR Code or visit https://www.greencast.co.uk/syngenta-art-application-videos
Capital Investment

Decisions decisions
In this article, Andrew Turnbull BSc (Hons) examines how the use of further financial management and analysis skills show that a turfgrass manager is aware of how proposed purchases affect the organisation as a whole, not just their world of the golf course or sports ground.

Part of a turfgrass manager’s role is to propose one or more capital expenditure projects that would benefit the facility. These projects will then be proposed to the management board, typically as a part of the budgeting process. The manager and the board will probably have more capital proposals than they have cash to fund them, so some methods are required for choosing the most appropriate ones, whether machinery, course improvements or clubhouse investment.

Some typical capital investment decisions facing the enterprise from time to time include:

1. Replace or repair/keep? As equipment or facilities become nearly “used up” the decision must be made about whether to repair them and use them longer or replace them with new items. Generally, the older these items are, the more costly the ongoing maintenance.

2. Purchase capital item A or B? When buying a new machine, the enterprise usually has a choice among different brands, sizes, performance characteristics etc. Whilst much of the decision can be based on technical differences, a major consideration has to be the economic differences between competing proposals.

3. Lease or buy? Sports facilities often have the option to either buy equipment or lease it. Differences in the economics of the two options should be considered.

4. Do it yourself or hire it out? Much maintenance and construction work can either be done by in-house staff or by outside contractors. Economic differences often can be the deciding factor.

These capital investment decisions occur occasionally throughout the year, rather than as daily operating decisions. Ideally, the manager anticipates these major changes and carefully plans for them.

Investment Appraisal Methods

There are several different methods of investment appraisal, however the three main ones are:

1. Payback
2. Annual return
3. Net Present Value

When evaluating investment appraisal methods, it should be remembered that all methods rely on the accuracy of predicted net cash flows over the project lifetime, where net cash flow is the difference between the cash received and cash paid during the defined lifetime period. For example, installation of a drainage system should enable a golf course to be open for more days, bringing in extra revenue. When replacing old machinery, the cash received is the savings on maintenance and repair costs.

We shall look at how to use the three investment appraisal methods by examining three options a golf club has for spending £40,000 available for improvements. The Course Manager would like to:

1. Making course alterations
2. Upgrade the irrigation system
3. Install drainage

Each of these options are costing the club money through repair bills and loss of income. However, only one option can be chosen due to the cash restrictions.

1. Payback

Payback is a method that aims to estimate how long it will take for a project to start generating an income. It looks at the value of the initial investment compared to the projected net cash flow.

Having calculated the payback period, it may be of interest to calculate the surplus cash generated during the project lifetime, after recouping the initial investment. This surplus cash could be from income generated, e.g. from the purchase of golf buggies; or savings on costs, e.g. when replacing old machinery.

Example 1 - making course alterations to reduce maintenance time and costs

Calculations from a forecasted maintenance schedule analysis show that, if an initial investment of £40,000 is made for Project A, the following net cash flows (savings in maintenance costs) will be generated:

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Cash Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9,000</td>
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<tr>
<td>2</td>
<td>9,500</td>
</tr>
<tr>
<td>3</td>
<td>10,500</td>
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<tr>
<td>4</td>
<td>10,500</td>
</tr>
<tr>
<td>5</td>
<td>12,000</td>
</tr>
</tbody>
</table>

The above figures are calculated by estimating the reduction in maintenance costs compared to keeping the course as it is.

To calculate the payback period of the £40,000 investment, total the net cash flow figures over consecutive years until the full investment is recouped (see table 1).

With this example the investment is fully recouped in just over 4 years, resulting in a total net cash flow, after payback, of £11,500 for the 5-year project.
Payback is the most frequently applied technique, which is used to screen out projects that would take too long to recoup the initial investment. A more accurate method of investment appraisal would then be used.

Table 4 shows how to evaluate the above projects using payback as the selection criterion. The cash inflows and outflows for each are shown.

The payback period can be of some use in screening the three proposals. Proposal A seems to be better than Proposal C - the shorter payback period is clearly better. Proposal B can be excluded outright - its initial cost exceeds future cash savings, so it does not pay for itself. Therefore, with payback, Proposal A is accepted.

This method has several shortcomings that limit its usefulness. First, the method does not consider the earnings that continue after the payback period is reached. Proposal C, for instance, has a total savings of £52,500 in comparison to the £51,500 total earnings of Proposal A.

The slightly shorter payback of Proposal A may mislead the manager who relies solely on the payback approach to evaluating investments. Also, keep in mind that we are ignoring the time value of money of the cash savings for each proposal when using this payback approach.

2. Average Annual Return

Due to unpredictable fluctuations in returns over the life of a project, average return is often used as a slightly more accurate measure in investment appraisal. The total return (net cash flow) is averaged over the duration of the project.

The average annual return can also be converted into a percentage in relation to the value of the initial investment.

Both these figures can be used as a basis of comparison for different investment proposals.

The average annual return percentage should initially be compared with the business’s cost of capital (explained in Discounted Cash Flow).

Example 1

Using the figures for Project A, which had an initial investment of £40,000:

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Cash Flow</th>
<th>Investment £40,000</th>
<th>Average return % = Average return = £10,500 x 100 = 26.25%</th>
<th>Vendor Net Value = £40,000</th>
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<tr>
<td>2</td>
<td>9,500</td>
<td>5,000</td>
<td>25.75%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>10,500</td>
<td>6,000</td>
<td>25.75%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>10,500</td>
<td>6,000</td>
<td>25.75%</td>
<td></td>
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<tr>
<td>5</td>
<td>12,000</td>
<td>7,000</td>
<td>25.75%</td>
<td></td>
</tr>
<tr>
<td>Avg annual cash savings</td>
<td>10,300</td>
<td>5,800</td>
<td>10,500</td>
<td></td>
</tr>
<tr>
<td>Payback</td>
<td>4 years 0.5 months</td>
<td>Not achieved</td>
<td>4 years 4 months</td>
<td></td>
</tr>
</tbody>
</table>

Example 2 - installation of a borehole to replace mains water for irrigation

Project B requires an initial investment of £40,000 and is forecast to yield the following net cash flow figures in water savings:

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Cash Flow</th>
<th>Investment £40,000</th>
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<td>4 years 0.5 months</td>
<td>Not achieved</td>
<td>4 years 4 months</td>
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</table>

Example 3 - drainage of three fairways that causes regular closure of the course during the winter and loss of green fees.

An initial investment of £40,000 into Project C will lead to the following net cash flows:

<table>
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Table 4 shows how to take into account the time value of money using payback as the selection criterion. The cash inflows and outflows for each are shown.

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</table>

Example 2 - installation of a borehole to replace mains water for irrigation

Project B requires an initial investment of £40,000 and is forecast to yield the following net cash flow figures in water savings:

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Cash Flow</th>
<th>Investment £40,000</th>
<th>Average return % = Average return = £10,300 x 100 = 25.75%</th>
<th>Vendor Net Value = £40,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9,000</td>
<td>£40,000</td>
<td>£10,300</td>
<td>£40,000</td>
</tr>
<tr>
<td>2</td>
<td>9,500</td>
<td>5,000</td>
<td>25.75%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>10,500</td>
<td>6,000</td>
<td>25.75%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>10,500</td>
<td>6,000</td>
<td>25.75%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>12,000</td>
<td>7,000</td>
<td>25.75%</td>
<td></td>
</tr>
<tr>
<td>Avg annual cash savings</td>
<td>10,300</td>
<td>5,800</td>
<td>10,500</td>
<td></td>
</tr>
<tr>
<td>Payback</td>
<td>4 years 0.5 months</td>
<td>Not achieved</td>
<td>4 years 4 months</td>
<td></td>
</tr>
</tbody>
</table>

Example 3 - drainage of three fairways that causes regular closure of the course during the winter and loss of green fees.

An initial investment of £40,000 into Project C will lead to the following net cash flows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Cash Flow</th>
<th>Investment £40,000</th>
<th>Average return % = Average return = £10,300 x 100 = 25.75%</th>
<th>Vendor Net Value = £40,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9,000</td>
<td>£40,000</td>
<td>£10,300</td>
<td>£40,000</td>
</tr>
<tr>
<td>2</td>
<td>9,500</td>
<td>5,000</td>
<td>25.75%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>10,500</td>
<td>6,000</td>
<td>25.75%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>10,500</td>
<td>6,000</td>
<td>25.75%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>12,000</td>
<td>7,000</td>
<td>25.75%</td>
<td></td>
</tr>
<tr>
<td>Avg annual cash savings</td>
<td>10,300</td>
<td>5,800</td>
<td>10,500</td>
<td></td>
</tr>
<tr>
<td>Payback</td>
<td>4 years 0.5 months</td>
<td>Not achieved</td>
<td>4 years 4 months</td>
<td></td>
</tr>
</tbody>
</table>
The initial investment is £40,000.

Calculate the Net Present Value at 10% for project C where the initial investment is £40,000.

Example:

Net Present Value (NPV) = Present Value of future cash inflows - Initial Investment

Discount factor tables

Discount factors are used to calculate the Present Value of future cash flows. Table 7 shows a discount factor table, which is used to provide the relevant discount factor for specific rates of costs of capital.

TABLE 7 Discount Factor Table

<table>
<thead>
<tr>
<th>i</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0.9009</td>
<td>0.8980</td>
<td>0.8970</td>
<td>0.8965</td>
<td>0.9524</td>
<td>0.9434</td>
<td>0.9346</td>
<td>0.9259</td>
<td>0.9174</td>
<td>0.9091</td>
</tr>
<tr>
<td>2</td>
<td>0.8116</td>
<td>0.7972</td>
<td>0.7831</td>
<td>0.7695</td>
<td>0.7561</td>
<td>0.7432</td>
<td>0.7305</td>
<td>0.7182</td>
<td>0.7062</td>
<td>0.6944</td>
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<td>3</td>
<td>0.7312</td>
<td>0.7118</td>
<td>0.6931</td>
<td>0.6750</td>
<td>0.6575</td>
<td>0.6407</td>
<td>0.6244</td>
<td>0.6086</td>
<td>0.5934</td>
<td>0.5787</td>
</tr>
<tr>
<td>4</td>
<td>0.6587</td>
<td>0.6355</td>
<td>0.6133</td>
<td>0.5921</td>
<td>0.5718</td>
<td>0.5523</td>
<td>0.5337</td>
<td>0.5158</td>
<td>0.4987</td>
<td>0.4823</td>
</tr>
<tr>
<td>5</td>
<td>0.5935</td>
<td>0.5674</td>
<td>0.5428</td>
<td>0.5194</td>
<td>0.4972</td>
<td>0.4761</td>
<td>0.4561</td>
<td>0.4371</td>
<td>0.4190</td>
<td>0.4019</td>
</tr>
<tr>
<td>6</td>
<td>0.5346</td>
<td>0.5066</td>
<td>0.4803</td>
<td>0.4556</td>
<td>0.4323</td>
<td>0.4104</td>
<td>0.3898</td>
<td>0.3704</td>
<td>0.3521</td>
<td>0.3349</td>
</tr>
</tbody>
</table>

Discount factors are used to calculate the present value of capital.

The time value of money

• The cost of capital is the sacrifice made by the business by investing in a project, this considers:
  • Comparison with returns from investing in the capital in an alternative way e.g. in a bank
  • Interest on debts incurred to raise the funds to finance the project
  • The time value of money

Discount factor tables

Discount factors are used to calculate the Present Value of future cash flows. Table 7 shows a discount factor table, which is used to provide the relevant discount factor for specific rates of costs of capital.

Example:
The discount factor used for a net cash flow after 5 years at a cost of capital of 6% would be 0.7473.
Therefore, a predicted net cash flow of £100 in 5 years’ time at 6% would have a Present Value of £100 x 0.7473 = £74.73.

Example

1. Apply the 10% discount factor to the following Project A figures to calculate the Present Value of the future cash flows.
2. Calculate the Net Present Value of the project where the initial investment is £40,000.

TABLE 8

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Cash Flow</th>
<th>Discount Factor</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9,000</td>
<td>0.909</td>
<td>8,181.00</td>
</tr>
<tr>
<td>2</td>
<td>9,500</td>
<td>0.827</td>
<td>7,856.50</td>
</tr>
<tr>
<td>3</td>
<td>10,500</td>
<td>0.751</td>
<td>7,885.50</td>
</tr>
<tr>
<td>4</td>
<td>10,500</td>
<td>0.683</td>
<td>7,171.50</td>
</tr>
<tr>
<td>5</td>
<td>12,000</td>
<td>0.621</td>
<td>7,452.00</td>
</tr>
<tr>
<td>Total</td>
<td>51,500</td>
<td></td>
<td>38,546.50</td>
</tr>
</tbody>
</table>

Calculation of Net Present Value:

Net Present Value = Total Present Value - Initial Investment
= £38,546.50 - £40,000
= (£1,453.50)

Comments: This project is not worthwhile at 10%. You could calculate at the percentage rate at which the project would be financially viable and then assess the likelihood of this happening.

Example: Calculate the Net Present Value at 10% for project C where the initial investment is £40,000.

TABLE 9

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Cash Flow</th>
<th>Discount Factor</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(4,000)</td>
<td>0.909</td>
<td>(3,636.00)</td>
</tr>
<tr>
<td>2</td>
<td>9,000</td>
<td>0.827</td>
<td>7,443.00</td>
</tr>
<tr>
<td>3</td>
<td>13,000</td>
<td>0.751</td>
<td>9,763.00</td>
</tr>
<tr>
<td>4</td>
<td>16,500</td>
<td>0.683</td>
<td>11,269.50</td>
</tr>
<tr>
<td>5</td>
<td>18,000</td>
<td>0.621</td>
<td>11,178.00</td>
</tr>
<tr>
<td>Total</td>
<td>51,500</td>
<td></td>
<td>36,017.50</td>
</tr>
</tbody>
</table>

Less Initial Investment = (40,000)

Net Present Value = (3,982.50)

Comments: A non-profitable investment. Compare this result with the example for Project C using the Payback method to see the effect of discounting.

The payback approach determines the number of years required for a project to pay for itself. This approach is best used for screening projects for further consideration using the net present value approach.

The net present value approach considers both the amount of the cash flows and the timing of the cash flows. Using present value factors, future cash flows are discounted to the present time and compared to the initial cost of the project.

When considering a single proposal, if the net present value of a proposed investment is equal to zero or is positive, the investment should be made.

About the author: Andrew Turnbull BSc (Hons), Dip. RSA, Cert Ed. is a consultant specialising in turfgrass nutrition. Contact: info@grassexpert.co.uk, web: www.grassexpert.co.uk
In our last article, we spoke about the importance of training and how those in the industry have benefitted from it. Here, training and development manager Neil Adams at Reesink Turfcare discusses how training benefits machinery maintenance, particularly in the winter months.

At this time of year, the winter season brings with it a reminder to ensure our turf machinery is up to scratch, ready for the year ahead and able to deal with the challenges colder weather brings.

Turfcare machines, regardless of brand, now include high-tech electronic or hydraulic drive systems, similar to those found in some top performance cars. Just as you wouldn’t drive a car that has not been serviced, the same should be said for turfcare machinery.

Cleanliness, regular daily checks and service intervals should take priority when it comes to protecting your organisation’s most expensive assets. It’s important to follow a machinery maintenance schedule implemented by a trained mechanic, which will, in the long term, decrease the cost of repairs and lengthy downtime and keep the equipment productivity at maximum.

The benefits of training

In order to stay up to date with advancements in machinery technology and ensure your machinery maintenance skills are able to cope with new developments in the industry, it’s important to seek out and undertake additional training. With the rate at which technology develops, and with health and safety and machinery regulations subject to change, there are many factors which could make undertaking the latest training programmes even more beneficial. That’s why Reesink have added a series of twelve new refresher courses to their training programme for 2020.

A refresher course would be the perfect way to stay up to date with the best techniques and practices when it comes to machinery maintenance, building on pre-existing experience and training with the latest knowledge of the industry. And good quality machinery maintenance is not to be underestimated, particularly when taking one day to complete a refresher course could see your machinery benefit year-round.

This is a view that Peter Todd, Royal Norwich Golf Club’s estates manager, strongly agrees with. With thirty years of experience in the industry, Peter knows more than most the benefits of what well-maintained kit can bring, and with Royal Norwich’s new course heading into its first winter it’s something at the forefront of his mind.

“Keeping on top of general maintenance ensures your machines are in the best possible condition. It can be tempting to cut corners when it comes to preventative service work, but breakdowns and downtime are more expensive and well-maintained kit tends to be trouble-free in comparison.”
“In order to keep standards high, you have to keep your machinery in top notch condition, and paying attention to parts maintenance is your first point of call in order to do that. There is a tendency to push the majority of machinery maintenance into the off season when there are fewer jobs to do around the course and cutting frequency has decreased, and while it does provide the time to do the machine’s ‘MOT’ if you like and a full service and deep clean, you’ll never regret paying attention to your machinery and parts maintenance throughout the year.”

**Daily maintenance**

With the amount of maintenance that is recommended to be carried out, either daily or on a regular basis, it’s no wonder that knowing the ins and outs of maintenance after completing relevant training is so helpful.

Some daily checks are simple and take up little to no time. Checking for fluid leaks and damaged hose units can be carried out with a cursory glance and investigated further if required, whereas interlock switches, braking, steering and instrument operation are normally checked the moment the operator drives from the shed. Checking oil levels, air filter and tyre pressures becomes routine and takes little time to do. It is possible, with some greens machines, that a difference of 1 psi in the tyre pressure will give a 0.25mm mismatch, which is visible to the naked eye.

At the end of a day’s work, it’s also worth taking the time to wash units down with low-pressure water - lubricate to purge any water and top up the diesel tank to minimise any condensation forming in the tank overnight.

Whilst these checks may be simple to make and any adjustments needed quick and easy to implement also, when you start to look at what is needed to ensure the highest quality of cut possible, the maintenance can become more complicated and time consuming.

**Ensuring the quality of cut**

One of the most important daily checks is to verify the unit is on cut. This will reduce the risk of damage to the cylinder, excessive wear on the moving parts, and give a better quality of cut. There are so many variables that can affect quality of cut and it is important to understand all factors involved.

**Bedknife to Cylinder adjustment**

Both the cylinder and bedknife’s cutting edges need to be straight and sharp, so grind as necessary and back lap little and often. The cylinder should be adjusted to the bedknife so that it pinches paper when placed between the two, and cuts paper when it is passed over the bedknife into the path of the cylinder. This is one of the most effective preventative maintenance practices.

It is also particularly important in the winter season to keep up bedknife maintenance. With wet grass and earthworm castings in the autumn and winter, keeping blades sharp becomes more difficult. When blunt blades can also increase the risk and spread of disease in your turf, there’s an added reason to ensure the proper maintenance of your machinery parts in winter.

**Attitude adjustment**

‘Attitude’ refers to the bottom of the bedknife and the ground plane under the cutting unit. A large angle is referred to as an aggressive bedknife attitude. The opposite applies to a small angle and, in this less aggressive set-up, the bedknife can be riding on the turf. This is one of the first places greenkeepers should look when troubleshooting aftercut appearance issues.
Designs in units, such as the DPA unit and the bedbar pivot location, now allow for operators to maintain a virtually-constant aggressiveness as the cylinder wears.

**Rollers**
Rollers need to be set parallel with the cylinder, using a set-up plate. At the same time, roller bearings should be checked for excessive play. Modern components, such as the DPA unit, have rollers that are parallel with the cylinder throughout and do not require the need to set the rollers in a parallel position.

**Height of cut**
This should be checked often for your desired finish. As with tyre pressure, errors in setting the height of cut on a greens machine by as little as a 0.25mm mismatch will be visible to the naked eye. With golf courses achieving ever-lower heights of cut on their greens, it is becoming more critical to achieve a consistent standard across grounds by setting heights of cut.

**Engine**
Particularly in the winter, when the cold weather can have an effect on machinery starting systems, making it more difficult to get them up and running, it’s a good idea to check the batteries and electrics on a more regular basis. Additionally, changing the oil and cleaning blocked air filters will help to save time in the long run.

**Adapting to the season**
It’s also important to consider the conditions you’re using your machines in, and make changes to ensure they are equipped to deal with those conditions. When the grounds are wet, particularly in the colder season, it’s a good idea to switch to new tyres. Ensuring you have improved grip in unforgiving ground conditions will help make sure productivity remains high and keep your machinery safe.

**Training and machinery**
Over the last several years, there’s been an increase in operator and mechanic training courses. The introduction of these courses has provided numerous opportunities for dealers, mechanics, greenkeepers and groundsmen in the agricultural, fine turf and groundscare industry.

This structured training has helped contribute to the improvement of safety in the industry, customer care and after sale satisfaction. With the increased knowledge, skill and experience completing training can bring, you can keep your machinery working better for longer, so the advantages of undertaking training - whether a full course or a shorter refresher course - should never be underestimated.

For further information on Reesink’s training call 01480 226800 or browse through the range online at www.reesinkturfcare.co.uk. Booking can be done through the website. To stock up on Toro Parts or for winter machinery maintenance advice, customers can get in touch with their local genuine Toro parts dealer or service centre and via www.reesinkturfcare.co.uk.
Managing Upwards and Sideways?
Just to clarify right at the outset:
1. Managing upwards just means that you more carefully manage your relationship with your boss, and/or your boss’s boss, even in many cases managing a working relationship with leading board or committee members.
2. Managing internally sideways means that you manage more carefully your relationship with your peers (people at your level) in other departments in the organisation.
3. Managing externally sideways means that you manage more carefully your business relationship with your organisation’s customers and end-users. Even if it is not part of your role, it is worth checking how the work you do directly or indirectly affects your organisation’s customers. If you can see the connection, then you can get involved in sideways management.
4. Managing sideways may also mean that you ‘partner’ with your suppliers, merchants and contractors.
5. Managing downwards refers to you supervising staff. This is not the topic of this two-part article. That said, you can always get your staff involved in the process of managing upwards and sideways.

Only a few people make time to manage upwards.

Let us start with you managing upwards. In my experience, only a few people make time to manage upwards. More often than not this happens when it becomes a necessity, e.g. performance standards are slipping and you are not getting support from your manager. In this sector, many people are being managed or supervised by people from a different work background than their own.

Your manager may not have your expertise or experience in the work, and perhaps there is now a leadership vacuum, i.e. a lack of meaningful input from above. Moving onto internal sideways management. Again, in my experience in small organisations, sideways managing is hardly ever done (compared to big organisations). In larger outfits - we may be fighting for the attention of our peers in other departments - just to get our jobs done reasonably well.

About 50% more important to your success
Moving onto external sideways management. Good customer relations and good deals from suppliers are vital, and we need to be seen to be managing our time to actively pursue both. As mentioned already - you may want to check your connections to customers and end-users.

Also mentioned in Part 1 research also shows that - upwards and sideways activities are about 50% MORE important to your success than managing downwards (keeping team members working well).

We start with you!
A great place for you to start is to update your Job Description and the Employee Specification for your job. They may be vague, or out of date, or they may not even exist - great! Check around for best practice and then update the documents to show what you think would be best - in terms of you maximising your contribution.

Visit the key players (above you, sideways and down) to get their input on the documents you are updating. Incorporate their good ideas and explain how your updated approach will help everyone, then agree a ‘trial period’. Strive to make your updated approach work, then review and adapt your approach in the light of lessons learned during the trial.

If you do not yet deal with suppliers, you might want to give it a go for a ‘trial period’. You could do all the preparation and then negotiate deals for the manager responsible to ‘sign off’ for you. You can try out ‘partnering’ with suppliers on results and outcomes - not just on price. Give suppliers regular updates on results.

Time well spent
There is a Time Management issue. Getting around to everyone will take time, but it is time well spent. That’s why it is vital that you get a ‘trial period’ signed off by your boss. It will reflect well on your manager if you make a success of your updated approach to the work.

Finally, here are some tips on how to approach people to discuss maybe doing things a little differently in the workplace. Research suggests that people seem to like it when you:
1. Show interest in their world of work
2. Avoid complaining about your work
3. Can see the funny side of things
4. Are open about what you want
5. Ask politely for their help
6. Offer to help them

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For a while now I have considered what success really is and whether I have achieved it? This led to several discussions with a good friend of mine, Matthew Wharton from Carolina Golf Club in the USA, which eventually morphed into us compiling a presentation that was given at this year’s BIGGA Turf Management Exhibition and Golf Industry Show.

The idea came about after Matt and I had been discussing the pressures of being a superintendent and how we were achieving our goals and whether we were being successful? We were both aware of the growing acknowledgement of mental health and wellbeing and thought that there was a clear connection between working towards success and the effects it was having on people in our industry. We both felt that even though we could not claim to be experts in the field of psychology and behaviour, we believed our experience and knowledge could be shared with our peers and help assist the younger generation of turf managers coming through the ranks.

Our conversation about success continued backwards and forwards over 18 months as we explored what success really is.

During that time, these discussions revived numerous memories of some of the highs and lows we had experienced in search of success, which led us to asking further questions, including:

- Had we achieved success?
- Were we successful?
- How do you define what is success? and
- If we had achieved a certain level of success, what price had we paid for this?

What is success?

Open the pages of The Oxford Dictionary and the word ‘success’ is defined as;

- The accomplishment of an aim or purpose;
- A person or thing that achieves desired aims or attains fame, wealth, etc ...
- Someone or something that is successful: a person or thing that succeeds.

For us as turf professionals, success can be made up of small and large elements. When we work through our careers we set milestone achievements - maybe it’s the first time we mow, being responsible for leading a project or team, or promotion to that coveted first superintendent role. All these are signs of success.

Success for some may focus on developing perfect turf surfaces, a pure mono-stand grass species, constructing and maintaining the largest maintenance facility or many significant projects that take you out of your comfort zone.

For some it’s hosting an event, whether local, regional, national or international like a World Cup or President’s Cup.

We could also judge success by achieving the status of superintendent at one of the world’s most prominent golf clubs, like St Andrews Links or Augusta National or Royal Melbourne.

Gaining qualifications is something very close to my heart. I’m not alone in admitting that I left school with very little in the way of academic qualifications.

Being labelled as stupid or being categorised that you wouldn’t achieve very much wasn’t uncommon. Possibly the drive for success and recognition inspired many to achieve higher qualifications, degrees, masters and even PhD’s.

Sometimes the reference of success is misguided, as it normally refers to your work and career. However, many have struck success outside work. Sports and hobbies range far and wide where you feel you are achieving something that elevates your sense of achievement and makes you feel that you are successful.

It may be even that after a long career you are able to retire early and pursue a life free of work and responsibilities and be free to do whatever you want.

But to achieve these ambitions, we must understand that there must be an amount of dedication, skill and determination. This isn’t without its issues.

Indeed, tomorrow’s manager will need to understand a greater range of knowledge and learning. We are already seeing a huge impact surrounding legislation and restrictions with the use of chemicals, with current day turf managers having to find and navigate a route to a solution that meets expectations.

Maybe it’s the first time we mow, being responsible for leading a project or team, or promotion to that coveted first superintendent role. All these are signs of success.
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FLOODING

Step by step guidance

Floods can have a devastating impact on a cricket club, causing damage to both pavilions and grounds. The ECB provides advice and support for affected clubs in these situations, whether it be significant damage to buildings and machinery or deposits of sediment and waste on outfields and squares.

There is a lot that a cricket club can do to reduce the risk of flood damage:

Step One: Is your club at risk of flooding?
If you are in England and Wales, you can find out the risk of your ground being flooded by water from rivers or the sea using the flood maps on the Environment Agency website. They also provide useful information to help you prepare if you are at risk of flooding.

There are other sources of flooding such as stormwater drains that aren’t assessed in this way. This is when local knowledge is invaluable - speak to your local council and some of the older members of your clubs - they will have a historical perspective of flooding on your ground.

Step Two: Can your club get warnings from the Environment Agency?
If your property is on the Environment Agency’s Flood Map you might be able to sign up for their ‘Flood Warnings Direct’ service which will send you a warning. This will alert a club representative if a flood alert or flood warning is in place. Make sure that this person is a current and active member of the club and able to react to the warning if necessary.

Step Three: Develop a flood plan
Producing a club flood plan can help limit damage to the club and save the club money in the long term. The plan should be reviewed annually and there are templates available on the ECB website.

All key personnel should have a copy of the plan so they know what to do and when. It is also a good idea to post a copy on your notice board and website so that the whole club can be aware that a flood plan is in place.

Step Four: Get advice on reducing flood damage
There are things that you can do as a club to help prevent flood water damaging your property;

• Maintain ditches, culverts and look at re-landscaping to help avoid winter flooding.
• Use flood boards, polythene and sandbags to reduce the amount of water entering a building.

Larger-scale projects include constructing flood walls and modifying river banks, in these circumstances you should always seek professional advice from a specialist. You should also contact the Environment Agency to ensure that your flood protection does not adversely affect neighbours or others downstream.

If your club has been affected by floods, please email facilities@ecb.co.uk for further information and assistance.

Advice on sediment removal
As floodwater recedes any deposited sediment may damage your turf and reduce playability. It may also be a health & safety risk to your staff, members and the wider public.

What should you do?
One of your primary concerns will be to get your pitches back into play as soon as possible - this will inevitably mean removing the sediment from the surface. When you do this you are required under both Health & Safety and Environmental law to consider the potential harm to both humans and the wider environment and you should act to Prevent both. The most appropriate strategy for sediment removal will depend on your situation and the extent of your flood, but two common techniques are either to break up and mix the sediment with your soil (typically using a harrow) or complete removal and replacement using a machine such as a Koro. Consult your advisor on the best strategy to do this as it requires assessment on a case-by-case basis.

How you should minimise potential harm?
To minimise risk to human health, the source (potentially contaminated sediment) should be removed or treated. Risks can be reduced further by removing the pathway from the source to the receptor (staff, players and public) during clean up, maintenance and play.

During clean up and routine maintenance, personal protective equipment (PPE) should be worn by all staff and volunteers who are involved. Minimum requirements include:

• Wearing suitable gloves, dust masks, cover clothing (particularly cuts/abrasions etc.) and waterproof boots
• No eating or drinking during this work
• Thorough hand washing with soap and hot water should be made compulsory for all staff, before every break (including before toilet breaks) and at the end of the day
• Staff should shower to remove dust from hair and skin, and clearing the nose, mouth, eyes, ears etc. is recommended.

Worcestershire County Cricket Club completely submerged after heavy floods in 2019

Flooded outfield at Carlisle Cricket Club
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www.pitchcare.com
Product Update

A round-up of the latest product news announced in recent weeks

Pellenc UK has announced the launch of the all new Rasion Easy 2 and Rasion Smart 2 battery powered pedestrian rotary mowers.

The new and improved Easy model has a number of key features:

• Silent brushless wheel motor with direct drive.
• 91 dB at speed 3 and 93 dB at maximum power.
• Mowing with consideration for the user’s well-being.
• Exceptionally low vibration rate of 0.7 m/s² (compared to 4.5 m/s² for a petrol mower).
• An easy-to-handle lawn mower: Single front wheel facilitating stability and work flow. 2 wheel-locking positions: free/idle wheels or wheel-locking for stability and work flow. 2
• Exceptionally low vibration rate of 0.7 m/s² (compared to 4.5 m/s² for a petrol mower).
• An easy-to-handle lawn mower: Single front wheel facilitating stability and work flow. 2 wheel-locking positions: free/idle wheels or guided steering - flexible and smooth.

A cutting width of 60cm with height of cut between 25-75mm, 70 litre grass box capacity and two front sweeper wheels ensure the Rasion Easy 2 is ultra-manoeuvrable. Weighing less than 30kg and folding handlebars means that transportation between sites is effortless. As Toro’s quietest ride-on greensmower yet, work can start earlier whilst complying with noise regulations, meaning greens can be ready earlier which could enhance revenue by allowing for earlier tee times.

The suspension system maintains a full flotation range to prevent gouging or scalping when going over undulations and Toro’s proven Flex technology allows the cutting units to pivot around the centre of the front roller to prevent side-to-side scrubbing. Add to this DPA cutting units and you have a mower which floats freely over any terrain with superior contour-following.

www.pellencuk.com

Another fine example of innovative Toro technology, the Greensmaster eTriFlex 3360 is the new greensmower, developed specifically with customer needs in mind. Reducing noise, minimising impact on the environment and with no hydraulics, it says goodbye to leaks whilst never compromising on quality of cut.

This clever ride-on utilises all-electric components for traction, steering, lifting and cutting, alongside a proven Kawasaki twin cylinder 14hp air-cooled engine with battery assist technology and a reduced speed of 2400rpm, shrouded in venting. It’s this design that ensures perceived bystander noise level is significantly reduced, making it the perfect greensmower for courses with nearby residents. As Toro’s quietest ride-on greensmower yet, this model makes a significant reduction in vibration when compared to 4.5 m/s² for a petrol mower.

The suspension system maintains a full flotation range to prevent gouging or scalping when going over undulations and Toro’s proven Flex technology allows the cutting units to pivot around the centre of the front roller to prevent side-to-side scrubbing. Add to this DPA cutting units and you have a mower which floats freely over any terrain with superior contour-following.

www.reesinkturfcare.co.uk

Bayer has brought a new residual pre-emergence herbicide to the UK market, adding another product to the amenity contractor’s armoury.

Valdor® Flex (MAPP:19033) contains two active ingredients, diflufenican and iodosulfuron-methyl-sodium, that prevent the emergence of a broad spectrum of weeds for up to four months, reducing the frequency of traditional herbicide applications.

The product provides excellent residual control for even the hardest to manage weeds on a wide range of surfaces, including open soil, gravel and industrial areas.

Valdor® Flex acts as a valuable tool for resistance management within the weed control sector and is stable in water for at least 24 hours so, if for some reason there is any spray solution left in the tank, it can be used the following day.

It is easy to mix in a knapsack or tractor mounted sprayer with very little dust given off, providing improved operator safety.

Valdor® Flex is available in a range of pack sizes from 10g sachets up to a 500g bottle ideal for contractors.

Valdor® Flex is available from the Pitchcare shop - www.pitchcare.com/shop/

If you are looking for an easy way to remove dirt and debris from the top of a synthetic pitch then the GKB Top-Clean is the machine for you.

The GKB Top-Clean is a full mechanic, self-driven machine that removes all kind of dirt from the top of a synthetic pitch, from cigarettes, leaves and papers to plastic bottles.

This machine can easily be connected to almost every tractor by using a standard three-point hitch or electric drawbar. Using a high driving speed (around 10 km/h) it will result in a perfect looking artificial pitch that you can be proud of.

Designed as a full self-driven machine, the Top-Clean features two rubber wheels at the front to ensure that the machine will roll softly across the artificial pitch. Not only this, but a rotary brush is connected with the wheels by a chain drive. You can determine the speed of the brushes with the driving speed.

During operation, debris and infill will come on a vibrating sieve. This sieve will separate infill material from the debris and, thanks to the vibration of the sieve, all pollution moves to the bins at the end. Containing two separate bins, after use, the bins can easily be removed to get emptied in a regular waste container.

www.gkbmachines.com

The Uplift 86E is the new 82V li-ion battery powered stadium rotary mower, designed for debris collection after matches and built on the experience gained with previous models.

It features twin contra rotating blades for a high lift cut and vacuum for increased efficiency, while a full width rear roller produces perfect stripes.

The cutting width is 86cm (34”) and there is a single point, robust and effortless height of cut adjustment between 20mm-50mm. A wide grass chute allows unimpeded grass collection and the moulded deck is constructed to optimize the airflow.

The Uplift 86E power source is an 82V battery system which features four quick change battery docking stations and the mower can use any number of batteries from one to four.

Batteries can be charged in 1.5 hours and they are interchangeable with the C34E in the Allett range. The batteries connect to a phone app via Bluetooth, enabling the operator to check battery life, battery temperature and even the batteries’ location. There are three brushless motors for maximum efficiency and reliability, two powering the blades and one powering the rear roller. Using batteries as its power source the Uplift 86E is extremely quiet in operation with exceptionally low vibration for maximum user comfort and productivity.

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### Product Update

A round-up of the latest product news announced in recent weeks

**The GM3200 and 3300 out-front rotary mowers**

The GM3200 and 3300 out-front rotary mowers have all the benefits Toro’s out-front rotaries are known for, including superior access and trimming, optimal sight lines, easy-to-use controls and all-season versatility, and, as you’d expect, significant performance enhancements too.

There are two engine models - a 24.7hp for the GM3200 and a 37.4hp for the GM3300, both Stage V emissions compliant, with options of 152cm (60ins) or 183cm (72ins) rear and side, or rear-only discharge rotary decks, with or without mulching kits, or a 152cm flail deck.

Toro has focused particular attention on the deck design with 4.5mm high strength steel decks, rugged spindles, a bullnose bumper and reinforced sideskids, these machines are built to tackle any terrain and deliver a superior and consistent cut while dispersing clippings evenly.

Customers can choose from three deck options. There are two rotary options: the standard deck has rear and side discharge and replaceable deck bumpers, whilst the Turbo Force deck has rear discharge and welded deck bumpers. Mulching kits are available for both.

Meanwhile, the option of the fine cut flail provides even more productivity and versatility for customers and further value to their investment making light work of both shorter precision cutting as well as tackling longer, coarser grass.

The new Attila 98X has been designed to work in the toughest of conditions. This powerful workhorse effectively deals with clearing vegetation from a wide variety of sites - long grass, weeds, bracken and brambles on woodland paths, orchards, verges and embankments.

Powered by the new Kawasaki FS691V 24HP electric start engine, the Attila 98X has a strengthened welded tubular chassis providing a better driving position for operators.

With a low centre of gravity, four-wheel-drive plus heavy-treaded tyres and differential lock, the new ride-on brushcutter to join the Attila family provides greater stability on slopes up to 30°.

Swing or fixed tip blades with a 98cm cutting height adjusted by a centralised lever with 8 working positions from 50mm-120mm plus transport mode enable this workhorse to cut through dense growth of up to 4.5cm diameter.

The new Attila 98X model joins the Attila range of pedestrian and ride-on brushcutters already available within the extensive Etesia portfolio.

www.etesia.co.uk

**The Blade Runner bowling green iron has been designed to smooth the playing surface without increasing compaction and bowlers will love the finish the Blade Runner provides.**

In common to all Poweroll products, the effectiveness of the machine with operator comfort and convenience is given the highest priority. Also effective for the removal of frost heave.

Features:

- A wider base than most irons to provide a very stable platform when changing direction and negotiating slopes on and off the green
- Large diameter rollers are utilised to reduce compaction by having increased ground contact. This assists a smooth driving action through reduced rolling resistance
- The rubber mounted engine and hydraulic drive unit is fully contained in a tray to keep oil/fuel off the green
- Conventional greens iron operator position of the driver sat sideways.
- Tiller steering with 2 handed control for precise control of direction
- Very comfortable for the operator, with ergonomically placed handles, lever and foot control. Seat is adjustable for reach. Hand grips swivel for comfort
- Optional transportation trolley available.

www.poweroll.com

**Reesink Turfcare has expanded its range to offer people the ability to detect and alert people to lightning strikes.**

Reesink Turfcare has announced the launch of LockStar - a new residual, pre-emergent total herbicide for vegetation management in the UK.

LockStar arrives at a time when public green spaces, amenity areas and transportation infrastructure are all coming under increasing pressure from reduced budgets, weed infestations and a reduction in chemical solutions available on the market. This new herbicide will keep areas such as these weed-free, functional and visually pleasing.

Developed for use on natural surfaces not intended to bear vegetation, permeable surfaces overlying soil and railway ballast, LockStar controls a broad spectrum of weeds and has an innovative, long-lasting formula which allows for professional and safe weed control. The formula contains diflufenican and iodosulfuron-methyl-sodium - which is the first new weed control active ingredient to be released in the UK for many years.

When applied before germination LockStar creates a dual barrier at the soil surface ensuring that soil is kept weed-free for up to four months. To control weeds that are already present, LockStar should be tank-mixed with glyphosate or a fatty acid.

ICL has announced the launch of LockStar - a new residual, pre-emergent total herbicide for vegetation management in the UK.

ICL products are available from the Pitchcare shop - www.pitchcare.com/shop/

www.poweroll.com

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Machinery and Supplies

Product Update

A round-up of the latest product news announced in recent weeks

The V-Ride is a stand-on mower designed for professional use; the compact machine size, ease of manoeuvring and clear view for the operator have lead to the V-Ride becoming increasingly popular for intricate mowing areas.

The Ride-On SCAG machines place the operator directly above the cutting deck, and one of the main features on the new V-Ride is that the revised configuration of the stand-on deck follows the same concept, placing the operator nearer the centre of the machine.

The new version of the original V-Ride was announced in 2017 and had revised features that exhibit SCAG’s policy of continuous improvement and response to operator feedback, which combine to make them such a successful machinery manufacturer.

The latest machine in the range addresses the need for gate-access - the new 2020 V-Ride 32 version.

The V-Ride 32A-16FX:
- 32” Advantage Deck
- 16HP Kawasaki FX
- Electric start
- Drive wheels: 20 x 6.5 - 10
- Fuel capacity: 4 gallons
- New style 2020 V-Ride operator pad
- All other features as on the 36” V-Ride

The machines are available through the STM dealership network.

www.st-mach.com

The Coshh compliant Armorgard Forma-Stor is a quick-assembly, modular storage unit purpose-designed for safe storage of hazardous substances on site.

The flat-packed unit can be constructed in around ten minutes and features 30-minute fire resistance, air vents and a fully welded sump to prevent leaks into the environment.

Anyone looking for a cost-effective, secure container for storing and transporting hazardous fuels and chemicals will find Armorgard’s TransBank is purpose-built for the task and meets full HSE regulations. Protection from theft, fire and leakage is secure with this heavy-duty steel plate container.

Armorgard products are available from the Pitchcare shop

www.armorgard.co.uk

The Hydro 80 MKHP5 cuts and collects both long and short grass - without clogging. Add to that its compact dimensions measuring just 1.98m x 0.90m wide, it is easily transported in a van or trailer. It can pass through most gateways and its tight turning circle make it ideal for small or awkward areas. It mows close to walls and fences and is highly manoeuvrable and efficient offering the kind of output that would easily replace three walk-behind mowers.

Cutting height and emptying of the grass collector can all be adjusted or carried out from the driving seat, while the steering console is fitted with a timer, rev counter and electric starter.

A hose pipe fitting makes cleaning the cutting system quick and easy, while the tool-free access to the engine allows for easy maintenance thanks to quick access to all mechanical parts.

As with all Etesia machines, the new Hydro 80 MKHP5 ride-on mower comes standard with a comprehensive two-year commercial and three-year domestic warranty.

www.etesia.co.uk

GroundWOW® makes printing on ground as easy as printing on paper. GroundWOW® SPECIAL FX can print any logo, any colour, any size, on any surface. Deployable in under 10 minutes, autonomous vehicle technology, artificial intelligence and an end-to-end Cloud SAAS (Software As A Service) platform combine to create ground-printed images as accurate as a blade of grass.

Compared to current methods, GroundWOW offers unrivalled time and cost savings. Customers will be the first in the world to have the power of full colour autonomous AI printing at their disposal for sports sponsorship and advertising applications.

From a practical perspective, the SAAS cloud platform provides permanent ‘up’ time, vast secure image-to-print file conversion plus full client management including the means to remotely prime, operate and update robots. The GroundWOW SPECIAL FX system even tells the user how much paint is required relative to the surface type which, in turn, delivers an environmental upside for clients. This is the first of several GroundWOW product innovations geared to drive sponsorship revenue in all sports around the world with a linked augmented reality proposition to come in early 2020.

GroundWOW will be available to view in a purpose-built robot production facility based in the North West of England from January, with first customer deliveries scheduled for Q1 2020.

www.groundwow.com

Sharing technologies with the award-winning A Model mower range, the 6080A and 6500A E-Cut hybrid electric fairway mowers from John Deere feature high-performance electric reel drive, which greatly reduces the number of potential hydraulic leak points to ensure maximum productivity and performance.

These new mowers can be operated at lower engine speeds, which further reduces operating costs by decreasing fuel consumption.

Equipped with a powerful 24.7hp (18.4kW) diesel engine, the 6080A and 6500A E-Cut hybrid mowers feature a three-wheel smooth tyre configuration on a durable chassis, with premium performance and comfort features for all-day mowing. Width of cut is 80in (2m) on the 6080A and 100in (2.5m) on the 6500A, with 18 and 22in (46 and 56cm) QAS cutting units respectively.

These new models include the proven eHydro transmission and LoadMatch as standard, which maintains a high quality cut even when working on slopes. A mowing speed of 8mph (13kph) on both models allows operators to be more productive by covering larger areas in less time.

Both models feature the innovative, password-protected TechControl display. This gives turf managers and technicians complete control over cut quality and performance by enabling them to input commands such as mowing speed, transport speed and service times, while also capturing on-board service diagnostics.

Cut quality is further enhanced with rear-attaching yokes on the cutting units and standard hydraulic down pressure, which can tackle even the toughest mowing conditions. Additionally, the hybrid reel drive system allows more power to be available for the standard GRIP all-wheel drive traction system, to further improve performance on slopes.

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Penalty shootout English record

A non-league cup match has equalled the record for the longest penalty shootout in English football.

Taunton Town and Truro City needed 34 spot-kicks to separate them after drawing 2-2 in the Southern League Challenge Cup second round.

They equalled the record set in an EFL Trophy match between Chelsea’s under-23 side and Oxford United in 2016. Taunton finally won the shootout 12-11 when Jack Rice netted their 17th penalty to send his side through.

“Thirty-four minutes, 34 penalties and then I had to rebuild the penalty spot afterwards. It was mad,” said Taunton chairman Kevin Sturmey, who doubles up as head groundsman. “We had two opportunities to win it on penalties 32 and 33 and missed them both; one would have been signalled a wide in cricket.”

The bird whisperer!

Stephen Thompson’s reputation in the industry is up there with the best when it comes to conservation.

Winner of Conservation Greenkeeper of the Year and occasional contributor to Pitchcare, the John O’Gaunt Golf Club stalwart is proud that his club has recorded over 100 bird species, along with countless other interesting and varied flora and fauna.

But now he appears to have also become the ‘bird whisperer’. This stunning kingfisher appears to be happy in Steve’s company.

We are NOT all doomed

Tandridge Golf Club captain John Mainwaring is standing down after his year on parade - but he says the club is far from “doomed” and saluted members and staff who had made his year such a success.

Mainwaring is losing his ‘pips’ to rejoin the rank and file but knows that he is leaving the club in excellent and competent hands.

In a message to members, he said: “I must first offer my sincere thanks to you all for making this last year so enjoyable. I return to the ranks of the cohorts ready to embrace the years ahead. Tandridge GC is bigger than any one person so all we can do is perform our duty to the best of our ability. Take no respite. Do the job but, most of all, don’t panic!

If you spot anything you think might give readers a chuckle send it to: kerry.haywood@pitchcare.com

As seen on social media ...

Unfortunate sign breakage
**DIARY DATES**

**JANUARY**

1st: Happy New Year
1st: Horseracing - Cheltenham (thejockeyclub.co.uk/cheltenham)
3rd-7th: Cricket - 2nd Test, South Africa v England, Newlands, Cape Town (icc-cricket.com)
10th: Horseracing - All weather racing, Dunstall Park, Wolverhampton (wolverhampton-racecourse.co.uk)
16th-20th: Cricket - 3rd Test, South Africa v England, St George’s Park, Port Elizabeth (icc-cricket.com)
19th-22nd: Industry - BIGGA, Continue to Learn at BTME 2019, Harrogate Convention Centre (btme.org.uk)

**FEBRUARY**

1st: Rugby Union - Wales v Italy, Principality Stadium, Cardiff (sixnationsrugby.com)
1st: Horseracing - All weather racing, Lingfield Park, Surrey (lingfieldpark.co.uk)
1st: Rugby Union - Six Nations, Ireland v Scotland, Aviva Stadium, Dublin (sixnationsrugby.com)
2nd: Rugby Union - Six Nations, France v England, Stade de France, Paris (sixnationsrugby.com)
4th: Cricket - 1st ODI, South Africa v England, Newlands, Cape Town (icc-cricket.com)
7th: Cricket - 2nd ODI, South Africa v England, Kingsmead, Durban (icc-cricket.com)
8th: Rugby Union - Six Nations, Wales v Italy, Aviva Stadium, Dublin (sixnationsrugby.com)
8th: Rugby Union - Six Nations, Scotland v England, BT Murrayfield, Edinburgh (sixnationsrugby.com)
9th: Cricket - 3rd ODI, South Africa v England, New Wanderers Stadium, Johannesburg (icc-cricket.com)
9th: Rugby Union - Six Nations, France v Italy, Stade de France, Paris (sixnationsrugby.com)
12th-16th: Cricket - International Twenty20 Match - South Africa v England (icc-cricket.com)
21st-22nd: Cricket - ICC Women’s T20 World Cup 2020 (icc-cricket.com/t20-world-cup-womens-fixtures)
22nd: Rugby Union - Six Nations, Wales v France, Principality Stadium, Cardiff (sixnationsrugby.com)
22nd: Rugby Union - Six Nations, Wales v France, Principality Stadium, Cardiff (sixnationsrugby.com)

**MARCH**

1st: Football - Carabao Cup Final, Wembley Stadium (efl.com)
7th: Rugby Union - Six Nations, Ireland v Italy, Aviva Stadium, Dublin (sixnationsrugby.com)
7th: Rugby Union - Six Nations, England v Wales, Twickenham Stadium, London (sixnationsrugby.com)
8th: Rugby Union - Six Nations, Scotland v France, BT Murrayfield, Edinburgh (sixnationsrugby.com)
14th: Rugby Union - Six Nations, Wales v Scotland, Principality Stadium, Cardiff (sixnationsrugby.com)
14th: Rugby Union - Six Nations, Italy v England, Stadio Olimpico, Rome (sixnationsrugby.com)
14th: Rugby Union - Six Nations, France v Ireland, Stade de France, Paris (sixnationsrugby.com)
28th: Horseracing - Lincoln Family Fun Day, Doncaster (doncaster-racecourse.co.uk)

**To have your event included in this magazine diary section, please email details to kerry.haywood@pitchcare.com**

**QUOTE ME HAPPY**

“There’s nothing I can do about it, I’m not a groundsman,” Ireland v Samoa Rugby World Cup pitch sparks reaction from referee Nick Berry.

“Where I’m from there are some things girls shouldn’t do, but my family always supported me. My father had an idea to cut my hair short to trick people into thinking I was a boy. After that, I would train with the boys and that’s really helped me play the way I play today.” Shafali Verma spoke of her journey to become the youngest Indian women’s cricket player to score an international fifty.

“Most of these groundsmen are poorly paid and unmotivated; they are also susceptible to vices including tobacco and alcohol addiction. They need help and a better quality of life. If Indian cricket with all its riches cannot do this for its own groundsmen, nobody else will.” Vedan Jaishankar, First Cricket, India.

“Sometimes you get beaten, sometimes you get out, and you can’t be punching walls,” Aussie cricketer Mitchell Marsh missed the start of his country’s cricket season after breaking his hand punching an immovable object!

“He’s fine. He’s Joe Root. He is the England captain and there’s no one else to do it. That’s the main thing that counts for us as players in a very tight-knit group.” Ben Stokes is adamant Joe Root remains the right man to lead England’s Test team.

“He stopped the game twice and made a big fuss. There was an opportunity for both teams to have a quick restart but twice he intervened and had things to say to the players. So I said: “Why did you do that? Please don’t do that” and then I got it.” Jurgen Klopp revealed the exchange he shared with the referee before receiving a yellow card during Liverpool’s Champions League draw with Napoli.

“Whether it’s criticism or not, I’m using it as criticism to drive everything I’m doing on a day-to-day basis. Maybe it’s a bit of a warped mentality but when someone puts you down or whatever, you don’t always have to respond with words. My way of doing it is with actions.” Andy Murray speaks honestly during his documentary ‘Resurfacing’.
It’s about obsessing over the little things, the details no one else sees. It’s never tolerating anything less than the best. Perfection is a mindset. And that’s worth being proud of.

Freephone 0800 085 25 22