GROUNDSKEEPING

JOURNAL

£2.95

VOL. 22 | MARCH/APRIL 2024





In this issue

Welcome to Groundskeeping Journal, the UK's leading bi-monthly publication providing latest product innovations, industry news and opinions from key professionals within the industry. With focuses on Aeration, Irrigation & Drainage; Greenskeeping; Latest News; Machinery; Pitch & Line Marking; Specialist Mowers; Sports Ground Equipment; Sports Pitches; Top Dressing; Sprayers & Spraying and Turf Management.



10 GKB Machines

GKB Sandspreader SP300 doubles productivity for Cutting Edge Grounds Maintenance

18 Origin Amenity Solutions

Trench Bowling Club - The Best Kept Green in Shropshire 2023 uses a microbial programme from OAS

20 SIS

Saving the Champions League from 'Biblical' downpours at Galatasaray's Rams Park

25 Johnsons Sport Seeds

Cardigan Golf Club overcome exposed conditions with bespoke Johnsons Sports Seed mix

26 Lobb & Partners

Innovative, inclusive design planned for new nine holes at Pirkkala club

28 Atlas Turf

Seeded paspalum is used to grass entirety of massively dramatic Coore & Crenshaw Caribbean course

30 Redexim

Redexim Top-Brush proves transformational for the team at Malton & Norton Golf Club

34 Kubota

Royal Mid-Surrey 'Take Ten' with Kubota



40 YEARS OF WORKING TOGETHER



The Workman you know, but now *electric*

The new Toro Workman MDX Lithium utility vehicle. Same powerful performance, same operator comfort, same hefty payload capacity, the Workman MDX Lithium adds HyperCell® battery-power to another customer favourite.

Reimagining turfcare, together.



Contact Us

Enhancing Quality Sports Services

ello and welcome to
Groundskeeping Journal.
Our publication has

been created to showcase the very latest industry news and product information from the Groundskeeping sector.

In each edition we carry in depth articles from some of the industry leaders, the articles cover many aspects of Groundskeeping with some offering tips and advice on Sports Pitches, Turf Management, Greens Keeping and much, much more. Whether you are looking

for tips and advice on creating the

perfect green or looking to source

the right product for your synthetic surface GKJ has it all.

Our vision is to connect our readers with professionals and suppliers working within their sector and we hope that we have created a platform that will become a must have tool

for anyone working within the industry.

Many thanks
for taking the
time to read
our publication,
we hope you
enjoy the read and if
you would like to keep up

to date with all things GKJ then make sure you check out our subscribe page.



Follow us on our Social Media





@gkj_mag

Contact the Groundskeeping Journal team below:

Editor-In-Chief

Antony Holter editor@mhmagazine.co.uk 01304 806039

Editor

Emma Page emma@groundskeepingjournal.co.uk 01304 806039

Publishing Director

Martin Holmes martin@mhmagazine.co.uk 01304 806039

Sales Director

Lee Martin lee@groundskeepingjournal.co.uk 01227 936974

Business Manager

Josh Holmes josh@mhmagazine.co.uk 01304 806039

Studio Designer

Richard Bland richard@mhmagazine.co.uk

Digital Manager

Jamie Bullock jamie@mhmagazine.co.uk 01227 936971

Accounts Department

Alison Holmes accounts@mhmediaglobal.com 01227 936971

Every effort is made to ensure the accuracy and reliability of material published in Groundskeeping Journal however, the publishers accept no responsibility for the claims or opinions made by advertisers, manufacturers or contributors. No part of this publication may be reproduced or transmitted in any form or by any means, mechanical, electronic (including photocopying) or stored in any information retrieval system without the prior consent of the publisher.



ounded in 1896, the course at Shipley Golf Club is neatly tucked away in the beautiful wooded valley of Beckfoot,

just outside of Bingley in West Yorkshire. The grounds were designed by renowned architect Dr Alistair Mackenzie and present a testing but scenic 18-hole game. Chris Wood, Course Manager for Shipley Golf Club, heard about Attraxor's ability to reduce Poa seedheads through fellow course managers and decided to try it on his greens on a trial basis. Having just completed his first full year of treatment with the plant growth regulator (PGR), he believes it has had a high-quality impact on the greens at Shipley.

Chris said: "I mix 375 grams of Attraxor with 2 kilograms of nitrogen on the greens every 21 days, a routine which has resulted in reduced Poa seedheads and increased growth regulation. I was very impressed with the speed in which it gets working!" Attraxor is formulated for rapid foliar uptake, as the active PGR ingredient, prohexadione, can get to work in as quickly as four hours post-application. The active substance inhibits the gibberellic acid pathway, resulting in a reduction of turf height and turf biomass. Although it can still be applied in cooler soil conditions of around seven degrees centigrade, the key time to treat turf is March through to September for best results. Chris has been using Attraxor during this main season to support turf growth.



Alongside the decreased Poa, I have also noticed that the grass sward is smoother, resulting in a truer ball roll and increased playability – which is a bonus!

Chris said: "Alongside the decreased Poa, I have also noticed that the grass sward is smoother, resulting in a truer ball roll and increased playability - which is a bonus!"

Attraxor can also decrease time and money spent on turf maintenance due to its ability to regulate longitudinal turf growth, lessening the frequency of mowing and clipping volumes.

Chris said that he had noticed



the need to mow less: "We have been able to skip cutting days due to Attraxor's growth regulating abilities, which has meant my time can be spent doing other key maintenance jobs around the grounds.

"Overall, I believe that Attraxor has increased the quality, regulation



and playability of the greens at Shipley, although after some applications the turf did lighten slightly - but this doesn't last and soon wears off."

To find out more about Attraxor, visit https://www.pestcontrol. basf.co.uk/en/Products/Overview/ Growth-Regulator/Attraxor. html#section-benefits



Suståne proves the key for consistency at Sweden's Linköping Golf Club



programme based around Sustane 5-2-4+Fe organic slowrelease fertiliser is working wonders at Linköping Golf Club

in Sweden - delivering enhanced consistency in plant health and growth for Head Greenkeeper Andreas Bergqvist and his team. Now into their second year of pursuing a more natural approach to enhancing soil biology, not only are the greens performing better, the additional strength has seen improved resistance to Anthracnose.

Andreas has been in charge of the maintenance of the picturesque parkland course for the last five vears, but has been at the club since 2001 as a deputy where he first gained experience of products from the Sustane range. "My approach to plant health is very much to work with nature and feed from the bottom up, rather than the top down" he explains. "We'd been using Sustane for a number of years, but when I took over I further reduced artificial inputs in favour of upping our Sustane programme to get better structure into our push-up greens."

The current plan consists of 8-10 week applications of Sustane 5-2-4+Fe between the months of April and September; the long-lasting sources of organic nitrogen promoting greater root development and good colour. "The main benefit we've found is that you don't get the flush of growth like you do with synthetic fertilisers. It keeps the greens consistent in terms of playability and means that



we're employing fewer mechanical practices such as verti-cutting to keep on top of rapid growth which, in turn, brings benefit for surface quality and health."

"Prior to using Suståne we would also commonly see outbreaks of Anthracnose around the course. This appears to have decreased significantly, and when we do get a patch we can target treat with some additional 5-2-4+Fe and it's seemingly resolved within a couple of days."

He continues, "One of the biggest issues we face here in southern Sweden is drought. The Sustane product being naturally-derived means that we can apply when we need to, and not when the rainfall forecast is in our favour. The boost to root development also means we're finding that the grass is more tolerant to the hot and dry conditions which means we're well-placed to deal with the changing climate moving forwards."

www.sustane.com

Why Collier Turf Care? We are large enough to compete, small enough to care...



We have 6 months worth

of stock on selected lines.

















We dispatch same day where possible on a 2 - 3 day service.

UK's largest stockholding



We have 30,000+ square feet of

warehouse space filled to the max.



of these key brands.

Collier Turf Care Reviews

4.8 Rating 439 Reviews

99.9% of our deliveries arrive safely due to our careful packaging policy.



97% of our customers recommend us.







facebook/collierturfcare

twitter.com/CollierTurfCare

instagram.com/collierturfcareltd

in linkedin.com/company/collier-turf-care

www.collier-turf-care.co.uk

sales@collier-turf-care.co.uk

01328 700600

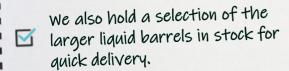
Very easy to order - Customers can place an order or ask for advice in a variety of ways.

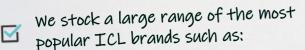
Contact us today to speak to one of our friendly, helpful staff.

Key Supplier Focus:













Sportsmaster SIERRABLEN

Vitalnova Sierraform

Support your turf after winter with Marathon® ALGAE!

Rain and cold: a tough cocktail for turf

When the cold season arrives, the grass enters a phase of weak or no growth. During this period, it becomes particularly sensitive to climatic stresses such as excess humidity or frost. The use of sports pitches during this season exacerbates the situation. The cause: compaction induced by trampling and uprooting. Trampling during wet periods breaks the structure of the top layer profile, causing fine particles to rise up and obstructing the porosity of the soil, resulting in water accumulating on the surface. At the end of winter, compaction of the surface layer also slows down the restarting of the soil's biological activity by asphyxiating the environment, leading to mineralisation and nutrition problems for the turf, problems accentuated by the leaching of nutrients such as nitrates and sulphates during the winter. Another disadvantage of insufficient biological activity in spring is the slowdown in the decomposition of organic matter such as mowing residues. The thatch build-up accentuates asphyxiation and encourages the onset of disease.

In short, a negative cycle sets in, leading inexorably to a deterioration in the quality of the turf!

That's why, after a cold, wet winter, it's essential to approach the new season with a tailored nutrition programme, thanks to the Marathon® ALGAE range.



Trampling during wet periods breaks the structure of the top layer profile of the soil.

A nutrition programme to match the situation

As soon as the grass emerges from winter, it is important to act upon two important areas: the supply of nutrients to support the increasing needs of the turf, and the stimulation of biological activity in the soil to boost the mineralisation of organic matter. That's the aim of the Marathon® ALGAE range of organo-mineral fertilisers.

Thanks to its patented XSER® complexation technology,
Marathon® ALGAE releases nutrients sequentially into the soil solution, gradually meeting the growing

needs of the turf, while protecting the nutrients from leaching. This stimulates the turf's growth, regenerates its roots and repairs the plant cover damaged by the winter.

The organic component of Marathon® ALGAE has two special features. The first is that most of it comes from a dehydrated source rather than a composted one. This characteristic preserves all the reactivity of organic matter for a rapid effect on stimulating soil microflora. The second special feature is the addition of SEADRY® dry seaweed extract, which is rich in specific molecules (sulphated

polysaccharides) and rare trace elements (such as vanadium) favourable to the development of microbial activity in the soil and root hairs.

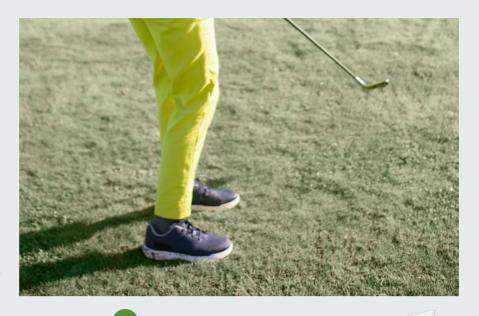
The different NPK balances available in the Marathon® ALGAE range can be used to support turf throughout the year, from regeneration at the end of winter, through strengthening resistance to summer climatic stress (high temperatures and water stress), to preparing reserves at the end of the season. The Marathon® ALGAE range is available in two particle sizes: 0.7 - 2 mm for greens, elite and stadium pitches, and 2 - 4 mm for fairways, training pitches, parks and gardens.

With such a range of solutions, sports ground managers have an effective tool at their disposal to create the right conditions for the development of high-quality turf that meets their requirements.

Marathon® ALGAE Sport fertilisers are available exclusively from Collier Turf Care (collier-turf-care. co.uk or call 01328 700600)

www.collier-turf-care.co.uk







important areas: the supply of nutrients to support the increasing needs of the turf, and the stimulation of biological activity in the soil to boost the mineralisation of organic matter.







GKB Sandspreader SP300 doubles productivity for Cutting Edge Grounds Maintenance



roductivity and efficiency from topdressing operations has more than doubled for

the team at Cutting Edge
Grounds Maintenance
following their purchase of
a SP300 Sandspreader from
GKB Machines. Director Josh
Blackburn cites that the
exceptional build quality of the
high-capacity disc dresser allows
them to spread up to 240 tonnes
of material each day on a variety
of sports pitch and amenity
surface renovations.

Having worked in the groundcare industry for close to 15 years, Josh established Cutting Edge two and a half years ago and leads a team of eight operatives on contracts in and around Teesside, North Yorkshire & County Durham. "We'd been using a second-hand spreader for some time so, with the number of pitch renovation jobs increasing, we were due an upgrade" he explains.

"We had demonstrations of a couple of different brands, but the GKB Sandspreader was head and shoulders above the competition - not just from the user-friendly set-up and accuracy of distribution but the impeccable build quality." Delivered by local dealers Lloyds of Bishop Auckland in the summer of 2022, Josh goes on to emphasise, "You too frequently find that with the machines at the bigger end of the ranges, you lose build quality, but with GKB that is





We had demonstrations of a couple of different brands, but the GKB Sandspreader was head and shoulders above the competition.

not the case. You can be assured that everything that comes out of their factory is going to last, and work to a high standard."

The GKB SP300 is the ultimate tool for sports facilities and contractors, looking for a versatile solution to large area topdressing. The 3m3 capacity and ability to quickly and simply adjust the spreading discs makes the Sandspreader suitable for use on a wide variety of applications, from football pitches and cricket

outfields to school grounds and golf fairways. "Being hydraulically-driven rather than PTO, it's really simple to adjust belt speed, disc speed, angle, and thickness. You can tell GKB have designed the machine with the way the operator will use it in mind."

"The Sandspreader is primarily used seasonally, but we have had it out working as late as October which it can do thanks to the four large balloon tyres which effectively spread the weight making it highly adaptable." He continues, "It's not only the quality of machine but the support you have with GKB which we really like. The one issue we had was resolved with a phone call in a matter of minutes. It's the whole package."

www.gkbmachines.com



Looking for a sustainable mulch for your next garden project?

Apsley Farms' soil improving mulch is packed with essential NPK nutrients. Acts as effective insulation to protect soil from frost and heat, suppresses weeds and repels slugs and snails whilst improving soil structure and health. Free from peat and waste. Creates added visual appeal to borders and beds. A 100% sustainable by-product of green energy at Apsley Farms.











01264 554433Nationwide delivery www.apsleyfarms.com

(205 reviews)

SIS sets the stage for Riyadh's season cup with first fully indoor hybrid pitch

eason Cup, Riyadh's showpiece football tournament featuring Messi and Ronaldo, was made possible thanks to the world's first fully indoor hybrid pitch built in 21 days by global sports surfaces specialist, SIS Pitches.

The competition forms part of the Riyadh Season, a festival featuring both live sport and entertainment in the capital, funded by the Saudi government's Public Investment Fund. All Season Cup games take place at the Kingdom Arena in front of 24,000 fans. During the competition, the stadium received two Guinness World Records. The first for being the largest covered football stadium; the second for having the largest seating capacity for an indoor covered stadium.



Setting the stage for the cup's major fixtures, including Al Nassr vs. Inter Miami, was a major challenge for SIS Pitches. Construction and development of the elite indoor sports venue started in late 2023, giving the business a much shorter window to install and prepare a playing surface fit for top-level competition.

However, this short window was only one part of the challenge. SIS also had to ensure the natural turf grew strong enough to properly secure the small percentage of synthetic fibres stitched into the arena's surface, as is standard for hybrid pitches of this type. This process was made harder by the arena's fully indoor design, which has no windows or roof for sunlight to enter. The SIS team worked around this by using ultraviolet growing lights to prepare the pitch in time.

Sela, the developer responsible for the arena, requested a game-ready playing surface in just three weeks, much shorter than the typical window for a major development of this type. This aligned with the pace of construction for the wider





stadium, which was completed in just 60 days.

Speed and resilience were key. SISGrass, the solution specified by SIS, merges natural turf with a small percentage of polymer yarn. Already used by many of the most recognisable names in sports, this mixture is injected by the company's patented electric stitching machine, providing a more consistent and resilient playing surface. SIS's machine is capable of covering 1300m2 metres per day with a 90mm shallow stitch, making it ideal for quick installs like that requested by Sela.

SISGrass is much harder-wearing than an all-natural pitch, and is proven to accommodate more playing hours while also being less susceptible to wear or damage. This was particularly important for the Kingdom Arena, given the small window groundspeople have to prepare between entertainment and sports events.

The stadium is home to Saudi



SISGrass is much harderwearing than an all-natural pitch, and is proven to accommodate more playing hours while also being less susceptible to wear or damage.

Professional League team Al Hilal. It will also host several other major sporting events in the coming months, including two heavyweight championship boxing fights. The Kingdom Arena is similar to New Zealand's Forsyth Barr Stadium, which is also indoors, though the latter is fitted with a transparent roof allowing sunlight to enter. Riyadh's stadium is therefore the first fully indoor facility to be completed.

David Ball, Managing Director at SIS Saudi said "This project had an incredibly challenging timeline but our team was able to mobilise quickly, delivering a high-quality playing surface fit for what arguably football's two greatest ever players. We knew the arena was going to be used for other sports and entertainment, so the pitch had to be capable of accommodating short turnarounds between events. SISGrass was a natural choice in this respect, having already proven itself the best option for groundspeople across the world."

Based in Riadyh's Boulevard City development, the Kingdom Arena boasts all the facilities expected from a modern stadium, fitted with a state-of-the-art air monitoring system and 20 skyboxes.



For more information on SISGrass, visit: www.sispitches.com/pitches/ hybrid-pitch-sisgrass/

Trench Bowling Club – The Best Kept Green in Shropshire 2023 – uses a microbial programme from OAS

Trench Bowling
Club in Telford has
recently celebrated
its 100th anniversary
and to top off this
special year, has

been judged The Best Kept Green in Shropshire 2023. The club has 45 playing members and competes in the Mid-Shropshire Bowling Leagues.

Greenkeeper David Evans and a team of volunteers have been preparing the green since 2014. "The green is in the best condition it has ever been, I want to thank Origin Amenity Solutions (OAS) for their support. In 2018 Symbio was recommended to me by the greenkeepers at Bowring Bowling Club in Wellington, Telford. They were using Symbio products, and the green was in excellent condition. I wanted to move away from synthetic fertilisers and pesticides and work with OAS to produce an integrated management plan. I also wanted to try to make cost savings and reduce the use of topdressing."

David had several problem areas that he was looking to improve. "I wanted to reduce thatch, improve drainage, reduce dry patch, promote greater root development, sward density, and reduce, but ideally,



prevent moss growth during the winter period. I also wanted to improve the overall presentation and reduce the need to top-dress."

OAS is a leading supplier of professional turf management products and technical advice. The microbial arm of the business specialises in selecting and applying the mycorrhizae, soil bacteria, fungi, and other microorganisms found in healthy soil.

With the help of Technical Sales Advisors Jeremy Hughes and Andrew de Wet from OAS several products were recommended, and a programme was compiled which David is happy to share.

"I use Symbio Compost Tea and Fungal Additive monthly from April through to September. I



The areas of dry patch
that were prevalent in
some areas of the green
are no longer a problem.
Culminating in an improved
root depth and sward
density.

complemented this with CMS Shoot, Super Seaweed, Supa Yucca and Liquid Aeration.

From March through to June, Incision wetting agent is applied and then from September to December, Symbio HydroAid Plus wetting agent. An application of Mycogro organic granular fertiliser at the start and the end of the playing season, and a turf hardener over the winter period.

David who also doubles as the Club Secretary and Bar Coordinator concludes, "In 2018 we implemented the Origin programme and we have seen a gradual improvement in the playing surface. We have significantly reduced the thatch layer to an acceptable level, improved percolation, and green speed. The areas of dry patch that were prevalent in some areas of the green are no longer a problem. Culminating in an improved root depth and sward density. I am incredibly happy and thoroughly delighted to have independent third-party endorsement after receiving The Best Kept Green in Shropshire 2023."

www.originamenity.com



A Spring Clean for your playing pitch

n the same way the needs of your garden change through the seasons, so do the needs of your sports pitches. As Spring is now here it's time to start thinking about what needs to be done to maintain your pitches and ensure they are ready for the forthcoming summer period.

Getting off to the right start

Spring is the perfect time to start preparation of your pitch for the upcoming playing seasons. Focusing on cutting the grass and aeration of the pitch, to allow water, air and nutrients to penetrate down to the roots, will ensure you have laid the foundations for the coming year.

To gain a consistent surface throughout the pitch, we recommend overseeding and feeding it. These two activities allow you to plant grass seeds directly onto the lawn without turning it and provide the nutrients it needs to maintain and encourage healthy growth.

Late Spring Renovation

Towards the end of Spring, it is time for a few last renovations. Continuing to overseed and aerate the soil, along with removing thatch and debris from the surface,

A good pitch requires commitment to well-planned, year-round maintenance. Here, at Kestrel Contracts, we develop long-term partnerships with our clients and we are passionate about helping our customers have the best playing surfaces available.



and performing topdressing by spreading a thin layer of material like sand over the grass you can be confident your pitch will stand up to the rigours of the games to be played on it.

Constant maintenance is key

Next up, it's important to maintain regular mowing to make sure the grass is kept at the optimal height for performance. While the optimal height may change depending upon the sport, for most pitches it is around 25-30mm, which ensures your players' movement isn't restricted. Make sure you also check the integrity of your irrigation and drainage arrangement to avoid water logging issues. It is also important to monitor for small pests on the pitch as well as other

potential natural problems like harmful fungi, to ensure the safety of your players.

A year-round investment

A good pitch requires commitment to well-planned, year-round maintenance. Here, at Kestrel Contracts, we develop long-term partnerships with our clients and we are passionate about helping our customers have the best playing surfaces available. We are more than happy to visit you and have a conversation about the specific needs of your playing surfaces. To find out more about our services, get in touch.

www.kestrelcontractors.com 01256 880 488 info@kestrelcontractors.co.uk





Take advantage of over 30 years engineering experience and find out how we can elevate your pitches to the next level.

Tel: 01256 880 488

E: info@kestrelcontractors.co.uk





Saving the Champions League from 'Biblical' downpours at Galatasaray's Rams Park

anaging cup competitions alongside domestic fixtures is difficult at the best of times. But it's even harder when games in the Champions League need rescheduling.

The extra mid-week travel puts pressure on football's elite clubs, with some squads clocking up thousands of added miles to complete their fixtures. It's a complication every manager wants to avoid.

Still, you can't account for the weather and sometimes it's so bad a game seems destined for another date. That is, unless you have SIS Pitches managing the playing surface.

When it rains, it pours

It's November 29, 2023. Galatasaray are set to host Manchester United in Istanbul for the second leg of their Group A clash.

Rams Park, Galatasaray's home ground, sees a range of conditions throughout the year, with city temperatures averaging between 20-28°c for the first few months of the season. Cooler temperatures, rain and even snow are common during the winter months, owing to Istanbul's altitude and coastal position.

Rain was forecast for November 29 - certainly not unusual for the time of year. However, the amount expected to fall is what gave UEFA cause for concern. Observation notes and data collected by SIS on the morning of the game tell



their own story. From 10am, thunderstorms would occur throughout the day, bringing nearconstant rain up until midnight.

The right system at the right time Conscious of a potential postponement, SIS activated its SISAir soil aeration system at 9.15 am. SISAir has been developed to help sports club owners and groundskeepers make the most of root zone growing conditions, making it easier to maintain stronger, healthier turf.

The system is installed just underneath a site's playing surface. Once in-situ, SISAir can be used for subsurface aeration, water removal and gas exchange. This is done by setting the network of pipes to vacuum mode or pressure mode.

As Ilyas Kobal, Managing Director at SIS Pitches (Eastern Europe) points out: "We knew vacuum mode would be critical throughout the day, so we began with manual operation early that morning to gauge rainfall intensity and the need for both pumps to discharge water."

According to SIS notes, at 10.18 am the system's drainage well recorded a level of 50cm, triggering the first pump into action. The rain was heavier than expected throughout the late morning, causing the second pump to start.

A few hours later, just before 1 pm, the pumps were stopped as the well water level fell below the 50cm mark for the first time. The system was proving highly effective, though it would only be a temporary reprieve with more bad weather to come.

"We only had a short period with the pumps off," adds Ilyas. "But we had proof of concept. These conditions were extremely challenging but the system was more than prepared to handle the strain. That gave us confidence knowing what was to come."

Will they, won't they?

As torrential rain continued throughout the day, fans and journalists began to question if the evening game would be called off. One noted the 'biblical showers in Istanbul' while another tweeted that the two teams would be 'playing in a swamp' if the game wasn't postponed.

Speculation continued to mount as the U19s competed in a UEFA Youth League match at the nearby Recep Tayyip Erdogan Stadium. Video of that match showed the ball barely rolling across a heavily waterlogged pitch making it 'virtually impossible for players to perform'.

Unlike Rams Park, Recep Tayyip Erdogan Stadium is not fitted with SISAir. This demonstrates the importance of effective surface management systems for major sporting events, particularly in regions where poor playing conditions are common. At Rams Park, water was being siphoned off just as fast as it was

settling. At the other stadium, the pitch was effectively unplayable.

Shortly after the U19s match concluded, former Manchester United defender Rio Ferdinand said he was doubtful the evening's fixture would go ahead, and throughout the afternoon **UEFA** officials were seen inspecting Galatasaray's pitch. Some threw match balls into the air to test responsiveness only to find them sticking to the ground upon impact. Many agreed with Ferdinand's assessment at the time, but the SIS team were confident the evening game would kick-off as planned.

"From 17.15 onwards, we moved the system up gear," says Ilyas. "The vacuums increased from 60% to 80%, and both pumps continued to run on/off cycles to remove excess liquid. From 18.30, a single pump was sufficient to discharge water as the rain began to ease - this approach is used for a rainfall intensity up to 25mm/h. Even so, the two pumps would have been capable of preparing the pitch in time had conditions worsened."

A vote of confidence

Despite an <u>extraordinary amount</u> <u>of rain</u> amid intense media speculation, officials remained

confident the game would be played. In the early evening, a

confident the game would be played. In the early evening, a statement was released from UEFA, which read: "We are closely monitoring the weather forecast and at this stage the match will go ahead as scheduled."

This was a vote of confidence for the SISAir system as rain continued to fall while both teams warmed up. Sensor level trend data showed 2.116m3 of water flowed into the well within one minute at maximum rainfall. indicating an overall rate of 127m3 per hour and a rainfall intensity of 15.61 mm/h. These recordings are corroborated when compared with data from NASA instruments taken on the same evening. "This figure is not unheard of but over the whole day it constitutes a severe storm," Ilyas concludes. "Even so, we made it clear to UEFA that conditions still fell well within the system's capabilities and the pitch would be playable. In the end, we were able to remove all excess rainwater and keep the pitch resistance-free. For some fans the final score was a disappointment, but for us this was a clear win away from home." Innovative systems, like SISAir, are just one part of SIS's offering. The company also creates natural. hybrid and artificial surfaces, including running tracks, as well as ongoing maintenance of all pitches regardless of whether they were originally built by SIS.



You can read more about the SISAir here.



Worm casts causing you a problem?

arthworms are vital for maintaining healthy soil. By continuously moving soil, worms loosen and aerate it, aiding water infiltration. And, when earthworms feed on nutrients in the soil, the waste products they leave provide valuable fertilisation.

But despite the benefits, earthworms create big problems for greenkeepers.

As they expel waste, earthworms leave small worm casts on the soil's surface. These tiny mounds affect ball movement on golf courses and look unsightly. During milder months, worms are more active near the surface, and these soil casts can mount up, creating more work for greenkeepers.

Up until 2019, greenkeepers had a simple way to tackle worm casts. However, since Carbendazim was banned due to the potentially toxic effects it has on the human reproductive system, no clear chemical solution has emerged to replace it.

How Worm Casts Affect Cylinder Mowers

Worm casts are not just an inconvenience. As a greenkeeper, worm casts cause several other issues, particularly when using cylinder mowers.

Due to their wet, sticky nature, worm casts clog mower rollers, eventually causing them to lock up. When this happens, the mower skids over the turf causing costly damage to both the turf and the machine.

Additionally, worm casts cause an abrasive grinding paste to form between the bottom blade and cylinder. This blunts the cylinders so that regular and costly sharpening is required. If the sharpening is not completed the blunt cylinders affect the overall cut quality and presentation of the course. For many Greenkeepers, this means their cylinder mowers spend more time in the workshop than out on the course.

While strategies like delaying the cut until the middle of the day to reduce stickiness, brushing the turf prior to cutting, or using an older mower when cast levels are high can help, these are not practical solutions as they add time and expense to the ongoing task of turf maintenance.



Using a Trailed Rotary Mower

Until a solution is developed to control worm casts on turf, one time-saving way of tackling them is to use a rotary mower. Trailed rotary mowers do not encounter the same problems as cylinder mowers, as they have been engineered to perform in a wider range of conditions with unwavering reliability.

Most trailed rotary mowers have 5" diameter smooth rollers which

are nearly three times larger than a cylinder mower, providing strength when it's needed most. These rollers are fitted with scraper wires (either a thin metal wire hugging the roller or a solid steel bar running across the length of the roller) which provide constant pressure across the roller, for keeping it free of debris and worm casts.

Another advantage of a trailed rotary mower is their high spindle



Due to their wet, sticky nature, worm casts clog mower rollers, eventually causing them to lock up. When this happens, the mower skids over the turf causing costly damage to both the turf and the machine.

speeds and airflow, this helps keep the blades clean of worm casts, improving the cut quality and reducing maintenance costs. The other consideration is cleaning. This process is made much easier with a trailed machine as the decks can be folded vertically giving clear access and removing the need to crawl under or bend over the machine.

If you want to see how a trailed rotary mower will perform on your worm casts, give Trimax a call on 01933 652235 or visit their website https://trimaxmowers.

co.uk/book-a-demo/



A revolutionary new way to measure

Moasure's patented technology transforms how professionals work, enabling rapid and simultaneous measurement and drawing. By simplifying the measurement of challenging shapes and spaces, Moasure empowers grounds management



experts to adopt a new approach with real-time data viewable on their devices.

This innovative tool allows users to draw, capture in 3D, factor in gradients, elevations and calculate areas effortlessly, even around obstacles. Moasure provides accurate surface area and volume calculations, aiding in material ordering.

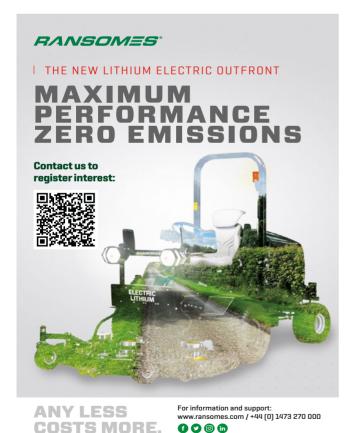
Measurements captured by Moasure can be quickly transferred to CAD software or exported to a PDF document to share with clients or colleagues.

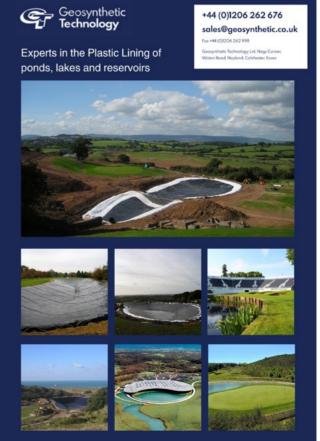
Save hours of time with Moasure—the intelligent way for grounds management professionals to measure complex spaces. With tens of thousands of users globally, Moasure is rapidly becoming the preferred replacement for traditional measuring tools.

sales@moasure.com | www.moasure.co.uk









Cardigan Golf Club overcome exposed conditions with bespoke Johnsons Sports Seed mix

he exposed location and sandy loam soil profile of Cardigan Golf Club mean the links course is subject to harsh conditions, yet the greens and fairways have never performed better according to Course Manager Stuart Adams - who attributes the improvements in visual merit and plant health down to the bespoke seed programme delivered by Johnsons Sports Seed.

Steeped in over 100 years of Welsh history, the hilltop location of the 18-hole links course offers picturesque views over the Teifi Estuary. "Our clifftop position leaves us extremely exposed to the elements, meaning we tend to dry out very fast with the warm sea breeze we experience in the summer" explains Stuart, who heads-up a greens team consisting of two full-time and three-part time greenkeepers, together with an artisan worker. "When it comes to seed selection, we have to find cultivars that will suit our site and predominately choose hard, strong and slender creeping fescues."

"Our fairways have a track-record for struggling from insect damage and the stresses of longer, hotter

Other brands cannot compare with the high germination rate, purity and overall results we achieve with Johnsons. We get consistent, strong and healthy grass, even in our high traffic areas, and our greens simply speak for themselves!"



summers so I discussed options with my DLF Technical Manager Ian Barnett, who suggested a mixture based around Johnsons J Fescue with the inclusion of additional Hard fescue to suit our situation."

A 100% fine fescue blend. J Fescue incorporates top-rated cultivars to provide a high drought and salt tolerant mixture for a sustainable sward that requires lower inputs of water and fertiliser. The inclusion of Hard fescue - known for its tolerance to a broad range of turf stresses - has resulted in a mix delivering outstanding resilience and recovery. J Fescue forms part of a comprehensive line-up of fine turf fairway mixtures including J Premier Fairway - incorporating 10% Hard fescue and 10% Sheeps fescue - and a new mixture for 2024, J Sustain Fairway, specially formulated with 40% Hard fescue to deliver a high-performance, sustainable surface with a foundation of natural strength.

"Our fairways look remarkable and are showing incredible improvements in sustainable management." He explains, "Other brands cannot compare with the high germination rate, purity and overall results we achieve with Johnsons. We get consistent, strong and healthy grass, even in our high traffic areas, and our greens simply speak for themselves!"

With enhanced diversity of both cultivars and species within the sward, Stuart is well-placed to overcome the challenges of the new season. "Not only has our overall quality improved, but we're building up increased resilience to the range of stresses we now have to overcome from the climate and ongoing reduction in chemistry at our disposal." He concludes, "I'd recommend Johnsons as the first choice on any budget."

www.johnsonssportsseed.co.uk



Innovative, inclusive design planned for new nine holes at Pirkkala club

Finnish club with huge junior programme plans expansion to support growth

olf Pirkkala, one of the most successful and dynamic golf clubs in Finland, is to extend its facilities

from eighteen to 27 holes, and has hired a team led by Tim Lobb of Lobb + Partners to design the new course. Lobb has assembled a team for the project comprising Minnesota-based golf course architect Kari Haug, plus already appointed Kai Hulkkonen and Jim Ferguson of development and project management consultancy Turnkey Golf.

Pirkkala is located some ten miles south-west of Tampere, Finland's second city. The club was founded in 2007, and is wildly successful, with a huge membership; most notably, it has Finland's largest junior golf programme, with 500 junior members, of whom 200 are involved in organised coaching. Consequently the club's existing eighteen hole course had become insufficient; it needed to grow.

Kai Hulkkonen has been working with Pirkkala, investigating growth opportunities for some time. With his help, and with the participation of the local municipality, the club has acquired some 30 hectares (75 acres) of new land bordering the existing property. During the design competition for the appointment, Tim Lobb was mindful of the club's nature, with large female and junior memberships, and saw the opportunity to collaborate on the job with Kari Haug, who specialises in designing courses with the maximum amount of playability for golfers of all abilities.

"Kari and I have talked about working together for a long time," says Lobb. "We met at European Institute of Golf Course Architects (EIGCA) meetings, and built a close relationship at EIGCA board meetings when I became the institute's president. I quickly realised that this was the perfect project for us to partner on, and asked her if she was interested - which, thankfully, she was."

"The tender documents made specific mention of the needs of the club's junior and senior membership," says Haug. "But in our response, we went much further we said we wanted to focus on all the golfers who don't hit it far to make sure their game is as much fun. The course has to be open and inclusive for all the different body types who are going to play the golf course, so we will install forward tees to give everyone a choice of length to play. We will include rest stops along the way where needed, which is very important at Pirkkala, because the terrain is hilly and the average age of members is 59 - and a lot of them are finding it harder to walk the course. We are extending the golfing life at both ends: we see golf as a lifetime sport. I call my approach 'Playable Pathways^{TM'}; the way we lay out our forward tees ensures that each tee has a suitable landing area. We also ensure that the ground game is playable and hazards encountered are surmountable if in the pathway to the green. We also want an accessible green for the incoming shot of the slower swingspeed player. Not every woman or senior plays the game the same way, so we need more than one forward tee to make it as playable as possible. There must be a pathway from the tee to the green, but the hole's strategy might not be the same from each tee."



From left to right, Kari Haug, Tim Lobb, Mika Viitaharju (Pirkkala chairman) and Markus Junni (Pirkkala general manager) formalising the design appointment for the future expansion of Pirkkala Golf Club in Finland.

Jim Ferguson of Turnkey will serve as project manager for the build. "The site is quite tricky, because it is hilly, rocky and in some areas forested," he says. "We are hoping to sandcap certain areas, but we are going to have to use the native soil, and we don't yet have a clear idea of what it is like - except that it is pretty rocky. For the forest holes, the clearing is not going to be straightforward in timing because of the nesting period for the native birds. We have to stop clearing trees in the spring to allow the birds to nest. But it is a very exciting

project - the club is being extremely proactive in the actions it is taking to secure its future. I have never seen a junior section like this one!"

Club general manager Markus Junni says: "For us this is a vital project to make the club sustainable in the long term - we have a very large membership with a huge demand for golf - and we look forward to seeing what the team - which we believe is an outstanding one - comes up with. We hope to break ground this summer."

www.lobbandpartners.com

Pure Dynasty plays key role at Cabot Saint Lucia

Seeded paspalum is used to grass entirety of massively dramatic Coore & Crenshaw Caribbean course

ne of the most dramatic golf courses ever built has had its long-awaited grand opening on the Caribbean island of Saint Lucia, and Pure Dynasty seeded seashore paspalum, developed by Pure-Seed Testing, Inc. and supplied by Atlas Turf International and Pure Seed, has been used to grass the entire course.

The Point Hardy Golf Club at the Cabot Saint Lucia project was designed by Coore & Crenshaw and is wrapped around the rocky coastline, featuring an amazing sequence of clifftop oceanside holes. However, building the Point Hardy course was a massive challenge, even for Coore & Crenshaw's hot-shot team. The Covid-19 pandemic hit the world just after construction started, meaning that lead shaper Keith Rhebb remained on the island for more than 250 days, for most of that time working alone on the course.

The rocky nature of the site necessitated capping, but shipping sand to the island would have been prohibitively expensive, so the playing surfaces were formed from a volcanic pumice sand sourced from the island. Unfortunately, this sand had poor drainage characteristics so both carefully planned surface drainage and the right grass choice were essential. Along with superintendent Damon Di Giorgio, who had managed the grass previously at Playa Grande



Photos: Jacob Sjöman

in the Dominican Republic, Coore & Crenshaw eventually selected Pure Dynasty, the world's only seeded seashore paspalum currently on the market. Pure Dynasty has been used on many important courses around the world, including Marco Simone in Italy, the venue of the 2023 Ryder Cup, as well as

regular professional tour hosts Royal Greens in Saudi Arabia, Mont Choisy and La Réserve in Mauritius. Just a few hundred miles away across the Caribbean Sea, the iconic Casa de Campo course in the Dominican Republic is currently being renovated using Pure Dynasty.



Pure Dynasty is the result of 25-plus years of plant breeding and testing work to produce a blend of varieties that provide improved disease resistance and overall turf performance.

"Paspalum was a natural choice here because of the course's proximity to the sea, the salt spray and the natural buildup of salts in the soil," says Coore.

"Atlas Turf and Pure Seed are proud to have Pure Dynasty featured on this phenomenal golf course," says Atlas Turf president John Holmes. "Where else could the extreme salt tolerance, resistance to heat and disease, and versatile playability of one turfgrass be challenged so magnificently?" Pure Seed president Crystal Rose-Fricker says: "Pure Dynasty is the result of 25-plus years of plant breeding and testing work to produce a blend of varieties that provide improved disease resistance and overall turf performance."

The fact that Pure Dynasty is the only seashore paspalum strain available as a seeded product was also crucial, as Saint Lucia prohibits the importation of vegetative material, making sprigging or sodding impossible. Importantly, the entire course, including the greens, uses the same grass, a decision which Di Giorgio says is working out well and reduces maintenance costs. "Ben Crenshaw, one of the greatest putters ever to play, told me the greens were rolling well, which was a nice compliment."





Redexim Top-Brush proves transformational for the team at Malton & Norton Golf Club

nitially purchased to overcome conditions described as a 'worm cast factory', a Redexim Top-Brush is proving to be a true multi-tasker for the team at Malton & Norton Golf Club. Head Greenkeeper Richard Jacques admits that prior to the purchase, the club underestimated how fundamental the 6m wide brush would become to the maintenance, with it successfully removing organic matter, improving cut quality and boosting presentation in twice weekly passes around the 27-hole complex.

Malton & Norton opened its doors

in 1910 and its popularity with golfers in Yorkshire and further afield has seen the expansion of the site, to 27-holes of parkland play. "Like most venues, the restrictions on chemicals left us trialling all types of brushes and mats to overcome our worm problem and we didn't find anything that really worked until we demonstrated the Redexim Top-Brush" explains Richard. "It was evident from the get-go that, used in the right conditions and at the right time, the Top-Brush could effectively remove worm casts better than any of the alternatives we'd tried so we decided to purchase one through

Ripon Ground Care in October 2022"

"We had no idea until we had it in the shed, how many uses we would find for the Top-Brush around the maintenance calendar. On top of dispersing worm casts, its out twice a week between March and October to stand the plant up on the fairways, improving the quality of cut and enhancing definition. There aren't many pieces of equipment you get that can transform turf density and quality as much as this one has in such a short period of time."

At 6m wide, the Top-Brush is a highly productive maintenance solution. As well as changing brush direction, working depth can also be adjusted, making it a versatile tool for a light surface brush - suitable for clearing dew, incorporating topdressing material or removing clippings - or a deeper, more aggressive surface agitation to effectively rid large areas of organic matter.

"Having used the Top-Brush for over a year, we're now in a position of managing worm casts preventatively - by reducing OM and improving density - resulting in fewer instances, which is a big positive." Richard continues, "That's on top of hugely elevating the turf quality and appearance, not just on fairways but also approaches and semi-rough which is giving us a better product in the summer and one that's more resilient to host play going into the winter months."

TOP BRUSH BODD

www.redexim.com

The trailer mounted hose reel from Dryspell Irrigation Solutions Ltd is a fantastic solution for hand watering applications, specifically covering large areas.



Are you tired of dragging hoses around to hand water? Then save yourself time and effort with this fantastic trailer mounted hose reel.



- Easily attaches to most off-road vehicles or carts - 50mm ball hitch.
- Reel accommodates up to 100m of 1" hose.
- Makes spot watering easier, quicker and more convenient.
- Ideal for field use such as turf care and wash down applications at golf courses, athletic fields, sports pitches, parks, nurseries and agriculture.
- Comes with a 24-litre storage box Ideal for storing wetting agent applicators and nozzles
- Complete with 100m of 19mm Irriflex-GLX hose and hose fittings.

Price - £1479.00 + VAT 01789 721623 | sales@dryspellirrigation.co.uk www.dryspellirrigation.co.uk

The Landscape-Pro+ hose

Introducing the new Landscape-Pro+ hose from Kink Resistant Hose Company, available now throughout the UK at extremely competitive pricing.



New 15mm (5/8") diameter available to improve flow rates and decrease pressure losses in commercial irrigation applications - where 12.5mm (1/2") is still most commonly used



- · Landscape-Pro+ is a 5-layer professional irrigation hose
- Advanced KMM (Kink Mitigation Manufacturing) process to create a knot free, kink resistant, flexible PVC hose
- · Knitted and spiral reinforcement layers.
- · Anti-Algae, UV Resistant and Phthalate free
- · Available in 12.5mm, 15mm, 19mm and 25mm diameters
- Contact us to hear about our exceptional pricing

Phone: 01789 721684 Email: info@kinkresistanthose.co.uk

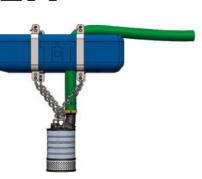






EFFICIENT LAKE EXTRACTION WITH T-T PONTOON SYSTEM

The Pontoon has been engineered to be a versatile and compact floatation device for de-watering, utilising submersible or engine-driven pumps. Constructed in Marine grade, foam-filled polyethylene complete with UV15 protection, with 304 stainless steel straps and fittings to maximise durability. Scan the QR code or contact our experts to learn more.





ttpumps.com

pumpsales@ttpumps.com

+44 (0) 1630 647200

Hydrotrench Drainage System



ydrotrench provides a targeted and modular drainage panel system that will permanently transform how you

solve drainage for gardens, patio / paving and driveway edges.

Hydrotrench drainage systems are a superior alternative to other traditional drainage methods, in addition they can be used to:

- Release surface water down into existing systems that are failed or failing due to compaction above.
- Repair and patch around collapsed / broken areas of pipe drainage.
- Act as a slit to control layer to dramatically reduce maintenance and lifecycle costs.

Hydrotrench remediation techniques are particularly effective in clay ground or racecourses that suffer from heavy compaction and frequently require costly maintenance and repairs.

Stunning Benefits

- Manufactured in the UK using up to 95% or greater recycled plastic content
- Long-lasting, no compaction, no pipe blockages and no pipe breakages
- · Rapid installation
- Works in any soil type (including clay)
- Primary system and / or rejuvenates failed or damaged drainage systems
- Superior reliability, more efficient and fewer materials than traditional drainage methods

Stunning Results

· Waterlogged home gardens,



patios, paved areas and driveway edges can now be drained more efficiently and with long-lasting effect.

 Silt traps can be replaced by 'stacking panels' laid flat at the end of the run to facilitate outfall connection.

How 'Modular Drainage Panels' Work

 They are installed into the ground and take water away from where you don't want it...to where you do!

- Because they are 'modular' you can piece 'panels' together and cover any size of surface you want.
- Primary system and / or rejuvenates failed or damaged drainage systems
- Each panel works like a 'stent' in the ground, creating a path of least resistance that will not crush or block, even in the most challenging environments.

www.rouden.co.uk



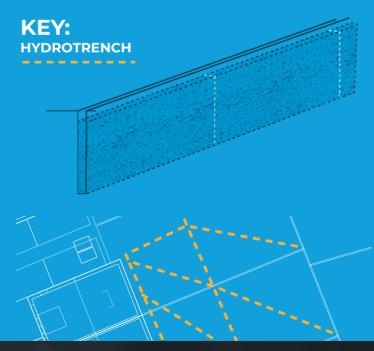
Hydrotrench is a groundbreaking modular drainage Panel system that will transform how you solve garden, patio / paving and driveway edge drainage, once and for all!



- ► MANUFACTURED IN THE UK USING UP TO 90% OR GREATER RECYCLED POLYMERS
- ▶ WORKS IN ANY SOIL TYPE (INCLUDING CLAY) & REJUVENATES FAILED EXISTING SYSTEMS
- ► FASTER, MORE EFFICIENT, LESS LABOUR & MATERIALS THAN FRENCH DRAINS AND SLOT DRAINS







TO FIND OUT MORE ABOUT HYDROTRENCH AND TO ORDER PLEASE CONTACT US:

Email: MAIL@ROUDEN.CO.UK | Tel: PEASE POTTAGE: 01403 275 276 | MAIDSTONE: 01795 843 866 | PETERSFIELD: 01730 777 350

Royal Mid-Surrey 'Take Ten' with Kubota

fleet of five RTV's and five tractors from Kubota are supporting operations across the busy 36-hole complex at Royal Mid-Surrey Golf Club. Some of the vehicles have delivered close to 20 years of reliable service and it's this dependability that's keeps Golf Course Manager, Gavin Kinsella, loyal to the brand for some of their most vital and well-used pieces of equipment.

Founded in 1892, and set on a stretch of royal parkland, Royal Mid-Surrey today comprises of two 18-hole courses - a shorter, more tactical round lays ahead on the Pam Barton course, while the longer, championship JH Taylor course poses a test to players of all abilities, regularly playing host to county and England Golf tournaments. "Keeping on top of condition and delivering the standards that players expect with a team of 20 is a challenge, particularly when you factor in holidays and staff absence" explains Gavin, "but it helps when you can rely on the equipment you have in the shed."

"We purchased our first Kubota RTV and compact tractor based on the great working relationship the club developed with local dealers Lister Wilder. Since then, the outstanding reliability we've had combined with the operator experience and suitability of these vehicles on our site means we've never looked at anything else." He adds, "40% of our land is floodplain which can lay very wet over winter, and these allrounders keep us mobile and never fail to get us and our attachments out on the course even in very inclement weather."





Our loyalty to Kubota is entrenched in our confidence in them.

One of the clubs original RTV-900's, purchased in 2005, remains on the fleet joined by two RTV-X900's and two RTV-X1110's in more recent years. "These vehicles are the first out of the shed every morning and often the last to return. They're our go-to for towing trailers, moving greens machines, and transporting tools and the team around the site for course set up. All the controls on the RTV's are where you want them, and the suspension makes for a smooth and comfortable drive experience."

Alongside RTV's, and proving to be the workhorses for the majority of autumn, winter and spring maintenance and renovations are an L2602, L3830 and L5040 from Kubota's popular L tractor series, a B2710 and a larger, M6060 with loader.

"The versatility we have in our tractor fleet means that no matter the operation or implement required, we can get the job done with efficiency." With the smaller implements catered for by the lower hp compact tractors, the larger L2602 and M6060 will be taking the strain for larger-scale groundworks and heavier machinery, such as the clubs high-capacity vacuum collector.

Gavin concludes, "Our loyalty to Kubota is entrenched in our confidence in them. They're machines we know, machines we trust and over several years have proven to be the most robust and reliable vehicles for our situation."

For more information, visit www.kubota-global.net www.kubota-eu.com







A STROKE OF GENIUS

THINK SMARTER, THINK TORO

Whatever your technology, timescale or budget is, upgrading to the new **Toro Lynx LAC** uniquely connects with your existing irrigation, saving time and money over a complete install, giving you instant state-of-the-art control.

Visit **reesink-hydroscapes.co.uk** and find out if you can upgrade today!

Effective water solutions for all landscapes

Irrigation . Pumps . Water Aeration and More





Craigmillar Park praise Trilo M3 for significant labour savings on year-round maintenance tasks



n M3 Multipurpose from Trilo has been praised by the team at Craigmillar Park Golf Club in Edinburgh for

the labour savings it has brought to the effective management of their eco rough and quick clearance of leaves and debris. The unit, delivered by Sherriff Golf & Turf, arrived just in time for a busy autumn and winter season but Golf Course Manager Stephen Sinclair is delighted to discover the versatility of the M3 will make it a machine for all seasons.

Established in 1895, Craigmillar Park Golf Club is located just two miles from Edinburgh Castle, providing the picture postcard backdrop for the popular parkland course. Like most parkland courses, Stephen and the team of three face the yearly challenge of managing leaf fall, with their previous method of cutting and mulching the material no longer providing a viable solution. After exploring the various options to find a machine fit for task, a demonstration by Jack Lyall of Sherriff's saw the M3 become the firm favourite - with the realisation that the Trilo Wanderhose, in particular, would offer improved course appearance in double quick time!

"From the first day, it has really impressed" explains Stephen. "We took delivery of the M3 in early November and it worked virtually non-stop for a month, removing leaves from all areas around the course – including bunkers where we can simply suck them up with the Wanderhose rather than having to manually blow them out and



then go along and collect them. The members noticed straight away the difference in both presentation and playability."

He continues, "We then saw the potential for using the M3 for cutting down our eco roughs and the results we've had here are outstanding! We have some areas of pretty heavy growth, but the flail shaft took these in its stride and the cleanliness of collection is head and shoulders above anything we've used before."

With the new season fast approaching, thoughts are now turning to how else the Trilo M3 can be utilised. "We have had some pretty wet and wild weather over the last couple of months, so it'll certainly be used to clean up debris and storm damage when conditions

allow. We're also toying with the idea of using it during renovations, to lift hollow cores. Dougie and Jack Lyall from Sherriff's have been brilliant at explaining the various options to us, alongside Jeremy Vincent of Trilo who provided excellent training to get us up and running."

The M3 Multipurpose from the Trilo range of vacuum collectors is a versatile one-pass machine for effective sweeping, scarification or cut and collection. Featuring the handheld Wanderhose, a high working speed and working width of 1.5m, the M3 is a popular compact unit finding year-round applications on sports turf and tasks around the golf course.

For more information visit: www.vanmac.co.uk

Groundsman Industries Ltd

Since 1990, Groundsman Industries have be developing their unique range of grass maintenance machines and accessories for maximum performance and durability.

On display the Turf Multi Cutter range offering excellent cutting ability and traction in all conditions with smooth operation and operator comfort. Two and four wheel drive and rear blade option for consistent sod thickness even on rolling terrane as well accommodating a wide range of blades and attachments. Guillotine and Sod Rolling attachments are now available to chop and roll the sod in pre-set lengths.

Groundsman Tractor Mounting and Pedestrian Aerators all use Groundsman's proven rugged Elliptical Plunge Action mechanism for aeration down to 15cm depth with minimal surface disruption. Quick-change tine-holders switch between Solid, Chisel, Hollow and Cluster Tines for aeration, thatch removal or over-seeding.

The new SpeedPro Tractor mounting range aerate down to 20cm deep at 50m/min without surface disruption making them the ideal hybrid machine for needle tining on greens and for heavy spiking on fairways and out-fields. The Flexblade Collector attachment is available for most aerators as well Groundsman to Core and Collect in one pass or for use independently for Follow-up Collection of Cores or Linear Aeration Soil.

Visit www.groundsmanindustries.com



Introducing the Eco Clipper FM343

Eco Clipper is known for its efficient and quiet electric mowing systems to maintain large lawns. The unique Eco Clipper mowing system allows it to mow the lawn even in less than optimal conditions, such as with wet grass and weeds.

To meet the demand for more lightweight mowers suitable for most park tractors from 40 hp upwards, the Eco Clipper FM343 has been developed. This three-part Eco Clipper front mower cuts 343 cm wide and folds to a transport width of 170 cm. As with the EC-FM4, electricity is provided by a PTO-powered generator behind the tractor.





A well-designed and highly effective leaf and debris clearance machine

S

CAG's Electric rideon – the EVZ is now at the end of it's first season; it is only fair to say that we have

found the same as others that electric machines are still finding their place in the Council and contractor markets for large area and tough usage.

The machine is well set-up with power provided by the Vanguard 48V 5kWh Lithium-lon commercial battery pack. Estimated productivity is up to 5 acres per charge, though this depends entirely on cut height, terrain and conditions.

The required Vanguard 1050W battery charger is included with each mower Estimated charging time: 5 hours = full charge / 3 hours = 80% charge

STM and SCAG still retain an enviable reputation for their pedestrian and ride-on range, with interesting already mounting up for the new season.



Windstorm in use

Elsewhere, leaf and debris clearance is still high on the agenda this time of year, and the STM / SCAG range of equipment has proved as popular as ever – with impressive sales and

interest in the SCAG Windstorm rideon blower. And impressive is the right word to describe the specification of the machine as well: this is a standon unit, placing the operator on a stand at the back with a comfortable knee-pad in front, giving an excellent all-round view for the user. The format is based on the SCAG V-Ride mower but, as opposed to a cutting deck, it has a massive cyclone blower on the front, capable of 6000 cfm output. The power unit is a 37HP Briggs Vanguard engine and the operator drives the machine with twin hand levers to twin rear drive wheels to give zero-turn manoeuverability. Adjustable nozzle direction for the output completes the picture of a well-designed and highly effective leaf and debris clearance machine.



The machines are available through the STM dealership network. To find your nearest dealer ring 01789 488450, email info@st-mach.com or look at our website www.st-mach.com







Debris Clearance Equipment











Pedestrian and Stand-on mowers







Electric and Petrol ride-on plus Remote Control mowers

01789 488450 info@st-mach.com www.st-mach.com



www.st-mach.com



GROUNDCARE

Landscaping for the future





HUSQVARNA PRO RANGE BATTERY SERIES

Offers all the power, performance and intuitive design you expect from Husqvarna

For more information on The Husqvarna Professional Product Range, contact:

Nick Davis - 07500 971106 Lee Mitchell - 07500 787020



Welcome to the post-petrol era

ress is leading the charge with K breakthrough innovation in battery-powered technology, built to deliver the performance and

power of petrol. Committed to ensuring the groundskeeping and landscape maintenance industry a zero-emission future, Kress's unique battery technology makes the transition from petrol to battery-powered outdoor power equipment sustainable, with benefits both for the environment and the users.

Kress has a legacy of excellence and innovation that spans over five decades. This long history of innovation has earned Kress a strong reputation for reliability, quality, and sets industry-leading standards. This legacy speaks to Kress's track record of delivering cutting-edge cordless solutions, without compromising on power.

The Kress range of commercial outdoor power equipment, combined with the remarkable Kress 8-minute CyberSystem batteries, delivers unparalleled power in record time. It's a revolutionary achievement that establishes a groundbreaking standard for commercial equipment, and it is the gateway to transitioning to zero-emission landscaping.

Kress has an innovative range of robotic mowers. The Kress RTKn robot mowers efficiently operate in parallel lines and autonomously move from an area to another as if they were driven by humans, with no need for boundary wires, or on-site aerials. It's like having an extra seasoned

much-anticipated expansion to the commercial range, set to arrive Spring 2024.

greenkeeper on your team. Kress is also gearing up to launch their www.kress.com





Battery tools with no compromise on power or performance

Fast-charging and long-lasting, choose the Kress 60V Commercial Range of outdoor power equipment for new levels of power for all types of landscaping professionals. An impressive line of commercial gardening equipment, with a performance battery platform that stands strong in harsh conditions and delivers unparalleled reliability - all without the high costs and hassles of petrol.





f you need to maintain very steep slopes, grassed banks around lakes or waterways or just difficult to access areas, the Raymo electric remote-control mower is the machine of choice. It has been designed with a low overall height of only 51 cm which together with a low centre of gravity, 4WD, and a zero-turn steering system allows the Raymo to tackle steep slopes, grassed banks and low obstacles with ease.

The operator controls the Raymo via an industrial-grade remote control so benefiting from zero emissions, low-noise and no vibrations. Being able to stand away from the mower and the ground being cut, the operator is kept away from dangerous hazards such as slopes, deep water etc.

Three rotary decks, 42", 52" and 46" Craft are available for the Raymo depending upon the type of grass to be cut and maintained. The 48 Craft deck is a heavy-duty deck for areas that are cut only once a year. Two sickle-blade mowers, either single or dual are ideal for maintaining wildflower or biodiversity areas.

Being able to stand away from the mower and the ground being cut, the operator is kept away from dangerous hazards such as slopes, deep water etc.

A new option just launched is the R14 SFINX swing arm post mower which attaches to the side of the Raymo and allows posts, trees and similar obstacles to cut around. In open areas it increases the cutting width of the Raymo, but will then retract automatically when it encounters a post or tree etc. The R14 SFINX may be fitted to the left or right or both sides of the Raymo.

The Raymo remote control electric mower cuts faster than a strimmer and will solve your health and safety problems when cutting slopes, banks and difficult to access areas.

For a demonstration please contact www.raymoelectric.co.uk



WISEKI





The ISEKI SF range of powerful 22.5-49hp diesel engine mowers enable you to mow your grass whatever the weather keeping the same pristine finish everytime. With a variety of rotary or Muthing flail decks to choose from, the ISEKI SF range really is the ultimate mowing machine. Available as cut and drop with a useful toolbox on the back, or cut and collect, with a turbine driven collection system direct from the deck to the large hopper, available up to 1300L. Designed and manufactured in Japan for quality that's built to last.

Contact your local dealer to book a demo on your premises today!

Contact your Local Dealer to book a demonstration on your site today!















Jacobsen® unveils fully electric mowing solution with PACE Technologies connectivity



n 2024, Jacobsen will become one of the first manufacturers to offer a fully electric golf course mowing service solution. With

the Eclipse 2 ELITE™ walking greens mower, ELITE lithium outfront and AR1 ELITE articulated rotary mower joining the already successful Eclipse 360 ELITE and SLF1 ELITE models.

Jacobsen has scaled up the power requirements for fairway and rough machines using tried and tested Samsung® Lithium SDI technology. By partnering this technology with Jacobsen mowers, turf professionals can cut all day on greens, tees, fairways, or roughs, while always maintaining Jacobsen's famous quality of cut.

Extending the benefits of lithium to the entire course enables golf organizations to reduce their carbon emissions further, but there are also



significant user benefits. With noise and vibration greatly decreased, a day of cutting fairways or rough will have less stress on the operator, bringing increased comfort and productivity.

To enhance the efficiency and productivity of these machines, Jacobsen has added PACE
Technology™, an equipment management and geofencing system that is a screenless web-based solution. PACE can be accessed from any device and features realtime tracking and task management to maximize the effectiveness of your operation. Users can track and



measure the power output per hole of the machines to maximize their performance and develop a bespoke picture of how they work on the course.

Testing these innovations and their capabilities has been a big consideration. Jacobsen, Cushman®, and PACE have collaborated with 26 courses across three continents in 2023, including Sage Valley Golf Club, South Carolina, Loch Lomond Golf Club, Scotland, and Peninsula Kingswood in Australia.

For more information visit: www.jacobsen.com







COMPACT DESIGN FOR MORE MANEUVERABILITY



18V BATTERIES
FOR OUTSTANDING
POWER & PERFORMANCE

ADJUSTABLE SELF-PROPELLED MECHANISM WITH





Cloud based software helps improve efficiency and safety

Understanding how resources are used so that you can control them is vital to the success of any turf based facility. The easy to use Ground2Control platform saves man hours recording legally required information and the at a glance analysis



helps you make better decisions, improve efficiency and profitability.

In focus: the real cost tracking available in the Resource Management Module of Ground2Control

First in first out' is one of hundreds of features. Within the Money Manager section, you can see a true picture of the costs of all products in use. For example, if a treatment used 150kg of fertiliser and you bought 100kg of fertiliser at £10 per kilo, then another 50kg of fertiliser at £15 per kilo at a different time, by simply logging purchases (and recording receipt of goods) Ground2Control calculates the true costs. This includes people resource costs associated to tasks too. This means you can export information to your accounting system with no discrepancies. Our goal at Ground2Control is always to give you swift calculations that you can feel confident about. For a demo email Co-Founder

jane.ratcliffe@ground2control.com





Wiedenmann double all in a day's work at historic Adare Manor Old Course

his summer, Brian
Dunne, celebrates
20 years as Course
Superintendent at
Adare Manor Old

Course GC in the southwest of Ireland.

He has built a long-established relationship with local Wiedenmann dealer Seamus Weldon, at nearby Killarney.

"We go back years; they've always been there for us," he said. "When we purchased a new blower back in 2008, Michael Weldon pointed us in the direction of a Wiedenmann Whisper Twister. It was new to the market, and we were among the first to buy.

"You can't fault it. We'd be lost without it.

"From October to December, it's out every day on leaf clearance duty. Our course is lined with beech and oak trees so there's plenty of work. One of the team on our small tractor blows the leaves into lines and our collector follows behind. It has dozens of tasks; drying off tee boxes, presentation, tidying and, when we've had storms, it's come into its own."

"We used to bring contractors in to help with deep aeration on our fairways. It was always a struggle to book the right week: and balance weather and the needs of golfers. It was also getting very expensive.

"I asked Michael if he could source a second-hand aerator so we could do the job ourselves. He came back with a beautifully refurbished Wiedenmann Terra Spike XP, and we haven't looked back.





I asked Michael if he could source a second-hand aerator so we could do the job ourselves. He came back with a beautifully refurbished Wiedenmann Terra Spike XP, and we haven't looked back.

"Your own machine makes such a difference. We try to do our fairways twice a year. We just pick when the conditions are right and do two or three at a time. We've got twelve acres in total, as well as walkways and tee boxes, so it takes us around a week and a half normally to do all the split sessions.

Brian's team, three at present, with a vacancy about to be filled, takes on



two summer workers to help them cope. The friendly parkland club is constantly busy, its history and dramatic setting, marking it out as not your typical golfing experience, so enjoys lots of visitors.

Very few clubs can boast anything as spectacular as Desmond Castle (1200 AD) which nestles in the background of the 1st and 15th greens or the ruins of the Franciscan Abbey (1464 AD) in the centre of the course.

www.wiedenmann.co.uk

Calderdale Council keeps line marking on track with Turf Tank

esource management,
time and consistency were
all factors that needed
tackling at Calderdale Council, and
the Turf Tank One has addressed
them all

Senior Technical Officer Samantha Ward had retirements in her line marking team, which meant losing over 60 years of experience. Temporarily, Samantha utilised members of the gardening group to mark out the running tracks and football, rugby and rounders pitches needed in the borough, but she was always looking for a solution.

"I thought there must be a better way to utilise resources that didn't involve additional recruitment and the time it takes to provide full training," Samantha explained.

"Our line marking team were impressed by the time that Turf Tank would save and the way you could plot the pitches. We knew from there that our gardeners could focus more on their



traditional jobs whilst people like me who are technically minded could work with the Turf Tank robot."

Redistributing resources had an immediate positive impact on the team, with timesaving and line accuracy next in line. Savile Park is one of the Council's busiest pitches, with athletics, football and rounders all hosted at the site. Previously it took staff an entire day to line a 400m running track,

whereas now it takes less than two hours.

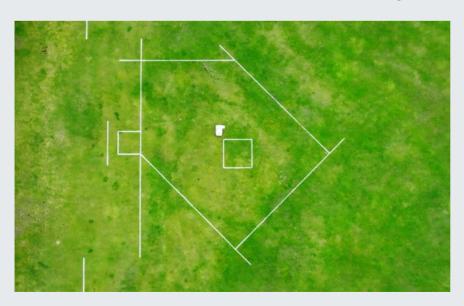
"Savile Park, is a multiple-game site, and it's much easier to mark out now. Once we set a template on the Turf Tank, we can pretty much set up each sport, football, running tracks, rugby, and rounders, and let it go.

"Every time it goes out, it's in the right space, and it's accurate.

"Our time is precious, and the running track we've marked out today now takes just under two hours with one person and the Turf Tank, so we have pretty much smashed the time in terms of the full day. Because of that, the Turf Tank has recovered a lot of time for our staff to do other things on the sports pitches and around the borough.

"We have also saved time with initial marking of football pitches, probably a week and a half every time we mark out, which is invaluable time."

For more information visit www.turftank.com





A biological product to degrade thatch throughout the season with minimal disruption

Applied in Spring, ThatchEater biologically breaks down thatch throughout the season, converting the thatch to humus. The resulting humus, humic and fulvic acids, promote sustainable growth and the frequency of aggressive cultural techniques is reduced, minimising disruption.

- Degrades thatch and mineralises organic matter
- · Releases nutrients for sward development
- Reduces the requirements for aggressive thatch removing aeration
- · Improves surface infiltration and reduces black layer



Orders and enquiries: 0800 138 7222 sales@originamenity.com www.originamenity.com



Scan this QR code to download a copy of the OAS Beneficial Biology brochure

OAS explains how to reduce Thatch for a truer, firmer, and consistent playing surface

ne of the most common challenges for groundskeepers is the negative impact a build-up of thatch has on surface performance.

Microbes play a crucial role in turf maintenance, and their activity can have a significant impact on the health and quality of playing surfaces. In this article, Polly Gearing from the microbial arm of Origin Amenity Solutions explains the impact of microbial activity and how it affects turf health including the breakdown of thatch.

Decomposition of Organic Material saves Money

Excessive thatch build-up is a major barrier to achieving true, firm, and consistent putting surfaces. Microbes, in particular beneficial bacteria and fungi are responsible for the decomposition of dead and decaying organic matter such as





Wath GC before Thatcheater

thatch. This decomposition process breaks down organic material into simpler compounds to release nutrients essential for plant growth. Without microbial activity, turf would experience nutrient deficiencies and organic material would build up, leading to the development of thatch.

Nutrient Cycling

Microbes are instrumental in nutrient cycling within the soil. They convert complex organic compounds into simple forms that plants can readily absorb. By cycling nutrients, microbes help to maintain a healthy nutrient balance in the soil, supporting vigorous and healthy growth.

Improving plant tolerance to stress

Certain beneficial microbes help to suppress the growth of harmful turf pathogens. These microbes compete with pathogenic organisms



Wath GC after Thatcheater

for resources, produce antimicrobial compounds, and stimulate the plant's immune response, thereby reducing the likelihood of disease outbreaks. Incorporating these beneficial microbes into turf management practices can promote more sustainable disease management strategies.

Soil Structure and Aeration

Microbes play a vital role in aiding air and water movement within the soil profile. Some microbes such as bacteria and mycorrhizal fungi, produce substances that function as binding agents, helping to aggregate soil particles and create larger pore spaces. This improves soil drainage, aeration, and root penetration, which contribute to healthier turf growth.

Plant Growth Promotion

Certain microbial species promote plant growth by producing hormones which stimulate root





"After an in-depth look under the surface, high levels of thatch were the obvious reason for poor turf health. I was keen to get the biology doing its thing! After our first season of using ThatchEater and Compost Teas, the difference was amazing. We went from high levels of tight thatch to a reduced amount, with it being a lot easier to pull apart and less dense. The condition of our greens improved and the surfaces already looked better health-wise. We continued using ThatchEater in the second year and again with visible results and improved turf health".

Mark Hudson, Wath Golf Club

development and increase nutrient uptake. Microbes can solubilise minerals making them more available to plants. These microbes contribute to enhanced turf vigour, increased sward density, and improved stress tolerance.

Reduce Disruption

Working with soil biology can reduce physical practices. While aeration is an essential part of sports turf maintenance, with the microbes hard at work in the soil decomposing thatch, disruption on the surface in the form of more onerous, expensive, and disruptive maintenance can be decreased.

OAS ThatchEater is a proven solution to reduce thatch build-up and improve overall turf health. It utilises a carefully selected blend of beneficial soil fungi and

bacteria known for their ability to rapidly degrade thatch and organic material into humus, a valuable soil component. ThatchEater uses Biofixation technology. This unique process is used to enhance the metabolism of beneficial microorganisms and protect them from UV light and chemicals.

OAS ThatchEater aids in the promotion of root growth, leading to increased nutrient and water uptake - crucial for the health and sustainability of sports turf. Stronger and deeper root systems result in better overall sward density, contributing to a more aesthetically pleasing and durable playing surface. It releases food for fungi which promotes the growth of desirable fine grasses and leads to high-quality playing surfaces. Additionally, the conversion of thatch to humus through microbial activity helps to release locked-up nutrients into the soil.

> For further advice call 0800 137 7222 or email sales@originamenity.com

GROUNDSKEEPING



The UK's latest bi-monthly publication providing latest product innovations, industry news and opinions from key professionals within the industry.

With focuses on Aeration, Irrigation & Drainage; Greenskeeping; Latest News; Machinery;
Pitch & Line Marking; Specialist Mowers; Sports Ground Equipment; Sports Pitches; Top Dressing;
Sprayers & Spraying and Turf Management.

FREE DIGITAL MAGAZINE SUBSCRIPTION

Subscription enquiries: Call 01304 806039 Email: info@mhmagazine.co.uk

Advertising enquiries:

Lee Martin – 01227 936974

Email: lee@groundskeepingjournal.co.uk

Editorial submissions or enquiries: Antony Holter – 01304 806039 Email: antony@mhmagazine.co.uk



SUBSCRIBE TODAY!