

for the Future

Page 3

at the RAC

Page 4

trials look great

Page 8

bees and players

Page 9

US turf show

Page 10



Unlocking Golf's True Potential

Golf already makes a hugely significant economic, social and environmental contribution. However, there is undoubtedly opportunity to do more in all areas.

Unlocking Golf's True Potential is about providing greenkeepres and golf clubs with the tools, initiatives and inspiration to encourage more people to play the game – and to develop golf businesses that are fully sustainable in every aspect for the long-term.

It is vital – and relevant – for all greenkeepers, since their livelihood depends on a healthy golf industry.

Furthermore, the greenkeeper clearly has a pivotal role within the club, in successfully delivering in many of these areas.

There are three key areas to Unlocking Golf's True Potential: Playability; Productivity and Sustainability. Each aspect can work independently to improve performance, but when allied together create an exciting opportunity for all those involved in the industry.



PLAYABILITY

Playability of the golf course is the primary reason most players turn up and pay – and it's the greenkeepers skills, using all the tools available to them, that keeps players coming back. Providing new tools, and continued R&D to get the best from them, is essential to enhance turf quality and playability.

Syngenta example initiatives to drive Playability:

- New more effective fungicides to prevent scarring and poor ball roll
- Primo Maxx programmes to improve turf quality and playability
- Qualibra programmes to prevent dry patch and keep greens firm and true
- Rescue opening up rough and removing coarse grasses
- R&D investment in products and turf management to consistently get better

PRODUCTIVITY

Improving **Productivity** is about delivering the enhanced playability efficiently and economically, along with initiatives to generate extra income for the club. Syngenta instigated much of the initial research that identified opportunities to increase player participation, especially among women and children – including funding the development of love.golf. Greenkeepers' knowledge and experience also has an important role, through ensuring best value for money from every action and the ability to adapt the course to the needs of the club.

Syngenta example initiatives to drive Productivity:

- Primo Maxx lowering cost of turf management
- GreenCast to optimise product use and timing
- Greencast Turf App improving record keeping
- Turf Science Live delivering education and ideas
- Market research and initiatives to help grow the game including love.golf

SUSTAINABILITY

Assuring **Sustainability** seeks to enhance the ecological value of the golf course in all areas – including proactively managing out of play environmental resources – as well as minimising the impact of all turf management activities. But it is also about making a course that is economically sustainable and has a long-term future for the industry, for players and for greenkeepers.

Syngenta example initiatives to drive Sustainability:

- Operation Pollinator biodiversity initiative
- Syngenta XC Nozzles to reduce drift and improve performance
- Qualibra improvement in water use efficiency
- New R&D fungicides with improved profile
- love.golf increasing player numbers

Look out for the new expanded **Unlocking Golf's True Potential** logo on Syngenta communications, to highlight how initiatives are helping greenkeepers and the golf industry to consistently get better.





The unique approach and training modules designed for Love.golf is available for all clubs and golf professionals. Greenkeepers can help their clubs to get involved and encourage more people to play the game – visit www.love.golf







BTME Invitation

Make sure you come and see how Syngenta is investing in the future – on stand B52 at BTME – Harrogate, 17 - 19 January 2017

Look into an exciting future for developments that are continuously getting better.

NEW - PRIMO MAXX II - assuring the future for the world's leading turf growth regulator

NEW – fungicide active ingredients for turf – coming soon, and further into the future

NEW – GreenCast website for turf agronomy information

NEW – initiatives that are successfully growing participation in golf

WIN - the chance for a free trip to Switzerland to tour Syngenta turf research facilities and local sports venues



Winners of last year's Syngenta BTME stand Driving Range Challenges enjoyed a fantastic trip to Castle Stuart in Scotland, to play the course of the Scottish Open. Led by Syngenta Business Manager, Danial Lightfoot, they got to play the incredible course, and were also treated to an enlightening course walk led by Course Manager, Chris Haspell to learn from his tips and advice. Our thanks to Chris and all the team at Castle Stuart for their hospitality.



The winners and hosts were, left to right, Jamie Lees & Phil Collinson (ICL); James martin (Blackmore GC); Chris Haspell (Castle Stuart); Stuart Gillett (Golf @ Goodwood); Aaron Watkinson (Bolton Old Links GC); Tom Flavelle (Cosby GC); Kyle Cleaver (The Belfry) and David Jones (Turf Care).

MEASURED SUCCESS

Since taking over as Course Manager on the two courses at the Surrey country-club home of The Royal Automobile Club (RAC), Woodcote Park near Epsom, Lee Strutt, MG, has instigated a plan to measure and record the effects of turf management actions.



Science based measurements will prove performance

The intention is to build a database of information that can help evaluate what has worked effectively and, crucially, how that can help make better decisions in the future.

"Every other aspect of the RAC business is constantly measured and evaluated against performance targets, and there's no real reason why course management should be any different," believes Lee.

Some of the headline business performance measures for the courses include recording rounds played, society golf day fees and extensive player satisfaction evaluation. "But on turf quality and course management there were no real benchmarks to set ourselves against, or to see how we could incrementally improve year-on-year.

"Clearly turf quality and playability are inextricably linked to player satisfaction; fundamentally they come to play golf and it's the condition of the course that will have the greatest impact," he added.

"Ultimately our actions have a huge influence on the financial performance of the club." And that's where measuring and recording elements of turf performance, such as speed, trueness, firmness, moisture, for example, has also given Lee an insight into the factors that influence playability, and the impact his actions as Course Manager are having on both turf quality and player satisfaction.

PERFORMANCE INDICATORS

In setting up a comprehensive and routine measuring and recording programme across the Old Course and the Coronation Course performance, he now believes they have established a set of key performance indicators with graded criteria and scores that, if progressed and enhanced, will work for both improved playability for members, and better decision making for the greenkeeping team.

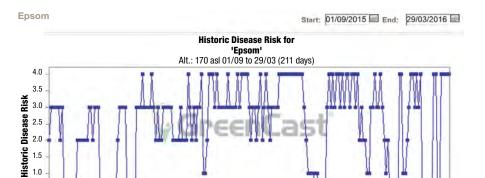
"Recording regularly over the full season will evaluate the impacts on the far wider aspects of turf agronomy and management. It will also give us a direct comparison under our own conditions."

OBJECTIVE EVALUATION

Measuring results will also be integral to evaluating a new long-term fungicide strategy being implemented by Lee, in a trial with Syngenta's UK Turf Business Manager, Daniel Lightfoot. Historically, the Club's approach has, like many traditional courses, been to wait until disease had been seen affecting the greens, and then reacting to tackle the specific problems.

This season, however, Lee is adopting a strategic preventative approach on the Old Course, which can be directly compared maintaining to the historical reactive techniques on the Coronation Course. Throughout the programme, the effects will be measured and





DateCopyright © Syngenta Agronomic Information Services

Jan '16

--- Fusarium Patch High Risk 2015/2016

Sept '15

1.0 0.5 0.0





Feb



recorded using a range of tools to assess surface playability and turf plant health.

Daniel Lightfoot pointed out that setting up the risk-based preventative strategy has included a comprehensive review of historic disease data from the GreenCast website, coupled with local knowledge of the courses, to identify where and when infection has hit in the past.

Together he and Lee have appropriate targeted treatments with risk assessment, based on weather conditions, grass species, nutrition, irrigation, historic disease records and other turf management influences. It will also use the GreenCast web disease forecasting system to identify risk and tailor application timing accordingly.

The winter 2016/17 programme for the Old Course is planned to include treatments using an initial Headway, whilst turf is still actively growing, followed by Instrata in late autumn for additional curative activity. The contact-Medallion TL will target cleaning up disease pathogens in the thatch and for long lasting protection when conditions cool down. Lee will also have the opportunity to try a new development Syngenta fungicide in the programme when conditions are appropriate.

"The advantage of being able to truly record the effects is, in the future, we can further refine application needs and timing to what we know works."

This year, for the first time, Lee will also be taking readings of turf health using a hand-held NDVI meter – which can demonstrate plants' responses to nutrition, irrigation, disease infection or any number of stresses. Adopting new technology to increase the database of information will further aid the evaluation of treatments.

CONTINUOUS IMPROVEMENT

Daniel Lightfoot added: "The eventual aim is to build the fungicide treatments into Lee's ITM programme. The approach fits the Syngenta philosophy of 'as little as possible; as much as necessary', which will assure any clubs' turf can be maintained at a standard that it considers appropriate.

"At the heart of continuously getting better with everything we do is being able to objectivity evaluate what has been done, and how that can help to do it better in the future. Lee is at the forefront of this approach."



Visit the GreenCast website to follow the full story of Lee's trial – and seasonal updates on the results.







Lee Strutt and Daniel Lightfoot will be presenting a BTME Continue to Learn seminar on the use of turf measuring tools to develop a proactive fungicide strategy at RAC – on Wednesday 18th January at Harrogate. Register now on the BTME website to reserve your place

Rewards for Turf Health

Greenkeepers and turf managers have the chance to get ahead of damaging disease this winter, with the new Ultimate ITM Program.



Use a proactive ITM Program to protect winter turf quality, advocates Marcela Munoz. STRI trials have proven it works.

This proactive approach to continuously improve turf quality combines the best turf protection and nutritional products to maintain turf health and playing quality.

Developed by Syngenta and ICL turf technical specialists, the Ultimate ITM Program utilises the optimum fungicides for specific seasonal challenges, in conjunction with appropriate nutritional inputs to promote healthy turf and deliver an effective Integrated Turf Management (ITM) strategy.

Marcela Munoz, Syngenta Turf Technical Manager, highlighted the Ultimate ITM Program has been designed to work alongside agronomy practices and skills and flexibility that can be suited to different course requirements.

"It is impossible and irresponsible to be too regimented and prescriptive by dictating fixed recommendations or timing," she advised. "It is essential for greenkeepers and agronomists to use their experience and local knowledge to select the most appropriate option for their specific course at any given time."

Marcela warned to remain alert to risk periods. As grass growth slows in the high-risk conditions, problems with Microdochium Patch (Fusarium) outbreaks are set to increase.

"As the nights get colder and soil temperatures cool, slower growth means any damage affecting playing surface quality occurring now could last right through to the spring." She added that GreenCast website is a valuable tool to help identify disease risk periods and optimise fungicide application timing to prevent infection and protect playing surface quality.

PROVEN WINTER PERFORMANCE

STRI trials at Bingley in Yorkshire over the winter 2015/16 clearly demonstrated the high level of effectiveness of well-timed fungicide treatments to control Microdochium Patch.

First applied in late autumn, just a few days ahead of infection causing visible damage to the turf (spots covering >2% of the surface), Medallion TL treated plots had zero infection a month later. Over the same period, infection on untreated plots had escalated to 14% of the surface area – which would have been having serious effects on playability and players' comments of turf quality.

With a three spray programme, at 28 day intervals, Medallion TL plots still had zero infection at the end of January – over 50 days since the third and final application. Untreated plots had reached 16% infection over the course of the winter.

"With the turf protected the initial infection cleared up, and then stayed clean right through the winter," commented Marcela.

"It further reinforced the advice to use fungicides preventatively at the very first signs of disease, and to maintain protection through risk periods over the winter," she said. "The early start is crucial to help greenkeepers to prevent damage that could affect playing quality right through to the spring."

Each stage of the Ultimate ITM Program carries extra bonus Turf Reward points, which are available whether turf managers buy one, two or all three components of the Program. For more information visit www.turfrewards.com



Over 150 of Ireland's leading turf superintendents, groundsmen, agronomists and turf industry professionals attended the annual Turf Science Live event, held at the prestigious Carton House Golf Course, and home of Golf Ireland, at Maynooth, 30km west of Dublin.



It was the biggest ever one-day Turf Science Live event - organised by ICL and Syngenta, in association with Campey Turf Care Systems and Toro - and provided turf managers in Ireland with a unique on-course format to see and discuss the latest agronomy and practical techniques.

Colman Warde, ICL Country Manager for Ireland, reported topics were selected to directly redress the increasing challenges of difficult weather conditions and budgetary constraints facing turf managers in Ireland, and help with the aim to enhance long-term turf quality and consistent playability on all sports surfaces.

Formulation scientist, Colm Crean, from Syngenta's UK International Research Station, provided a fascinating insight into just how a high quality product is developed. He demonstrated the hugely complicated steps to make fungicide that work consistently and reliably under extreme weather conditions, along with the application techniques to help get the best from every application.

ICL Technical Manager, Henry Bechelet, outlined a series of research trial results and on-course experiences that demonstrated how an Integrated Turf Management approach of ICL speciality fertiliser nutrition, used in conjunction with proactive Syngenta fungicide applications, could effectively create stronger, healthier turf and better levels of disease control.

"The research has clearly shown that better targeting of each individual component of the ITM programme, at the most appropriate timing, can deliver better results for consistent turf quality, and help to make the most cost effective decisions for each agronomy input."

Continuing the theme of integrating turf management agronomy, Daniel Lightfoot of Syngenta and Tom Wood of STRI showed how the use of Qualibra wetting agent could help better manage issues around high rainfall seen in Ireland this year. The work had also shown welcomed techniques to improve the germination and establishment of new seedlings, which could enable faster recovery of better playing surfaces for both golf and sports pitches.

"Golf courses in Ireland have an enviable reputation, but players' expectations for turf quality is getting ever higher," pointed out Colman Warde. "Turf Science Live has shown some new ideas to help turf managers meet current challenges more effectively."

All the companies at TSL would like to extend our thanks to John Plummer, Resort Superintendent and Mark Farragher, Head Greenkeeper, along with all the team at Carton House, in providing the exceptional facilities for such a successful Turf Science Live.

Fairway Health

East Berkshire Golf Club Course Manager, Matt Nutter, has been trialling a Qualibra wetting agent programme on his fairways over the summer. The intention was two-fold; firstly to maintain colour and visual appearance, and, potentially more importantly, to enhance turf health and strength going into the winter.



"As a heathland course, and without the benefit of irrigation on the fairways, we have always tended to burn-up in the summer," reported Matt. "That's characteristic for the course type and, for some golfers, perfectly acceptable. But when other local clubs remain green, and televised tournaments look vibrant, increasingly there are comments and demands for year-round colour on the fairways."

From an agronomic perspective, Matt also highlighted the challenge of getting burnt-up fairways to recover from summer stress that leaves plants more susceptible to damage from frosts, disease and winter play - resulting in the need for more expensive and time consuming renovation in the spring.

"This season, through June and July, we had plenty of rainfall and sufficient moisture retention, even on our quick to dry-out sandy heathland," commented Matt. "But, there was no evidence of the Qualibra treated fairways holding too much water or being slow to drain, and they played equally well as untreated areas.

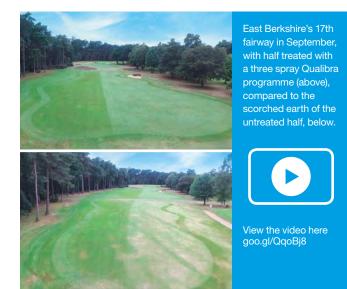
"However, when the weather turned hot and dry in August, the difference quickly became clearly visible. When we started to see the signs of patchy stress and browning on the untreated half of the trial fairway, the Qualibra area retained its colour and far more consistent."

The visual differences remained right through an incredibly hot and dry spell, when the south of England experienced record high temperatures. For fairway turf quality, Matt has seen the treated areas not only looked better through the heat and drought, but have recovered faster following early autumn rain and warm soils.

"The trial should help us to evaluate the long term potential to improve fairway condition. If we can improve plant retention - especially the more desirable fescue species - that will increase consistency and the quality of the fairways all year round," he added.



Watch GreenCastTV on YouTube to see what Matt was looking to achieve from his fairway Qualibra programme, in discussion with Daniel Lightfoot here, goo.gl/vVSEpW



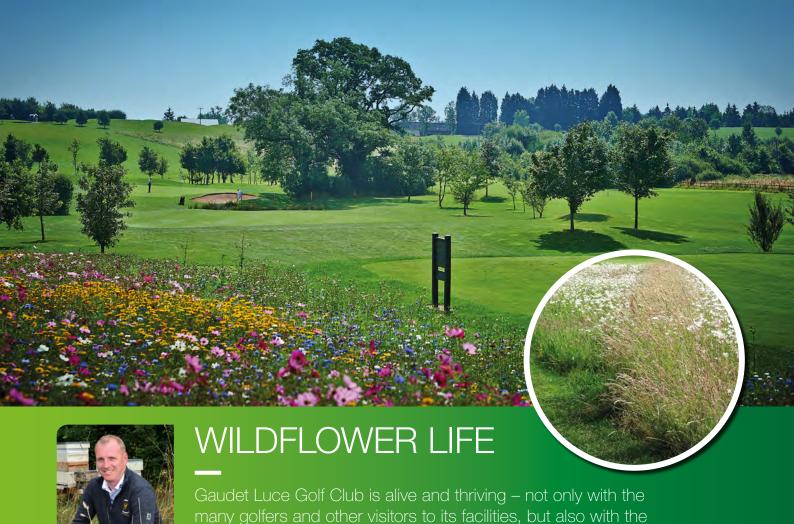
Qualibra Quality

Reporting new trials results at STRI Research 2016, Syngenta Technical Manager, Marcela Munoz, highlighted STRI trials have shown that Qualibra enables soil to hold sufficient moisture to improve turf health and playability, but does not retain excess moisture that could risk creating soft surfaces or encouraging the build-up of thatch, associated with polymer-only wetting agents.

The trials showed that, under drought conditions Qualibra retained surface hardness within +/- 6% throughout the summer, compared to 22% variability in untreated turf.

"Importantly, under an intensive irrigation schedule, to simulate heavy rainfall, the Qualibra treatment maintained surface hardness consistency, with no adverse effects in making surfaces softer.

"The key for greenkeepers and turf managers is knowing that they will get consistent results, no matter what the weather," she advised.



"Greens quality and course condition remains our number one priority," reported Course Manager, Andy Laing (above). "Environmental areas maybe lower on the list, but they are still an important part of creating an attractive

The course, near Droitwich, now has a dozen areas planted up with a mix of wildflowers that successfully adds interest and colour for players, as well as a vital ecological resource for pollinating insects and an increasing variety of wildlife.

place to come and play."

Having experimented with perennial mixes and then annual wildflowers Andy has moved to a biannual mix, which provides a greater diversity of species, which are predominantly naturalistic flowers and give a summer-long flowering that extends into autumn and beyond. "As we reliably get two years of flowering from each sowing, we have effectively halved the time and cost of establishment, and yet still deliver a really attractive result."

Andy emphasised that care and attention over the establishment is essential to achieve early flowering in the first year, and for the mix to successfully work through to the second season.

wildlife it has been actively managing to attract to the course.

To look after the biannual mix Andy has found that a light topping in the late autumn, after flowering has finished, can be beneficial. Last year he also found that when one area was being overshadowed by coarse grasses going into its second season, an application of Rescue suppressed the grasses and allowed the wildflowers to proliferate. One pass left unsprayed demonstrated the effect - with virtually no flowers visible, whilst the treated area was full of colour and life (pictured inset above).

"Using Rescue is another tool that can help us to manage ecological rough more effectively and get the best effect for our site," he added. "We are also looking at how it might fulfil another objective to enhance course appearance and playability, by removing invasive coarse ryegrass on the fairways."

ENVIRONMENTAL ATTRACTION

Gaudet Luce Managing Director, Martin Fernihaugh, has recognised the importance of encouraging the ecology of the course, as both an attraction for the club and to promote a positive story for the golf industry.

"Whilst we do have a proportion of players for whom the golf is everything, there is a far larger contingent of the membership where the welcome in the clubhouse, the company of fellow members and the environment around the course are equally important to their enjoyment of the game," reported Martin.

"We have clearly demonstrated that managing a golf course and enhancing the environment is entirely compatible, and providing a valuable ecological resource to the area," he added.



For more of Andy's tips on ecology management tips and advice, visit the GreenCast website

APPLICATION TOP TIPS

Early winter disease attacks can have devastating effects that will last right through to next spring and summer - resulting in lower player satisfaction and increased costs of renovation.

An effective Integrated Turf Management programme, coupled to a proactive fungicide programme, can help to see turf safely through risk periods, explained Syngenta Business Manager, Daniel Lightfoot. But to get the best results, attention to accurate application can make a significant difference.



A - Daniel Lightfoot:

Improved spray techniques will have a significant impact



B - Pressure set-up

Ensure the sprayer is correctly set-up for even pressure and consistent application across the boom.



C - Nozzle height

Set the boom height for nozzle tip to spray from the nozzle tip, not the boom.



D - Boom joints

Ensure boom joints are lubricated and moving freely, and that the boom is straight and level across the full width.



E - NSTS test

practice to avoid costly errors



F - Nozzle calibration

Check nozzles for wear and even output. Calibration should be a routine practice and will quickly pick up problems.

Get the Greencast Turf App



The GreenCast Turf App provides a practical smart phone tool to help golf and amenity turf sprayer operators deliver more timely and accurate applications, as well as automatically recording and storing records of each treatment and decision making.

It has directly addressed the key concerns of greenkeepers, agronomists and club managers for spray record keeping and improving application techniques.

The easy-to-use App has been heralded as a milestone in the best practice for spray application for the turf industry, and the effective stewardship of amenity pesticide use.

The Greencast Turf App is available now for free download from the iTunes Store or Google Play.

- Compiles complete spray records
- Creates tank-mix recommendations
- Provides application advice
- Quick linked with GreenCast website
- Fully customizable for individual courses







WIN A TRIP TO US TURF SHOW

The winner of Amenity Spray Operator of the Year 2017 will get the incredible chance to travel to a US turf or green spaces show, in Texas or Kentucky.

Visit the Greencast or Amenity Forum website for your chance to enter.

This year, for the first time, course managers, agronomists or industry specialists can nominate their spray operators to take part in the competition.

Daniel Lightfoot, Syngenta UK Business Manager, urged more operators should get involved, highlighting that providing sprayer operators with a community focus to

share experiences with other like-minded people, and to pick-up invaluable tips and advice from their knowledge, is a key element of the Awards.

"Every operator has something that will add to the experience and help others," he enthused. "It's not about having the latest kit or biggest machine. If you can demonstrate the ability and ingenuity to consistently achieve safe and accurate application through the whole spraying process, then you are in with a chance of winning."





ASOY WINNERS AND RUNNERS-UP

WINNER

RUNNER-UP

SPORTS AND AMENITY TURF USING A BOOM SPRAYER

JASON GARLICK

JMG Amenity Ltd, Leicester

LIAM EVANS

Royal St Georges Golf Club Sandwich

SPORTS AND AMENITY TURF USING HAND HELD EQUIPMENT

HAZEL JOHNSON

Hortech Ltd. Lancashire

GARY WATTS

Greenthumb Beverlev. Hul

HARD AND POROUS SURFACES USING VEHICLE MOUNTED EQUIPMENT

MARK SANDERS

JSD Rail, Workington

HARD AND POROUS SURFACES OR INVASIVE WEED SPECIES USING HAND-HELD EQUIPMENT

JAMES CARTER

DTMS Group, Yorkshire

Top Operators Rewarded



The UK's top amenity sprayer operators have been recognised with this year's Amenity Sprayer Operator of the Year Awards (ASOY).

Sponsored by Syngenta and ICL, the winners of this prestigious competition were announced at the Amenity Forum Conference in Burton-on-Trent.

The Awards, managed by the Amenity Forum, have highlighted the exceptional skills and experience of all those involved, to demonstrate best practice for effective results and, above all, safe spray application in amenity situations.



www.greencast.co.uk www.greencast.ie

Syngenta UK Ltd. Registered in England No. 849037. CPC4, Capital Park, Fulbourn, Cambridge CB21 5XE Email: golf.syngenta@syngenta.com

Web: www.greencast.co.uk / www.greencast.ie

GreenCast®, Headway, Medallion TL®, Primo Maxx®, Rescue® and Qualibra® are Registered Trademarks of a Syngenta Group Company. Headway (MAPP 14396, PCS 03557) contains Azoxystrobin and propiconazole. Medallion TL (MAPP 15287, PCS 04188) contains fludioxonil. Primo Maxx (MAPP 14780, PCS 03879) contains trinexapac-ethyl. Rescue (MAPP 14518, PCS 03682) contains pinoxaden. All other brand names used are trademarks of other manufacturers in which proprietary rights may exist.

Use plant protection products safely. Always read the label and product information before use. ©Syngenta AG November 2016.

Distributed in the UK and Ireland by ICL.
Tel: 01473 201100 Email: prof.sales@icl-group.com
Web: www.icl-sf.co.uk

GREENCAST

All the best information for turf agronomy advice – new design and function for phones and computer

www.greencast.co.uk

