

LEFT: Roughs are awash with wild flowers and classic heathland shrubs like wild broom and gorse. Course manager Duncan Kelso in the picture



ABOVE: Dr Simon Watson of Syngenta with a soil/root core (Picture Syngenta)

about the author



Dr Terry Mabbett

Dr Terry Mabbett is a disease, pest and weed control specialist with forty years international experience covering research, advisory and journalism. His current fields of focus are professional turf and alien insect pests and pathogens of Britain's native and naturalised trees.

nology and growing medium from the very start, designing and constructing to USGA specifications for year-round playability. There is always the option of re-constructing greens to USGA specifications but you can't just do one. You have to do 9 at least and at up to £25,000/green you are talking about up to half a million pounds for an entire 18-hole course.

Managers of such courses are looking for products that will move rainwater and night-time irrigation down through the soil profile so that water is not just sitting there during the day to create a wet top layer and poor playability. They would traditionally go for a wetting agent with small molecules and accompanying strong penetrant properties to take water right down through the soil profile. However, by facilitating straight through movement of surface layer water droplets they are also promoting the accompanying rapid passage of dissolved nutrients which are no longer available to the grass plant.

"Duncan and other course managers in similar situations are looking to retain moisture in the soil profile", says Simon, "and are therefore looking to polymer technology featuring bigger molecules that can

hold on to water by re-connecting with soil particles."

Bridging the gap

Qualibra fundamentally bridges an apparent divergence in situation and need by presenting both penetrant and water holding properties. The research and development behind Qualibra is all about more evenly distributing moisture throughout the soil profile, thereby increasing the interfacing area of root surface and soil water containing dissolved nutrients.

Qualibra achieves the desired even spread of soil moisture through a unique combination of 'soil wetting' components. First is a small-molecule penetrant to move water and achieve the desired spread along the length of root mass, cutting through any hydrophobic zones along the way. Working in tandem with these penetrant properties, is the larger molecule water holding polymer also in Qualibra. This retains moisture right through the root zone, a feat unlikely to be achieved when using a conventional exclusively polymer product.

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the soil profile. Reduced leaching leading to improved nutrient uptake and more efficient fertiliser application, and less environmental impact from nutrient loss into groundwater, are now all on the agenda.

Many might automatically assume that lack of water is the cause of turf yellowing in summer but Simon says it is more likely due to a lack of available nitrogen. Nitrogen in its soluble, plant-available form only exists dissolved in water. In situations where Qualibra makes moisture more accessible, greater availability and higher uptake of soluble nitrogen should automatically follow. Syngenta say Qualibra can delay the onset of summer senescence if used in a programmed approach from spring through to autumn.

Out on the course

'Proof of the pudding is in the eating' and a walk around King's Hill showed clearly the potential soil water management problems faced by Duncan and his team, and also how an integrated soil water management programme, including aeration, is maintaining and retaining grass root structure through the delayed spring and summer of 2013.

Our visit to Kings Hill took place on a bright, sunny and warm June day but with a distinctly drying wind blowing across the course. Soil temperature measured on one of the greens at 4 inches depth was 17.5°C. Duncan said this would be expected to drop some 2-3°C at night. Undulating nature of the greens was clear to see. A soil/root core taken from one of many 'high spots' showed how excellent grass root formation, structure and depth was being maintained.

Syngenta recommends foliar applications of Qualibra through a 08 XC nozzle at between 550-800 L/ha. Duncan uses a Gambetti sprayer mounted on a Toro Workman. He tank mixes Qualibra wetting agent with nutrients including sulphate of iron (Ferrous sulphate) to get that little bit more acidity for good grass growth, while keeping the turf hard.

"The course is not normally troubled by turf diseases like Fusarium Patch and anthracnose or surface worm casts", says Duncan. "Greens were uniformly constructed at 90 per cent sand and 10 per cent peat. We work hard to keep the organic matter fraction down in order to keep the greens firm and the spin-side of this effort

is inherently low turf disease and surface worm casting." The extra acidity from iron sulphate is clearly helping on both counts. Duncan uses Qualibra alongside Primo Maxx growth regulator to obtain the mutually provided benefits of improved rooting, drought tolerance and good grass colour.

RIGHT: A soil/root core taken from one of the many 'high spots' on greens showed how excellent grass root formation, structure and depth was being maintained (Picture Syngenta)

BELOW: Constructing the reservoir was the best decision we ever made says course manager Duncan Kelso pictured here (Picture Syngenta)

BOTTOM: Roughs are both scenic and challenging with gorse, broom and other typical heathland shrubs very much in evidence



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A Rich reward



Les Howkins admitted he was “shattered” as we chatted in his office at The Richmond Golf Club. Just 12 hours earlier, he had spent an eventful evening separating warring teenagers at a sixth form leaving bash held deep in the 105-acre grounds of the club – which is owned by The Crown.

“I was asked to do security and at one point these two girls were really going at each other” he recalled, “so I just picked one of them up, carried her away and plonked her outside to calm her down. She was kicking her legs as I lifted her out. Later one of her friends came up to me and said it was the funniest thing she’d seen all year.”

It’s no exaggeration to say Les lives and breathes this club – he lives on site – and this explains his sheer pride in their amazing recent achievement. They fought off worldwide competition from the likes of Oklahoma Golf & Country Club and Denver Golf Club to win the title of ‘Renovation of the Year’ from Golf Inc – a well-respected industry magazine based in California. A panel of judges hailed the work Les and his team completed in-house to overhaul the club’s bunkers which had previously

suffered from flooding and wash down issues. In fact they described it as an “extremely elegant solution to transform a course, showing in dramatic fashion how bunkering defines a course. For a club wanting to make a statement, but faced with limited funds, this is a great example to follow”.

After considering proposals from several architects the club picked Thompson, Perrett & Lobb (TPL) to plan the work in 2009 – and it was TPL who suggested entering the competition. Les thought Richmond stood no chance as they were competing against huge clubs worldwide – some with budgets of well over £10million (Richmond had £125k), and five times the number of staff.

He said: “We had nothing to lose – it was free to enter – so we put a portfolio together with before and after shots, explained the process and the rest is history. I think the fact we’d done it all ourselves maybe gave us an edge, but I was gobsmacked when I was told we’d won. The work was worth it anyway, but to be given an award by industry leaders is the icing on the cake and made all the blood, sweat and tears worth it. Hopefully we’ll get a certificate soon to hang in my office!”

The Richmond Golf Club are celebrating after winning an international award after renovating 56 bunkers. Course Manager and part-time bouncer Les Howkins explained how they defeated American clubs with multi-million pound budgets with their £125k project





So how did they do it?

Les arrived at the club in April 2008 with an extensive woodland management project already underway – but his focus quickly turned to the problematic bunkers. His team had a novel way of highlighting the issues.

“On my first day there was one particular bunker which was full of water and we pumped it out. The following day it was full of water again so we pumped it out again. The third day it was full again.

“Of course, the other lads knew the water table was so high it would just fill up overnight, they just thought it would be funny to watch me flounder each morning. They made sure I realised the scale of the task.

“The wash down was particularly bad, which contaminated the sand, which in turn created muddy sand which just did not drain.

“We’ve got a team of ten here including one full-time mechanic, and were spending so much time on the bunkers, especially after wet weather, we had little time for anything else, although the rest of the course does drain very well as it’s on a sand and gravel base.”

Les spoke to several architects and met four on the course, and TPL stood out due to the depth of their research and general work

ethos. They looked through the club’s archives to get a flavour of the course’s history, watched members play to gauge the standard of golf and produced an outstanding plan with their design ideas – some of which were radical.

“I took their plans to the committee and there was uproar immediately over plans to get rid of a bunker on the third fairway.

“It was a good shot for bad golfers so it was punishing the wrong standard of golfer but they replied ‘that’s part of the challenge’ and they didn’t want that challenge removing.

“I had to be fairly forceful and tell them this work was absolutely necessary, and promise results. Our aim was to place the bunkers strategically, giving the longer hitters a tougher challenge while giving the higher handicappers an easier route to the greens.

To an extent I hung my career on this project succeeding because I’d only been here a year when we started the pilot.”

The team used the 11th hole as the pilot in 2009, putting drainage in, experimenting with different liners and different types of sand. They chose buckbricks sand as it compacts down well, so provides a firm footing and is also free draining.

“The pilot was a success so we were all set. I had a fair bit of drain-



PROFILE

Name: Les Howkins
MG

Position: Course Manager

Born: Leicester, 18 May 1973

Handicap: 6

Hobbies: Golf, spending time with wife and two young daughters

Favourite Sports Team: Leicester Tigers

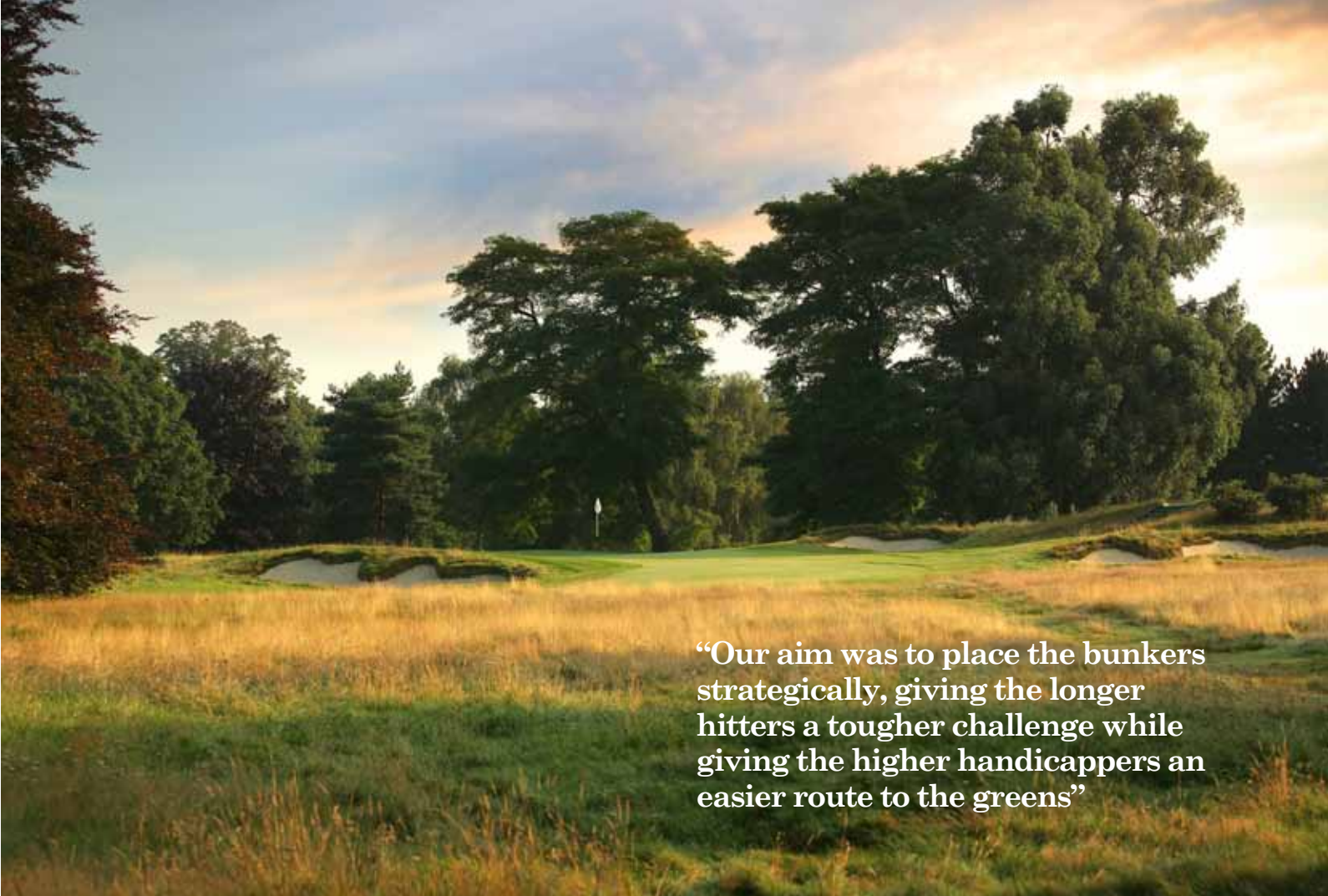
age and digging experience and the now Deputy Course Manager Dan Norsworthy is a fully qualified digger driver, so we knew we had a great team to do it.

“When we started the work Jaey Goodchild was the Deputy and he was hugely involved in it too – it was a tremendous team effort. Of course, there was an element of learning for us all along the way and TPL supported us with the final grading and shaping of the bunkers.

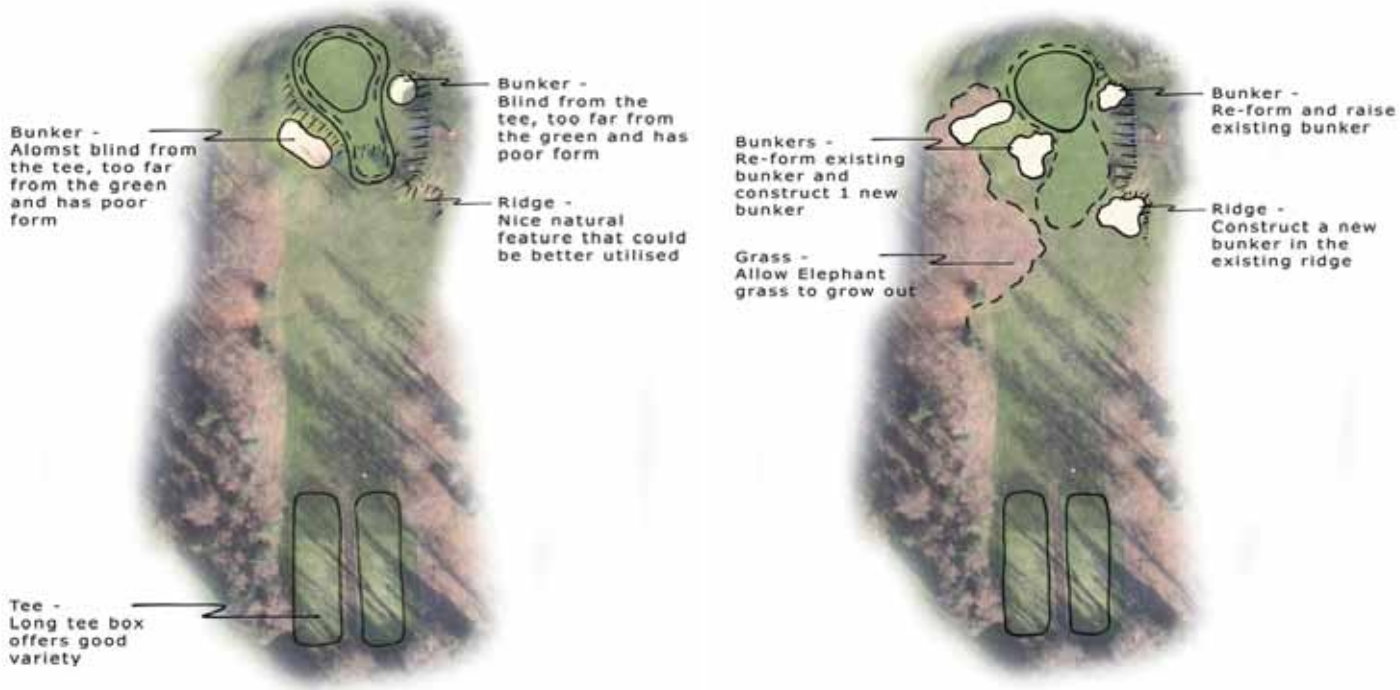
“The company we used for the original bunker liners went under, so we then approached Blinder Bunker who I was hugely impressed with. We also used Steelwrist who manufacture tilt rotating buckets on diggers.

“We bought our own digger and a Steelwrist bucket, it’s phenomenal and pretty unique.

It ended up being an absolutely essential piece of kit for the work we needed to do, enabling you to do the work much more quickly and



“Our aim was to place the bunkers strategically, giving the longer hitters a tougher challenge while giving the higher handicappers an easier route to the greens”



TPL PLAN: KEY FINDINGS

- Many of the fairway bunkers were out of position punishing the average golfer and most of the greenside bunkers were too far from the green to pose a serious threat to the better golfer.
- Many of the bunkers left the golfer with downhill lies resulting in thin or ribbed shots.
- Many of the bunkers were at the bottom of hollows and only just above the water table, causing them to gather large amounts of water and drain very slowly.
- Most of the bunkers were barely visible to the golfer, and those that were visible were not very visually appealing.





The team from left: Sam Bethell, Paul Carella, Les Howkins, Tony Bartram, Pat Kidd, Dan Norsworthy, Joshua Thorley
Missing are: Adam Wise and John McPherson

efficiently. We also used Speedcut who installed around 4,000 linear metres of drainage across the course that we could then tap into for the bunkers. We sourced the turf from Inturf, which was flawless.”

Phase one of the work began in October 2010 and was completed in January 2011, with a similar timescale for phase two a year later. Except for occasional closures on the par threes as the team worked near the aprons, disruption to play was minimal.

With each phase they allowed

three months for the bunkers to grow in before opening them.

Some holes were radically changed with bunkers moved or removed, greens widened or shortened and mounds introduced to add to the playability factor. Others were tweaked more aesthetically with hollows strengthened and tees relocated slightly

Les, who began his career at 15 with a work experience stint at Kibworth Golf Club and worked at Cleethorpes Golf Club prior to his move south, said:

“I did have to give some of the older members bunker lessons because they couldn’t get out of them at the start.

“They just needed to hit the ball a bit harder, and once they got used to them they loved them.

“I’m really proud of what we’ve achieved here. All the team are happy with the results, and the committee, members and visitors have been 99% positive too.

Golf should be a game where the player has to think before every shot and that’s what I believe we’ve reinforced with these changes.”

Congratulations to all the team at Richmond – the final word goes to architect Tim Lobb.

He said: “I’ve been in the business for close to 20 years and this is the best in-house result I’ve ever seen, it’s stunning.”

Before the renovation

After heavy rain almost all of the bunkers on the course had severe wash down on the faces. So all the bunkers were edged, banks flymoed and all the sand pushed back up the face and the bunkers given a full rake.



The contamination of the sand is not only aesthetically displeasing, it effects the playing qualities of the sand by creating a compacting, muddy sand that does not drain. The new bunkers without the wash down have no such problems and the bunker liner creates a permanent barrier between soil and sand.



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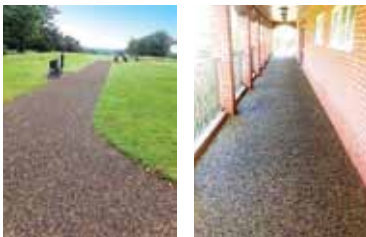
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You've got the power!

Jacky Lowe shows you how to present effectively using PowerPoint

How did that happen? A quick chat with the chairman of green, and you've somehow ended up offering to do a presentation to the membership. It can be the stuff of nightmares - standing up in front of a room full of people.

Where do you start? This article aims to take some of the fear (and pain) out of presenting your chosen subject matter to your designated audience. It will also introduce the most effective use of PowerPoint as a presentation and visual aid.

So, why should you use PowerPoint?

PowerPoint should help you bring together all the elements of your presentation, enabling you to get your point across in a visually stimulating and memorable way. The use of a slideshow will enhance your presentation and add an extra dimension to your message.

Where do you start?

Significance

It might sound obvious that you should start by deciding on the message behind your presentation. Make sure that you are clear as to why you are presenting in the first place. If you can't make your subject matter meaningful, you shouldn't be presenting.

It needs to be significant – why? Because significance creates passion, and passion leads to action. There is nothing better than a passionate speaker – if you are passionate (or at least interested) in your subject matter, then you will present a confident and clear speech.

Structure

The structure of your presentation is your next consideration.

What structure should you use? It doesn't matter, as long as there is a structure. The three main things you need for your structure are:

Credible – Ensure it's believable and convincing. You may choose to have an introduction, a middle and a summary. Or maybe problem, pathway, solution. Choice of structure doesn't matter, as long as one exists.

Memorable – keep to 3 or 4 reasons to each point (or argument) – your audience won't remember any more than this. If you need more than 4 reasons, develop a new point.

Scalable – whatever you can say in 30 minutes should be scalable to 45 minutes, an hour, 5 minutes.

An example of a good, or widely used structure would be:

- Memorable opening
- Point 1 (3 reasons)
- Point 2 (3 reasons)
- Point 3 (3 reasons)
- Memorable closing/ Summary

Simplicity

Albert Einstein once said "If you can't explain it to a six year old, you don't understand it yourself" and this is completely true of PowerPoint presentations. If you can't explain something so that any audience member will understand, then you don't understand it yourself. This also brings us to the point that you should know your audience. Are you addressing a room full of six year olds, or a room full of agronomists? This simplicity (or lack of) is one of the main reasons for the failure of PowerPoint presentations. We don't seem to be able to keep things simple. We end up cluttering slides with complicated diagrams, loads of text, or complicated graphics.

Powerpoint is designed to visualise ideas, create key points and

about the author



Jacky has been training across Microsoft office, accounts and business skills for the last 18 years, across all levels and sectors. She has knowledge of the greenkeeping and turf industry from being married to a former Course Manager.

