

Four seasons in one day

There's no getting away from it – the West of Scotland is beautiful, but extremely wet. How do the team at **The Carrick on Loch Lomond**, lead by Jim Brown and Paul McClearn, cater for thousands of corporate clients while battling two metres of rain annually?



Greenkeeper Profile

Name: Jim Brown.....
Position: Course Manager.....
Born: Keighley, 1 January 1965....
Handicap: 18.....
Hobbies: Cycling.....
Favourite Sports Team:
 Keighley Cougars Rugby League....

Name: Paul McClearn.....
Position: Head Greenkeeper.....
Born: Galway, 28 September 1974
Handicap: 13.....
Hobbies: Spending time with two
 sons, cycling.....
Favourite Sports Team: Ireland
 Six Nations Team.....



As I drove towards The Carrick in glorious winter sunshine, little did I know I would soon experience the classic four seasons in one day – which is far from unusual in the West of Scotland.

The rainfall figures could be described as intimidating with last year's 1800mm proving a relative respite after 2200mm in 2011. So it's no surprise that the team at The Carrick (named after Doug Carrick, the Canadian architect who designed the course) are constantly challenged by drainage issues.

Jim Brown kick started a programme of improvements at The Carrick through his role as Group Golf Courses Manager for De Vere Hotels, before becoming Golf Course Manager at the heathland course. The first nine holes are played on open Lowlands while the second nine head into the Highlands close to the famous Loch before returning to the clubhouse.

Jim's regular meetings with Head Greenkeeper Paul McClearn identified various serious issues on the course – namely drainage and turf quality on the greens, regularly flooded fairways and collapsing bunkers. As we toured the course, we are in turns basking in glorious sunshine then hit with wind and rain – which seems to sum up the local climate perfectly.

Yorkshireman Jim says: "Obviously we can't control the rainfall but we can control how the golf course reacts and recovers to that rainfall. I began by inviting De Vere Hotels' CEO (and avid golfer) here to show him the problem areas, and convince him that we needed investment. It was pouring down at the time which was perfect to illustrate the issues! We needed various pieces of machinery such as a sand bander, a large enough tractor to power that sand bander and a big enough top dresser to start to top dress the fairways to improve the soil properties.

"We also needed significant annual investment to purchase sand – we applied 220 tons to the greens last year and we were looking to secure another 800 tons to apply to problem fairways and approaches. If he agreed it meant we wouldn't have to rely on contractors and could do the work when we wanted during conditions suitable for success – we were delighted when he accepted and supported our proposals."

Jim is crystal clear about the main challenge he faced on his arrival - the USGA greens with an excessive and increasing thatch

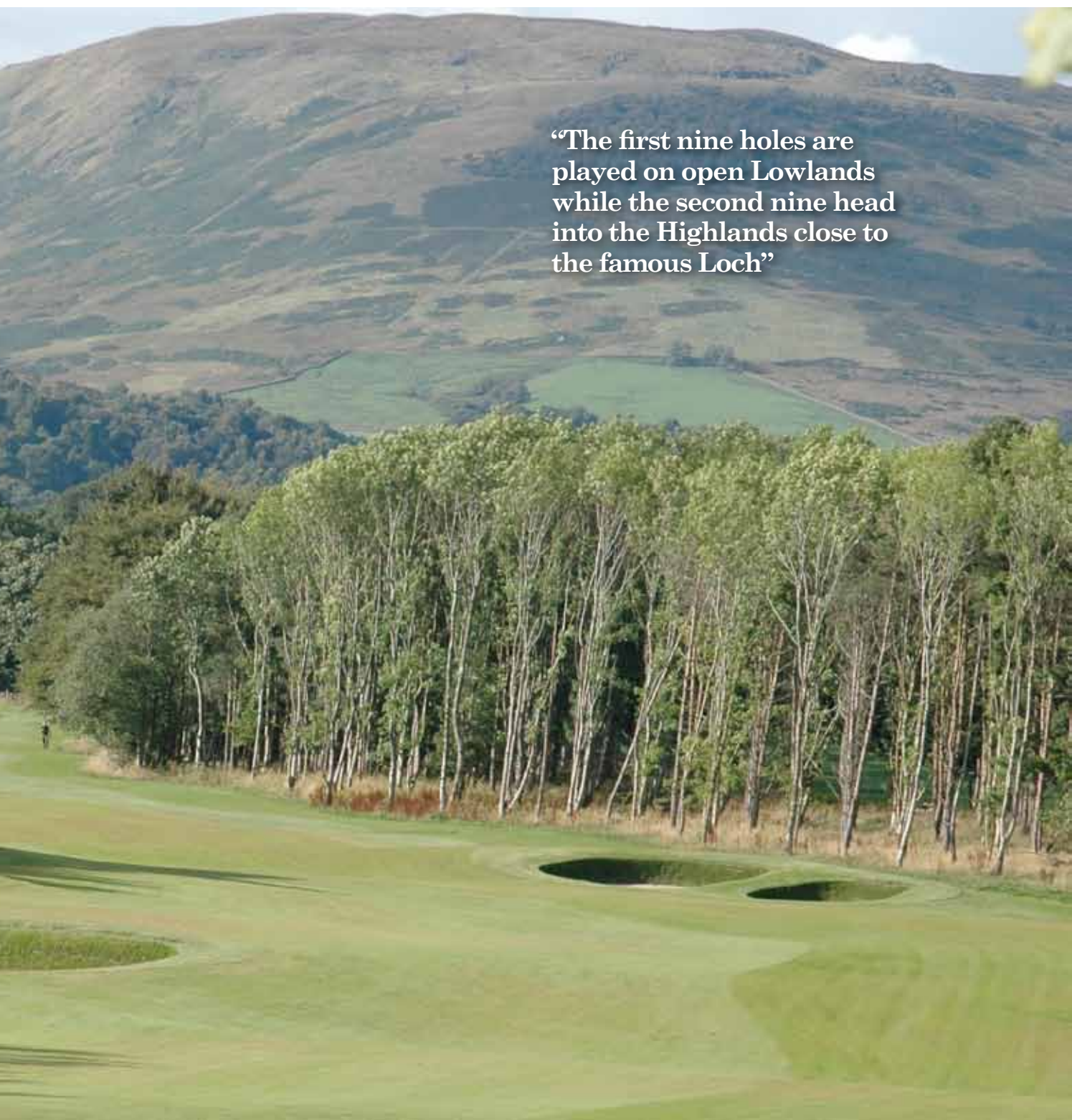


layer were "basically drowning".

"A number of the greens were down to 60% grass coverage with algae forming on the surfaces. Historically Potassium nitrate would be applied as a form of nutrition but within a week after application the turf would be wilting again. We had a five-year-old golf course with up to two inches of thatch on the greens - this led the greens to flood and ultimately turf saturation. With a change in nutrition and an improved aera-

tion programme including winter applications of Everris K-Step, we would try to build up a reservoir of nutrients in the high sand profile rootzone – this would help deliver nutritional supplements when the turf required – even during the winter months.

"I knew our success or otherwise would be measured by the quality of the greens throughout and after winter. As we enter spring it is widely accepted that turf quality and especially the greens have



“The first nine holes are played on open Lowlands while the second nine head into the Highlands close to the famous Loch”

never been better with a good turf density and disease free – all without an application of fungicide, using good old-fashioned aeration.”

Paul admits that the greens were also his biggest headache. He said: “Over the last few years we’ve used large amounts of fertilisers on the greens, which is not what we want to do. Every spring we’d be battling to get the grass growing to get good coverage and ultimately recovery.”

They also managed to convince the club that a regular aeration pro-

gramme needed to be put in place. Previous reluctance was down to the sheer number of golfers playing and an unwillingness to disappoint them. Paul says: “Communication was the key to success with the management and improvements needed with the greens, now the club management not only understand the challenges we face, but also encourage us to continue the good work”.

The team now alternate 5mm and 8mm solid tining every month.

During July and November last year they hollow tined with 12mm hollow tines, the latter not followed up with topdressing, allowing the persistent rainfall to pass through and drain away, as Jim says “aiming for a hydraulic conductivity of fresh air”.

They then introduced the Graden Sand Injector to physically remove thatch and inject sand, working on two greens at a time during the latter end of the growing season. This work is always communicated



to visitors and members alike through newsletters and golf sales colleagues.

Paul adds: "We've gone back to a very trusted, and dare I say old-fashioned form of greenkeeping. It's now spring and the worst green has 95% grass coverage. The greens are draining and there's good sward quality so we won't have to throw as much fertiliser at them to help them recover.

MACHINERY LIST

Greens: 4 x Toro Flex21, 2 x GM3250, Procore 648, Graden Sand Injection Deep Scarifier
Tees/collars: 3 x Toro GR1600, 2 x GR1000, 1 x John Deere 2653
Fairways: 2 x Toro 5400D
Roughs: 1 x Toro 3500D, 1 x 4500D
Tractors: 1 x New Holland TC45DA, 1 x TN60DA, 1 x John Deere 5080, 1 x 4520
Spraying: 1 x Toro 5800
Utility vehicles: 6 x John Deere 6x4 Gator, 1 x 4x2 Gator
Attachments: Procast PC3 Top Dresser, Wiedenmann XF Aerator, XP Aerator, Super 500 Flail, Tornado TM360XL Blower, Vicon PS303, Dakota 410, 440 Top Dresser, T.I.P. Groom-it Drag Brush, Redexim Sandmaster, Ryan Junior Sod Cutter
Trailers: Ifor Williams, Marshal S4, S2, Toro Trans Pro Flex 21, AFT 45 Chain Trencher.

"I'm an advocate of simple greenkeeping practices but you have to adapt on the day to temperature and rainfall, manage it on the hoof. Many of our customers travel great distances to hold a corporate day here, so we have to do our best to get them out on the course come hail, rain or shine."

Even before Jim became Course Manager in February last year, Paul and his team began a major programme of improvements with drainage on the fairways. The sand banding within the fairways was a bid to get the water off the surfaces and create a positive interface with the drainage below.

Paul said: "When the 1800mm we had last year is classed as a dry year you can see why we had problems! Because it's so wet, the organic matter in the top part of the fairway turf became quite thick and didn't take the water, so we invested in a contractor to cut out 50mm channels of soil, take the soil away then back fill it with sand so we were creating 12 inch deep sand channels to interface with the drainage below.

"We've bought our own chain trencher which involves a similar process to the sand banding. The rain comes, we know where the worst affected areas are on the course, it goes down the gravel drain, into the existing subsurface drainage then into soakaways. It then goes through a natural filtration system before flowing into the loch."

The next challenge was embarking on a huge renovation project concentrating on the course's 122 bunkers. They were degrading and collapsing due to the amount of rainfall – and were poorly presented with the sand becoming contaminated. So they redesigned and reurfed the existing revetted bunkers inhouse. Now they only require normal upkeep such as edging and replenishment leaving the greenkeeping team free to largely concentrate on other tasks.

The team also received feedback about a lack of definition to the semi-rough, so increased nutrition and fertiliser in these areas. They've constructed a brand new elevated tee at the stunning signature 14th hole which plunges towards the Loch. The next stages include installing further preventative drainage in the rough to complement the other drainage investment.

Jim adds: "We know how the golf course reacts to heavy rainfall and we're delivering high quality green surfaces 365 days a year because ultimately that's what the golfers care about. I'm not saying everything will be fixed in one go, it's going to be a slow process, but these small successes all add up and fill us with enthusiasm for this season and the years ahead.

"Feedback from members, visitors and regular corporate golfing parties is that they've seen a significant improvement in turf quality, particularly on the greens, and they're also pleased with the consistency of presentation throughout the year.

"The greens simply do not flood anymore, which is a huge success. Our focus now is the World Corporate Golf Final on 7 May. Some have suggested that taking on a four day high profile international golf tournament, at this time of the year, in this part of the world is a risk, but the greens are strong, the course is responding very well and we're very much up for that challenge."



MAIN ABOVE: Water on a green before the work

INSET ABOVE: Drainage channel on a fairway

