Four seasons in one day

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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
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?
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 1860mm 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 McEwin 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 brand new 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 aeration programme including winter applications of Evotria K-Step, we would try to build up a reservoir of nutrients in the high sand profile rootzone – this would help deliver growth and minimal builds when the turf required – even during the winter months.

“I knew our success or otherwise was the key to success with the greens, now the club management not only understood the issues 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...
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“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 25-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 aeration programme including winter applications of Evird 2-Step we would try to build up a reservoir of nutrients in the high sand profile rootzone – this would help deliver good soil profile supplements when the turf required – even during the winter months.

“Knowing 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 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 with the greens growing to get good coverage and ultimately recovery.”

They also managed to convince the club that a regular aeration programme 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 understand the challenges we face, but also encourage us to continue the good work.”

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

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 aird quality so we won’t have to throw as much fertilizer at them to help them recover.

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.”

Paul added: “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 returfed the existing revetted bunkers in house. 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 fertilizer 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 compliment the other drainage investment.

Jimm added: “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.”