A French Revolution

Thanks to the continuing strength of the Euro, French Clubs are taking advantage of British specialist turfcare companies to make improvements to their courses.

France boasts some longestablished golf clubs in superb settings which have large memberships but also attract visitors and holidaymakers. As a result, these courses are worked extremely hard and many experience long, hot, dry summers. This, together with the topographical features such as trees and mountains which make the courses so attractive, add to the Course Manager's challenge.

Compaction, poor grass growth and old push-up greens out of clay mean that surface drainage is a problem. And increasingly, French clubs are turning to specialist aerators for help. Their machines can establish drainage ducts to a depth of 31cm and backfill with a sand/soil amendment mixture to improve rootzone and allow surface water to percolate through to the drainage layer beneath.

Golf La Boulie in Versailles, employed Drill n Fill, operated by British Ecosol Turfcare, to carry out work. Established in 1901, the courses are part of one of France's leading sports clubs, Racing Club de France, and has frequently hosted the French Open. It boasts two 18 hole courses, Le Forêt and the elder, La Vallée.

The greens are old and were built on a poorly draining base. The soil is clay with a terracotta drainage layer at a depth of 40cm.

"Due to this construction, we have been having problems with greens that were slow to drain after heavy rain," said Director, Jean-Franck Burou.

"The greens were very compacted and the grass growth weak." Ecosol Turfcare was called in to Drill n Fill all 18 greens on La Forêt course, while the following year there was a return visit in 2010 to the older course, La Vallée.

The Drill n Fill aerator can fold back turf and penetrate soil to a depth of 31cm, backfilling instantly with sand and a soil amendment such as the zeolitic Sportslite. This relieves compaction and allows improved drainage, as the water percolates down the ducts, which remain open for months and accelerates the infiltration rate. Backfill can be tailor-made for each green according to turf conditions to give a soil exchange with sand, zeolitic or ceramic amendments and blends of nutrients.

Removing the soil allows lateral movement in the rootzone, releasing compaction and the increased percolation reduces the spongy, soggy conditions often seen in clay-based greens. Deep holes and good soil amendment encourage deep, strong roots and result in better grass growth on the green. There is a choice of drill depths and diameters.

At La Boulie they needed to improve soil exchange on the compacted, slow draining course which was also showing poor grass growth. Three aerators and a SQRL debris collector were used on the 18 greens, aprons and approaches, two hectares in total. Drills were 31 cm long and 20mm wide. Backfill



was a locally quarried medium-fine French sand, kiln dried to ensure complete hole-filling.

The operation on La Vallée was similar, with three aerators and two SQRLs. Despite being hampered by frozen greens, requiring a late start in exceedingly cold weather, the French greenkeepers were extremely supportive.

"Although we injected 60 tonnes of material, the job was very smooth and efficient," reported Head Greenkeeper, Guillaume Grall.

It was felt that the local sand used in the first job had been a little fine, so for La Vallée, the backfill was imported from Bespoke Blending and Bagging(BBB) in the UK. It was a 95:5 mix of DA30 Kiln Dried sand and Sportslite, which has the additional benefit of retaining water in the rootzone - important in France where water used for the irrigation of sports grounds is rationed.

"The results have been very satisfactory," said Jean-Franck.

"At La Boulie there has been a nett improvement in the drainage level and also from being able to introduce sand into these clay greens. This has resulted in a 'tightening' of the greens and they are now much firmer with better grass growth. The greens are already firmer and draining faster."

Golf de Chantilly is another club, which decided to carry out work this summer. The club offers two courses, the elder, is 100 years old. There is a team of 15 greenkeepers and normal turf care includes verti-draining and the John Deere Aero Spike which goes to a depth of 3-4cms

"Although our soil conditions are good, greens are constructed from Loire Sand to a variable depth," said Director Remy Dorbeau,

"We had a problem with water not moving off the surface because, at 10cm down, there is a layer of chalk and a lot of organic matter. We needed to get down to the gravel drainage layer at 30cm deep which is why we used Drill n Fill."

The whole of the old course was treated, grass growth has already improved and surface drainage performing well after the first rain of autumn.

Golf de Fourqueux is in the environs of Paris, which offers 27 holes -three sets of nine which are interchangeable and so offer different 18 hole challenges each week.

Superintendent JeanMarie Pardo contacted neighbours Chantilly about the deep aeration and backfill process, liked what he saw and booked four greens, 2000sq m, for treatment.



"We had been struggling with compaction and poor drainage because we have old clay push-up greens."

JeanMarie also decided to import the sand/Sportslite backfill from the UK.

"It was of a higher quality and more suitable grade than I could get locally," he said

"Two weeks after the treatment, we had heavy rain and could see that the treated greens were firmer and draining more quickly," said JeanMarie.

Another club, close to Paris, Golf St Cloud, can lay claim to a bloody battle having taken place on the site of the now 15th green and a view of the Eiffel Tower from the 14th.

Course construction at St Cloud is again push-up greens out of clay, topped with fine native soils. As with the other courses, Director Denis Couture was experiencing slow drainage off the greens due mainly to build-up of top dressing on top of the clay base as our photo shows. He had the entire older course, Vert, Drill n Filled this summer and has booked in the Jaune course for 2012.

"I have seen good results from this process at other clubs and feel sure it will be the answer for us. Paris has experienced some very hot summers recently and the greens have had a lot of use, so drilling down to around 30cm, completely replacing the rootzone and leaving a network of ducts will aid water percolation and improve grass growth," he said.



MAIN ABOVE: Drill n Fill at Fourqueux MAIN LEFT ABOVE: Chantilly Asst Hd Greenkeeper Christophe shows drill depth ABOVE: CHANTILLY: Director Remy Dorbeau (I) describes his green LEFT PAGE: Soil sample from St Cloud showing build-up of top dressing over clay RIGHT: St Cloud's Denis Couture on a finished green.

