Turf Treatment With A Dedicated Touch

Regular and thorough aeration throughout the year provides the key to the production and maintenance of first-class playing surfaces on Sunningdale’s championship golf courses.

Indeed, aeration is the basic component of the complete turf management programme practised by Jack McMillan during his seven years at the club. The programme was developed specifically to suit the soil characteristics of Sunningdale’s 400 acres.

The soil type, Bagshot Sand, is described by Jack as fairly impoverished and inert, comprising a sand/silt mix of little topsoil depth, which can, on occasions, behave like clay.

"By that I mean the soil compacts quite easily under foot or wheeled traffic. It will also bake in hot weather. Therefore, it is essential that the ground is aerated intensively all-year-round so that it retains its structure and remains free-draining."

Jack is a firm believer in maintaining an aerobic soil structure.

"On most courses that means carrying out thorough and regular aeration to combat the joint effects of the continuous passage of feet and machinery.

"At Sunningdale, everything we do goes hand in hand. If the soil compacts, it neither handles water well nor allows vigorous and healthy root growth. Rain or applied water will tend to run off, causing ponding, while in hot weather, plant cover can be burnt off, leading to rapid turf wear and erosion."

Jack added it was, therefore, vital that the soil and its structure be kept in as good a condition as feasibly possible. He employs a Cushman Turf Truckster equipped with Huxley and Cushman slitting attachments to carry out an intensive winter aeration programme on the Old and New Courses at Sunningdale.

Commencing in October, the equipment is used exclusively each week to treat the greens, surrounds and tees. Snow or heavy frost is all that lays the machines off.

The Huxley slitter is fitted with 6in blades, while those on the Cushman version are 4in long. The two machines are then worked alternately so that aeration is carried out at a different depth each week.

This helps “open up” the soil structure more effectively, while reducing the risk of a hard, impermeable layer forming - a particular hazard when aeration is performed at a constant depth.

The greatest likely problem at Sunningdale, however, is compaction within the surface layers, so aeration of the top few inches of the turf at a weekly intensity is essential.

The Cushman Turf Truckster is used with a range of attachments from the Huxley and Cushman stables to handle hollow-coring, brushing, spraying, topdressing and the matting-in of materials, all carried out by the club’s 13 groundstaff.

The Old Course, which opened in 1903 and has bigger putting surfaces and bunkers, is looked after by a foreman with four staff. A foreman and three staff tend the New Course, which dates from the 1920s.

The remaining groundstaff comprise a central tractor squad and a full-time mechanic.

Sunningdale applies about 500 tonnes of topdressings a year, in seven or eight separate applications. The soil mix, consisting of 75 per cent sand and 25 per cent peaty-loam, is produced on site by the club’s Royer processing equipment and is used on all 36 greens, approaches and tees. Dressings are only applied when there is a promise of plant growth or actual growth is occurring.

On the spraying side, Jack said that the predominantly acid soils of the two heathland courses did not encourage the establishment or growth of many broad-leaved weeds. "The sprayer is used primarily for fungicide treatments and for the monthly application of a cocktail comprising a wetting agent and sulphur of iron."

"The Huxley brush is in regular use during the spring and summer, removing dew from the greens, while the dragmat helps us spread the topdressings thoroughly across all surfaces. The brush is also used in ideal conditions to apply a finishing touch to the greens after matting," he said.

Jack, who entered the profession when 14, is looking forward to May when the world-famous Surrey club stages the Walker Cup.