

A Fescue Future?

In the conclusion of this two part series, Steve Isaac, Assistant Director - Golf Course Management, The R&A, documents his investigation into Denmark's redevelopment of fescue greens.

April's article, *Seeing is Believing*, described The R&A's introduction to the fescue greens of Denmark. Here, the story is picked up after our Golf Course Committee had digested the report from our initial visit.



▲ Left and right: The contrasting environment to Falster greens - exposed and shaded ▲

THE STRENGTH OF THE CASE?

Thrilled as we were by what we had seen, there was the nagging concern as to how representative this movement toward fescue was. We needed to see more going through the process to be convinced this was a long-term commitment and not just the sort of short-term fancy seen, and then discarded, by many in the UK, whose course management policy often changes with the revolving door of the Committee.

In mid-September 2004, I returned to Copenhagen to be given a wider ranging tour of Denmark and its golf courses. My guide, once more, was Chris Haspell, now the Course Manager at Hørsholm Golf Club, and previously the Golf Course Consultant to the Danish Golf Union. Three days saw visits to courses in Jutland as well as the main island. All exhibited high fescue counts and promising success rates in converting to this species. Two examples stand out, at Falster and Markusminde.

Falster is where Chris started his working career in Denmark in the early 1990's. An STRI report from those days by Alistair Beggs identifies *Poa annua* dominated greens with real thatch problems. A return visit would have Alistair wondering if it was the same course.

The greens are now firm and those in more exposed situations have a very high fescue content. The key to this remarkable transformation? Simple, managing for fescue and not for *Poa annua*. Low nitrogen input, a mowing height of 5mm, plenty of light topdressings and an intensive overseeding programme retold exactly the same story heard during our previous visit.

Progress is slower to shaded surfaces and these are in quite severe shade. Here, firmness has improved dramatically but the sward is taking its time to change, with bent coming in but fescue wary of establishing in such a hostile environment.

The real sign that growing fescue has become the accepted way of doing things, rather than just a trend, in Denmark is that courses are now being sown out with this grass to meet environmental restrictions and resource availability. In this regard, the visit to Markusminde was, probably, the most exciting of all. This course was sown throughout two years ago to fescue/bent. It could be considered the blueprint for the sustainable golf course in northern Europe - costing around £500,000 to build an 18 hole course, 9 hole par-3 and driving range.

The course is maintained, to a decent standard, by two greenkeepers, no pesticides are used and in 2004 the owner - a farmer - applied only 10 kg/ha of nitrogen to the greens. Thanks to such a low nitrogen input, fescue remains the dominant species on the greens and also to fairways, where it provides superb lies and requires far less mowing than other species.

Potentially as, if not more, exciting is the Vallø Golf Centre which was sown wall to wall with pure fescue in September 2004. A blend of Chewings and slender creeping red fescues were chosen after consideration in the design stage of a water restriction of 5,000 cubic metres a year and spraying controls. There is even talk of an extremely famous firm of American architects designing a course in Denmark which will be sown out to fescues. Now that really would be a break through!

THE REALLY RADICAL APPROACH!

Further calls to see the courses at Sebbel Kloster, Hørsholm, Fredensborg, Furesø and Dragor Golf Clubs only served to reinforce the impression. Of particular note is the bravery of Furesø and their Course Manager, Hans Beurling. Hans has the reputation of being something of an experimentalist amongst his Danish colleagues. However, even they were expressing concern



▲ Left and right: The practice green at Furesø in May and August ▲

over his mental health when he resurfaced his practice putting green by stripping off 100mm of rootzone before replacing it with clean material and overseeding with fescue and velvet bent. Nick Park and I saw this green a few weeks after seeding during our visit to Denmark in May 2004, the development over the intervening period and what I was now looking at was startling.

The club had undertaken rebuilding of a few greens prior to this, using the more conventional technique of removing everything that was there and replacing it with a USGA style construction. This novel approach clearly reduced the time and cost involved in resurfacing, utilising the decent stone carpet from the original construction and merely replaced the immediate growing medium - and it proved most successful.

Inspired by the results from the practice green, Hans was to astound everyone with his next audacious move. Fortunately, I was there to record the event when he brought a Koro Fieldtopmaker onto site and started stripping the turf and 50-60mm of thatch and rootzone from greens on the golf course!

This was a much quicker and cleaner operation than the process used for the practice green, but it still made the jaw drop! Before you decide on this course of action please note that they have 27 holes at Furesø so can afford to take a few out of play at a time. Even so, this treatment takes some courage.

Once the cleared surface had been cleaned up to remove any residual thatch the machine had missed, fresh rootzone was to be introduced and the new surface sown with fescue. Just another day in the life of a Danish greenkeeper.



The contrasting sward with dense fescue domination at Falster, reclaimed from *Poa annua*, to the left, and a more open bent/*Poa* sward in deep shade, to the right



BRINGING HOME THE BACON

The expansion in the number who are trying to change species composition from unsustainable swards to sustainable ones based on fescue and browntop bent to over 70 clubs in an organised way is, perhaps, the most encouraging aspect of what is happening in Denmark. 'Seeing is believing' and the potential to utilise sites as case histories to benchmark what can be achieved has to be a major promotional tool in encouraging others from far a field, beyond Denmark and, indeed, beyond northern Europe to adopt a similar approach.

The autumn of 2004 saw groups of greenkeepers and officials from Sweden and the Netherlands visit courses in Denmark. There was universal acclaim for the quality of the turf seen and the sustainability of the management required. All of this certainly applies to the UK and it would be good to think that we could apply the techniques developed by the Danes to restore fescues and bents to the greens of many courses here, which have lost them at some point in the past through a combination of golfer demand and management strategies to meet those demands.

One could argue that fescues, in particular, have been the victim of technology - the availability of mowing equipment that can cut ever closer to match the demand for pace. Ever more sophisticated fertilisers which make it easy to apply the nitrogen. Automatic irrigation systems which enable the same for water and the safety net of fungicides that helps combat the disease often caused by such intensive maintenance and the grass species it encourages.

Reversing this trend is not all plain sailing. It demands full commitment from everyone at the club. It may be the Course Manager who implements the programme but without the support of the Committee and, probably more importantly, the membership, the chances of success are not good. It can take a number of years to see significant progress, generally three to five on courses in Denmark, but here the commitment level is 100%.

If you cannot gain the trust of the members and get this change in management included in a written course policy document then the uncertainty of the regularly changing Committee may prove difficult to work around. Before you discount trying to turn back to fescue consider the alternative.

The mesh of the fungicide safety net is being cut by EU regulations. Tighter controls on water quality and use are coming in through implementation of legislation such as the Water Act 2003, derived from the EU Water Framework Directive. Cost is becoming an increasingly important factor at many clubs, as

they have to tighten their belts in the face of greater competition for members and visitors. In the UK, we may currently have the tools to keep *Poa annua* greens but for how long? Surely, no one could argue they are a truly sustainable alternative to fescue or fescue/bent turf?

The R&A definition of the sustainable golf course is: "Optimising the playing quality of the golf course in harmony with the conservation of its natural environment under economically sound management." This will strike a chord with many greenkeepers, committeemen and golfers as we consider the future of golf and golf development at home and abroad. There is no doubt that the movement in Denmark towards chemically low input turf is wholly sustainable and a lesson to us here in the UK that sometimes you have to look back to move forward.

The results obtained in Denmark should provide inspiration to all who believe in traditional greenkeeping and we know there are plenty out there who just need the encouragement of working examples. Yes, we will have to change hearts and minds, educate the golfer and the rest... but when, potentially, the very future of golfing turf is at stake, heed the warnings and take positive action before it is too late.

The Danish Greenkeepers Association has produced a very good report on their activities. The R&A contributed funds towards its production and it is posted on www.randa.org.