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IAN DAIR, Assistant Director with the Nature Conservancy Council, writes of the Council’s aims for golf course ecological preservation, essentially as a primer to the introduction of their new Greenkeepers Conservation Management Plan...

Golf is booming. It used to be something for the privileged few (Scotland excepted). Now, millions take part in the sport and many millions more wish they could. Golf is big business and is already a major land user with the 1,800 or so courses in Great Britain covering around 100,000 hectares. If the R & A’s predictions on the need for more courses are fulfilled there could be another 700 courses in England and Wales alone covering another 40,000 hectares.

If it hasn’t done so already, golf has to grow up very quickly to meet this new status. It must be aware of its position in the world at large. That it is doing so, and very well, is expressed in the initiatives which the Royal and Ancient’s Greenkeeping Panel have taken in issuing their two discussion documents 'The Way Forward' and 'The Demand for Golf'. 'The Way Forward' recognises in particular that 'when managing the land on which golf is played we must ensure that greenkeeping practices are beyond reproach from the rest of the community. The conservation lobby grows annually in strength and a little planning now may save a lot of trouble in 10/15 years time'. My organisation, the Nature Conservancy Council, is part of the conservation lobby – the reasoned and responsible part, given that any lobby will have this part and the other (no less useful in its way) with a more than single-minded devotion to the cause. To quote again from 'The Way Forward' – 'it must therefore be in the interest of course management – and the game – to form a proper working relationship with the NCC, in order that future plans work to the benefit of both parties. And, again, to publicise the part that Golf Clubs...  

Continued on Page 19

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Seeds and Turf

play in responsibly conserving wildlife for the benefit of the whole community. A nature conservationist, whether reasoned or rabid, couldn’t put it better.

So, what has the Nature Conservancy Council done to respond to this overture from the R & A? A lot, is the answer – but hand in glove with the R & A, the National Golf Unions and your own association, BIGGA. Our aim in so doing has been to encourage the golf world to manage its land and its activities with nature conservation, or its recreation, in mind: to assist the golf world to do this: and to achieve both these aims with a minimum call on the NCC itself since, as a Government agency, we are kept on a very tight rein by the Treasury.

How could we help the golf world to keep golf green? I happen to be the chairman of my Golf Club and Mike Schofield, the colleague who worked with me on our nature conservation and golf course project, is a keen golfer himself. So we knew that whatever we did had to be acceptable to the golf world and to the people who control what happens on golf courses i.e. the captain, the chairman of green and, most importantly, the greenkeepers. So we asked them what they wanted, consulted them over what we were producing and gained their support and commitment throughout. The result has been a book ‘On Course Conservation – Managing Golf’s Natural Heritage’. This was sponsored and fully endorsed by the R & A and launched by Michael Bonallack at the ETME Conference in Harrogate in January 1990. It was distributed free to every club in Great Britain. We are following this up with an example of a conservation management plan for your course which the greenkeeper can complete.

This is what the NCC and the golf authorities are doing. But what can you as a greenkeeper do to manage your course for conservation? Well, first of all get hold of the book from the captain or secretary. Look out for the training courses on conservation management which BIGGA conduct regularly. But, most of all, think of yourself not just as a golf greenkeeper but as a conservation manager for your course. I never cease to be impressed by the general conservation knowledge, and the specific knowledge of their own course, which comes across whenever I talk to greenkeepers. I feel confident that in looking after wildlife you are looking after the interest of the golfers who use your course, that course itself and golf in general. Michael Bonallack put this eloquently, ‘In these times when so many species of plants and animals are endangered by so called progress it is good to think that golf has a tremendous opportunity to reverse this trend’.

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**General points for turf on the golf course**

1. **Management:** To get greens into play in the shortest time choose turf which has been intensively maintained at a relatively low cutting height in the turf grower’s nursery.
2. **Disease:** Should disease affect a turf containing a mixture of grasses it is likely that one of the grasses will be less susceptible and will fill in gaps created by the death of its companion grass. A single species turf (pure bent or pure fescue) cannot do this.
3. **Weeds:** All cultivated turf should be free of both broad-leaved weeds and weed grasses, particularly annual meadow grass.
4. **Soil Type:** Most new golf greens are constructed with a sand/soil rootzone mix. In terms of natural soil this most closely approximates to “loamy sand” or “sandy loam”. A turf supplier should be able to provide information.
5. **Samples:** The best way to choose turf if you are at all unsure is to inspect the field from which your order is to come, or to obtain a representative sample as close as possible to harvest date. Any reputable turf grower will welcome the opportunity to show you his fields.
6. **Price:** It is expensive to produce a good quality turf. If you are offered turf at a cheap price be very wary and find out what has reduced the price. As with many products, you get what you pay for.
7. **Independent Advice:** There are many so-called advisers jumping on the golf course bandwagon. Use only qualified agronomists for advice.

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Search is on for the 'ideal' seed mixture...

In theory, the use of seed gives the user the widest choice of species and cultivars, and it should be possible to pick and choose the best for each particular situation. In practice, however, the constructor tends to choose from the ranges of proprietary mixtures offered by the major seed houses. In devising their mixtures the seedsmen inevitably have to compromise between availability and price. Some desirable cultivars are effectively exclusive to a seedsman and so the 'ideal' seed mixture remains hypothetical. Even so, the annual STRI seed guide enables an objective comparison to be made.

Given time, seed can give a first class surface. It does not introduce any undesired soil types to the course and is by far the cheapest method. Unfortunately in the British climate, seed is significantly slower than turf. The use of turf speeds up the establishment time of greens - the most crucial part of the course - and it is here that turfing is becoming the conventional way of quickly obtaining an established putting surface.

Good cultivated turf is purpose-grown from different seed mixtures by suppliers who have an established reputation and should be mature, uniformly cut, weed-free and available year round. Choosing the most appropriate is the key to success. From a practical view there is less risk involved in creating a new green from turf, for seeded greens are notoriously subject to adverse weather conditions and weed invasion. Indeed there are many who in going for the immediate saving which seed
Turf provides less risk, takes less time

brings have found that they have had to pay for seed and turf as well, together with suffering delays.

**Turf for Golf Greens**

By far the most common grass to spoil the uniformity of the green is annual meadow grass (Poa annua). This weed grass has a faster growth speed than most other grasses and, if present in conditions which suit it, may take over the whole green. It is susceptible to diseases and has poor colour in drought and winter.

**Fescue/Bent Turf**


The normal turf used on North European golf greens consists of fine-leaved fescues (Chewings and/or slender creeping red fescue) and bent top bent and is the surface recommended by the R & A and the STRI.

The traditional seed mixture for greens turf is 80% Chewings fescue: 20% bent top bent, which should yield a turf containing a good balance of these species. The ideal green should contain both fescue and bent but the proportions will depend on prevailing site and management conditions.

Current high levels of play, coupled with inadequate green drainage, have led many fescue / bent greens to deteriorate to the extent that they now consist mainly of Poa annua with some bent. Good construction and management will avoid this happening, but if not cared for the fescue is the first to go.

When buying fescue / bent turf look for an assurance from the supplier that their turf is free from Poa.

**Cumberland or Sea-Washed Turf**

Harvested mainly from the Solway Firth sea marshes, sea-washed turf consists mainly of native fine-leaved fescue with little, if any, bentgrass and the soil is silty. The fine particle size of this soil inhibits drainage and may lead to compaction and surface water retention. As well as badly drained greens, this in turn leads to Poa invasion once out of the salty environment. It is virtually impossible to keep this turf pure on an inland course.

**Pure Fescue Cultivated Turf**

This is a recent version of sea-washed turf. Using seeds of cultivars of fine-leaved fescues, it can be grown on soils other than those of estuaries. Pure fescue turf is very fine-leaved and can look impressive to the uninitiated on first inspection.

**Pure Bent Turf**

In the USA and on American influenced courses in Europe, creeping bentgrass (usually Penncross), is the accepted grass for golf greens. Its use in this country is controversial. It is usually established from seed though a very small amount is being grown for turf. Creeping bentgrass greens need a different management approach from conventional fescue/bent greens because they spread by the production of above-ground stolon (creeping stems). This essentially means more frequent verticutting than on fescue/bent turf.