ON COURSE FOR QUALITY
An Ecological Concern

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GOLF is the fastest growing sport of today, indeed the demand far exceeds supply and the waiting list for membership is growing longer and longer. It is the urban expansion, the increase in leisure time due to redundancy and retirement from work that now calls the tune to open up the course, to destroy the character, the natural and the national heritage at the expense of the wildlife and the landscape character.

Many clubs are looking towards course expansion by opening up the fairways and manicuring all areas in an effort to achieve a faster throughput of traffic. Unfortunately, what is gained through increased throughput can result in a significant loss in course quality.

It must be remembered that the injudicious increase of throughput gained may be counter-productive in the longer term. The widening of fairways or the increasing desire towards Americanisation will cause an increased workload on the greenstaff and will result in the degradation of the course in view of its wildlife and landscape potential. There is a limit to the carrying capacity of any course.

Over-loading the greens, tees and fairways can only increase the agronomic problems of disease, wear and compaction that were amplified by the summer drought of 1989, all of which will do little to improve the throughput, but would certainly reduce the challenge and the integrity of the course.

It is the course quality that this paper seeks to address.

Contributory Factors to Course Quality

(a) Increasing Throughput of Golf

Many greenkeepers have commented to me that they spend so much time manicuring the semi-rough and rough that the priority areas struggle in the competition for maximum attention. The semi-rough and rough, particularly on many parkland courses, is mown to 1/2 inch (13 mm), the same height as on fairways. This reduces the amount of time that the greenkeeper can spend improving or maintaining the quality of the greens.

Opening up the course will certainly accommodate a greater year-round flux of traffic. However, as we found in the drought of 1989, without concentrated attention to greens and tees the course will quickly lose its turf cover and become seriously compacted. The drainage would become severely impeded to the overall detriment of the course quality.

(b) The Use of Natural Features

The above are representative of problems arising from opening up the course. Course quality should, however, also incorporate the natural heritage, and its part played in terms of Britain's landscape history. Many of the courses of today are the descendants of late 14th and 15th century landscapes that were typical of dune or upland heath environments. The early golf architects used the existing natural features to build and construct courses around nature.

They enveloped natural features into their design and sought not to destroy them when they provided either an obstacle or hazard. Such natural features are an important part of the British golf heritage. To quote H.S. Colt (Book of Links 1912) "The only way to make attractive land provide satisfactory golf was to work in all the natural features, and not develop them more than was essential, but use them to create courses of their own character."

(c) Existing Flora and Fauna

Innumerable individual courses of today represent ancient habitats. The links and dune systems being probably the more obvious. However, many parkland courses consist of acidic heath or ancient grassland environments. A course at Doncaster, South Yorkshire, the Town Moor course, is a local authority owned course and has been historically documented in terms of its changing botanical flora. In the past, it was a principle site of the autumn gentian ***(Gentianella amarella),*** today it is a last stronghold of the rare dwarf and western gorse ***(Ulex galii and minor)*** and the rare petty whin ***(Genista anglica).*** These exist primarily as a consequence of its unchanged past. Many courses are set upon species-rich sites and have the potential to recreate the past habitat.

(d) Aesthetic Qualities

Course quality must also incorporate the natural beauty in terms of the visual qualities and the feeling of isolation between each fairway, and the restfulness and the tranquillity of the surroundings. With the above in mind, the description of several parkland courses can best be summed up by two adjectives, flat and artificial. Flat, together with the artificial, occasional trees that stand as isolated sentinels, certainly present a limit to our powers of exhilaration and enjoyment.

Improvement of Course Quality

(a) Areas to Consider.

There are many ways in which course quality can be improved upon. Golf need not be the selfish user of land that it is often criticised as being.

The semi-rough and rough provide an excellent opportunity for development in terms of the wildlife that they come to attract. A careful programme fitted to suit the individual requirements of the course would be rewarding in terms of its aesthetic appeal. It would present variations to the course, give definition and gradation, thereby making the course overall more attractive. Areas left on the golf course provide vital pockets or islands which are becoming increasingly valuable as natural land is being taken for domestic or industrial development. These habitats being under the preserve of the golf course are therefore becoming especially important. They can, given correct management (which is only required very infrequently), support a wealth of birds, mammals, plants and insects.

(i) The rough

The rough areas, when graded, zoned and maintained, need not severely affect the throughput of traffic, they require less maintenance than the fairways and give definition to the course. Also included within the rough are the boundary perimeters, out of bounds hillsides or just corners of land that are often a source of neglect. The definition of the rough can be extended to include several areas on the course, all of which represent principle habitat types. These include short/long grass areas, individual trees and bushes, thickets, woodland, hedges, lakes, streams, ponds and ditches. All are found within the relatively small, confined areas of the golf course.

The roughs representing fairway divides on many parkland courses need not severely affect the throughput of traffic given correct maintenance. The British fairway should represent a hazard, from which a bad shot should be penalised with a bad lie. Zonation or grading the rough is a positive step to creating a workable hazard for the golfer and will provide a wildlife shelter area, as well as giving definition to the fairway. These areas would benefit from the introduction of wild meadow flower species which, in turn, will attract a wide range of animals for whom the area will provide food and shelter.

The creation of such an area would require infrequent attention, allowing the greenstaff time to carry out improvements and maintenance on the greens and tees. Mowing of the rough would be modified to suit the life cycle of the flowers so that they establish to become an integral component of the sward. Mowing may be adopted in July/August only. The hay is removed to prevent nutrient build up and avoid the increase in build up of debris which hinders ball hunting. The planting scheme would be such to discourage rank (tall) grass dominance which would make the finding of lost balls much easier and certainly more pleasant.

(ii) Boundary perimeters, out of bounds hillsides, neglected corners

All around the golf course perimeters the land is being destroyed or modified. The habitat loss directly affects Britain's natural history. Pressures now on the golf courses are not only to provide the golfer with a source of enjoyment and pastime, but it must also provide sanctuary to the wildlife that is increasingly under threat due to the continued urban expansion.

Conclusion

Conservation on the golf course seeks to make use of the natural resources sensibly. Habitat creation is an integral part. Careful management and sensible advice can enhance and provide variety, and thus increase the wildlife potential of the course. It is on the newer courses that creative land management and conservation is particularly great. The only way forward is the development of new courses and the retention of the existing at a standard which now exists (see D.White's editorial article in Greenkeeping Management, August 1989).

The Sports Turf Research Institute at Bingley has over 60 years experience in golf course maintenance. It is now expanding its services and is able to offer clubs advice on any aspect of ecological management or conservation. The Institute is able to offer clubs ecological assessments, woodland planting and management programmes, advice on the various grant aid schemes available, and an advisory service for on course ecological management.