

Dr Roger Bennett gives a taste of what his major study on golf and its environmental impact uncovered...

A positive **be**

Between 1992 and 1997 I undertook a major and comprehensive research programme looking at golf and environmental impact.

The study focused on the issues concerned with the amenity and environmental impact of golf development in England and Wales. The study has been widely acknowledged by the Industry (in its broadest sense) as being the best independent study of its type and one that addressed the real environmental issues and giving clear guidance on the way forward.

In short, the study assessed the impact upon a number of different environment types against the type and nature of applications for golf development that were received by Local Planning Authorities (LPAs) during the boom years of golf development in England and Wales (1988 - 1992).

The study also concerned itself with the effectiveness of the LPAs planning framework in terms of its preparation in dealing with an unprecedented number of golf development applications they received between the late 1980s and early 1990s. It also took account of the wider environmental implications of golf development including post-construction management practices.

In particular, the study looked at the effectiveness of landscape impact assessments and whether they fostered and safeguarded the interests of the public. While the focus of the study was on England and Wales it drew on many of the developmental experience of Europe in terms of golf development and the wider environment.

Clearly, many of the environmental issues surrounding course development in particular are often seen as the core issues in the context of world-wide course development. To this end the conclusions and recommendations coming out of the study could, albeit in wider context, be of

value to those individuals and/or organisations directly or indirectly concerned with golf on a world-wide scale.

The study was undertaken at a time of agricultural decline against an almost unprecedented interest in the development of the game in England and Wales. Farmers and landowners who were looking to move out of farming for economic reasons saw golf development as a means to an end, whether it be in terms of self build projects or selling off surplus agricultural land to speculators and/or developers. This in turn raised the profile of golf development and alerted a whole range of groups, associations and individuals to the potential damage a course development might inflict on the wider environment.

Many environmental, wildlife and countryside groups believed the scale of golf development in England and Wales would, on the face of it, pose serious environmental and conservation problems. The study took these issues into account and examined them thoroughly within the research period.

In short, the study at its conclusion did not wholly support the opponents of golf development in their perceptions that development by its very nature was alien to a landscape and caused adverse damage.

While inevitably some mistakes on the part of developers were made in the design construction and post-construction management phases of development, on the whole development in environmental terms during the boom period was not as damaging as the protagonists would have us believe and in many cases the reverse is true.

There is little doubt that golf development irrespective of land environment types does have significant potential to actually increase and enhance the environmental benefit.

Clearly site location, design, con-

struction and post-construction management are major success indicators in terms of the potential of courses in the wider amenity and environmental sense. I have little doubt that if the developer can fully understand the wider issues relating to the environment and the wider community that golf courses can have a positive role to play in conservation in its broadest sense and in fostering good landscape management.

Early dialogue between developer and those that for one reason or another oppose development and the Planning Authorities is crucial if the benefits of development are to come to fruition. One should also consider the golfer, here there has to be a constant need to balance the needs of the golfer with those of the environment in order to fulfil mutual benefit for all those parties involved in development particularly where it affects or is likely to impinge upon our natural and cultural heritage.

The study has a wide range of conclusions and recommendations. Many of the recommendations collectively imply a need for a standard approach in the preparation, submission and judgment of a golf development application. However, the likely impracticalities and associated problems of implementing the process may be difficult, at least in the short term.

Providing LPAs and those other interested parties with clear guidance is key to how to deal with golf development applications in the future. The dissemination of guidance is equally important and techniques and/or methodologies for this should be considered no less important, not least of which in the area of course management.

In my view, course management represents probably the most single important factor in terms of future environmental impact and while

Benefit

good design and construction can lay the foundations full environmental benefit will only be maximised through well thought out and considered management strategies. Courses should have well developed strategic plans which take account of forthcoming years (the strategic plan), and strategic plans need to be underpinned by annual plans (operational plans). At the heart of these plans should be the amenity, environmental and community issues.

By far the most important and significant findings of the study concerned the following issues all of which relate to the amenity and environmental impact of course development:

Planning

- the use of landscape appraisals
- the use of environmental assessments
- the use of ecological appraisals and/or others

Design and Construction

- design quality needs to improve
- design and construction needs to take account of land reversibility
- planning authorities need to work more closely with professional associations representative of golf development and the opponents of golf in order to foster "best practice"
- simpler design and construction methodologies are the future many designers and course constructors would benefit from increased training opportunities relating to environmental issues/concepts

Ecological Conservation

A course's ecological conservation potential will only be maximised through early planning.

Design integration is crucial to the future ecological success of a site. Comprehensive management strategies are needed alongside visionary expectations Course Managers and Greens' Committees need to be envi-

ronmentally aware.

Landscape Enhancement

- many designers and constructors/developers are still not appreciative of this concept. There is a real need to develop and promote perhaps world-wide "good practice".
- a need to develop an ethos that promotes simple design and build practices which take account of the wider landscape. For example, the promotion of green bunkers and florally rich fairway margins and roughs are important visual and ecological features.

Historic and Other Designated Landscapes

There is still a perception held by the golf protagonists that all golf development on such landscapes is harmful this study has clearly shown that golf development can live in harmony with historic and designated landscapes and that mutual benefit can be achieved.

Management

Evidence gathered as part of the research into course management practices suggested that many established courses and a high percentage of newly developed courses had and/or were not managing their courses specifically in the interests of conservation. However, there is strong evidence coming out of the industry as a whole that management practices are beginning to make an impact at operational level in particular.

Restricting the number of rounds per annum (reduces impact on wear and tear), the adoption of organic management techniques where possible and a commitment to the other improvements and protection of habitats within the site can individually but better collectively reduce the course impact upon a particular environment type.

Without clear management strategies the landscape and its natural

resources could fall into disrepair and as Pearce, Markandya and Barbier put it: 'the resource is extinguished or irreparably damaged (source: Blueprint for a Green Economy 1994).

If courses are fully to maximise their conservation potential then strategic management plans which have to be visionary and innovative are needed particularly as one has to bear in mind the many different interpretations that are used when considering conservation. As North reminds us: "Conservation in the modern world is riven with contradictions". Management strategies also have to be broad enough to implement site enhancement opportunities which if successful will undoubtedly make a valuable contribution to the wider environment.

Social and economic criteria also have a role to play if a course is to be managed successfully.

Just as farmers and landowners are seen to be the custodians of the countryside those that own or manage a course could, albeit informally, take on a similar role (a kind of amenity and environmental stewardship).

- this study has shown that this is an area that needs considerable improvement if the potential courses undoubtedly have are to be realised. It is an area that is extremely important if golf is to break down the barriers that many individuals/organisations have relating to its environmental image.
- "best management" practice holds the key management strategies often under-developed.

Water Resources

- too many water features on courses, unless they are tied to sources of on-course irrigation their use and development as features should be considered against a wider environmental background
- a greater need to use and develop

further those grass sward species that have drought tolerance characteristics.

I have only touched on the overall findings of the study in this article, but clearly I have more substantial research data on the above items and more. One issue that became crystal clear during the study relates to independent guidance. Without question this is an important factor in terms of establishing a way forward. As this study was entirely based upon independent foundations it does provide through its conclusions and recommendations guidance that is wholly independent (inclusive of future trends).

Many of the issues surrounding golf development in terms of amenity and environmental impact need to be considered against independent guidance and where it exists "best practice". To this end I am happy for individuals and/or organisations to contact me and I would be particularly interested in helping those individuals, groups and/or associations who believe as I do that golf course development can if the right pathway is steered benefit the wider environment rather than harm it.

For information, I have a particular interest in the management of courses particularly at strategic level and an interest in the planning and wider community potential of golf development.

Dr Roger Bennett M.Hort.
(RHS), M.A., D.Phil., F.I. Hort. is
Principal of Askham Bryan
College, Askham Bryan, York,
YO2 3PR, England. Tel: 01904
772202.

Askham Bryan College has a strong golf studies curriculum and has a national reputation for the delivery of golf education from craft level programmes to degree level programmes.