

# Using TREES not losing them

by MICHAEL HONEY

**T**elevision viewers who witnessed Nick Faldo win the European Open last September were privileged to watch an excellent display of golf played in an idyllic woodland setting. Despite weather that was not always conducive to exhibiting the course at its best, Sunningdale did not disappoint traditionalists who prefer to see golf played in a landscape with natural aesthetic appeal. Established championship courses such as Sunningdale were designed and built in an era when optimum heathland locations were still available. Time is also on their side; their many years of existence has enabled them to develop an established tree cover and to blend in with their environments. Despite these advantages the positive image they portray of golf as a rural land user should not be ignored by those wishing to develop new courses.

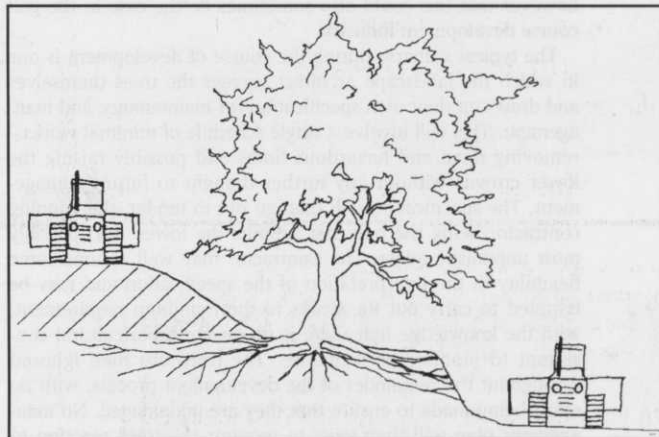
Similarly other established courses on heath, forest and park landscapes should, like Sunningdale, be aware of the responsibility of caring for and the problems involved in maintaining such treescapes.

The building of new golf courses poses a potentially greater challenge for modern golf course developers and architects, with a whole range of political economic and environmental problems to consider. Golf has become a political issue as a result of the pressure on rural land for the development of new courses. This pressure has developed through lower land prices, lower economic returns for farming and a demand for golf that has been quantified as a need for 700 new courses by the year 2000.

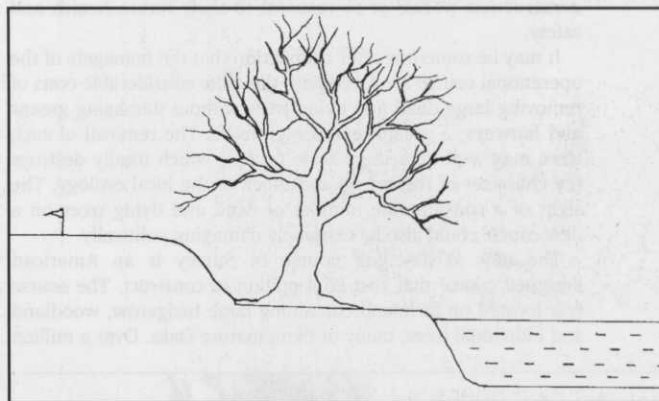
The response to these market conditions has been a subject of public debate covered extensively by the media as the rush by developers, farmers and land owners to cash in on the golf boom has led to many ill conceived projects, some of which were little more than money making speculations. Many such schemes never gained planning permission, but the damage may have already been done in terms of bad publicity for the golf industry. The opposition view of golf as an artificially imposed and selfish land use began to take credence in the public mind.

There is no doubt that although some excellent courses have been built in recent years, mistakes have been made both economically and environmentally. The recession of the 1990s has not left the golf industry unscathed and it has become evident that many of the more extravagant and ostentatious developments judged the market incorrectly. Smaller, lower cost and lower impact schemes, not aimed at Britain's limited market of millionaires, have proved considerably more resistant to recession. The damage done by some of these over ambitious schemes is not just a loss of financial confidence. Many of the projects had little thought for the environment as they imposed their grandiose schemes upon the landscape.

These developments, often American in design, ripped through the countryside like green motorways, often shifting



Soil heaped on one side of a mature tree causes compaction of the root system. Excavation to create a lake on the other side of the tree causes root severance and changes in water content of the soil, results in the death of the tree after two or three years



motorway quantities of soil in the process. Their construction involved radically altering the relief: lakes and ponds were excavated and trees were felled, isolated or bullied into the new design, which on completion bore little resemblance to what had existed before and indeed exists around the course.

Most new golf courses are set in rural landscapes that contain a large number of trees. These trees are crucial to the character and form of that landscape and should therefore be used to help define the character of the new course. On a landscape of bland topography, existing trees with new plantings can be used to provide depth, direction and interest. Trees can separate tees, greens and fairways, whilst individual trees can break up the monotony of a particular fairway. The treescapes can therefore give the hole and course its identity without resorting to man made hills and lakes: as golf course consultant Jim Arthur argued recently, golf is not a watersport.

# TREES

35 ➔ By carefully implementing a landscape of trees into the design, rather than destroying them, the course can develop and benefit the local environment. Obviously ideal heathland locations are now in short supply and some alteration of sites that exist may well be necessary, however a sympathetic approach to the surrounding landscape is still possible. This can be best achieved by recognising the value of the existing tree cover and commissioning expert advice on tree care and maintenance.

An arboricultural consultant should therefore be brought in at the beginning of a golf development process to work with the team designing a new course and should remain with the project through to its completion and beyond. All too often the existing trees on site are left entirely in the care of the landscape architect. Few are qualified arborists and they rarely have the budget commitment or knowledge needed to formulate a proper long term management plan for existing trees. Without the advice of an arboricultural consultant, large scale earth moving may well change soil and water levels around trees, damage roots or cause compaction and alter drainage, all of which can condemn trees to death.

Such tree damage is still widespread in the construction industry, whether it be the building of new houses or office, commercial and infrastructure development. Despite the efforts of arborists it is well known that trees may still be a long way down the list of priorities of certain developers, it is inexcusable however that this could also sometimes be the case in the golf course development industry.

The typical scenario during the course of development is one in which the landscape architect surveys the trees themselves and draws up their own specification for maintenance and management. This will involve a single schedule of minimal works – removing dead and hazardous limbs and possibly raising the lower crowns without any further thought to future management. The specification will then go out to tender, the winning contractor being the one that submits the lowest and possibly most unrealistic quote. The Contractor may well assume some flexibility in the interpretation of the specification and may be tempted to carry out the works to the minimum requirement; with the knowledge that there is no on-site arboricultural consultant to monitor performance. The trees are then ignored throughout the remainder of the development process, with no effort being made to ensure that they are undamaged. No management plan will then exist to monitor the trees reaction to construction works, or to respond to their future health and safety.

It may be sometime after completion that the managers of the operational course are faced with the quite considerable costs of removing large dead and dying trees without damaging greens and fairways; a greenkeeper's nightmare. The removal of such trees may well be a large scale process which totally destroys the character of the course and much of the local ecology. The sight of a considerable number of dead and dying trees on a new course could also be extremely damaging politically.

The new Wisley golf course in Surrey is an American designed course that cost £5.4 million to construct. The course was located on farmland containing large hedgerow, woodland and individual trees, many of them mature Oaks. Over a million

cubic metres of soil was shifted and nine lakes were created. A high priority was attached to integrating the landscape with the surrounding countryside. Planting was extensive and most of the existing trees on site were retained, the aim being to enhance the wildlife and ecological value of the area. The course has now been open for nearly a year and already there are conspicuous groups of dead and dying mature Oaks and other large individual specimens which are clearly in a state of terminal decline. The general ecological and environmental motives of the developers cannot be doubted, but what must be questioned is the actual level of expertise and financial commitment devoted to the most valuable assets of the landscape. Such tree failures highlight the difficulty of integrating existing tree cover with large scale changes in relief and drainage without an enormous amount of effort, money and expertise.

An arboricultural consultant would assist in implementing any golf course development scheme whilst minimising damage to the valuable tree cover or causing long term tree problems. Just as important, however, will be the consultants recommendations concerning the long term management of the tree population. Such recommendations can save money and avoid expensive crisis management: neglected trees that are damaged by storms may require costly removal or expensive remedial works.

The same principle applies to established courses, where storm damaged neglected trees may require expensive restoration works. Such neglected trees may also require dramatic remedial surgery because they have gradually become hazardous or totally unsuitable for their location.

Trees are not static entities, but dynamic living growing organisms and as such can constantly change the golfing characteristics of each hole. The sudden realisation that a tree or trees is blocking the fairway or severely encroaching upon the green may necessitate drastic pruning or even tree removal. Any such drastic remedial action imposes a severe and sudden strain on administration budgets, but will also be a strain for the tree – possibly sending it into a state to decline. An arboricultural consultant will formulate an on-going management plan that would keep each pruning operation to the minimum and this will be achieved by schedules over a number of years, allowing the tree to adjust gradually. This is healthier for the tree and allows the golf course manager to budget for tree works more carefully, spending a smaller amount of money over a defined period of time.

Trees around greens may cause shade related problems to the greens themselves. Diseases such as Fusarium Patch will often thrive in a shaded moist environment with poor air flow. Moisture control to avoid humid surface conditions will help prevent disease attacks such as Fusarium patch. Rather than trying to cure the problem by chemical means, which will invariably produce a resistance to the treatment from the disease within the green, better long term results may be obtained by altering the surface environment. On a well wooded course with heavy tree cover around diseased greens an arboricultural consultant can best advise how to increase aeration and reduce shade and moisture. This may involve removing less valuable and suppressed trees, whilst carefully thinning and reducing the remaining specimens.

With the estimated loss of over forty million trees in recent years through storms and disease, leaving a severely reduced national tree cover, many arborists believe that we are facing a tree crisis in Britain. This has led to a move towards closer involvement with the golf leisure industry as custodians of a large percentage of national tree cover. Trees are both valuable assets to the nation and an essential part of the form and characteristic of most golf courses. The golf industry could therefore become an integral part of the national tree policy, enhancing the industry's image as a legitimate user of rural land. This, however, requires the commitment to work closely with arborists in the design and development stage of course construction. Such involvement should lead to courses being designed to integrate with the landscape and its trees rather than impose design upon them. The involvement would also lead to a proper long term management approach to the care of golf course trees.

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Stocker tree spade in action on Foto Island.

Picture: Ruskins Tree Moving Ltd.

