

Trees and woodland often form an important component of the golf course landscape, and here consultant Antony Strawson outlines their benefits and management implications

PLAN for success

Trees can improve the playing aspects of the game, providing three-dimensional obstacles, back drops to greens and show direction of holes and generally create an attractive playing environment. They provide shelter and security for members and visitors (not to mention the grounds staff themselves) and also provide important habitats for a wide range of plant and animal species often within very urbanised areas. If managed correctly, trees can enhance the visual appeal and the aesthetics of the course while providing a multitude of different benefits.

But while extolling the virtues of the humble tree, one must also consider some of their less attractive qualities. With their prolific rooting, trees are often the culprits of blocked drains. They can cast shade onto tees and greens, stealing important moisture and nutrients, leaving only fallen branches and dense carpets of leaves in return. They can encroach onto the fairway, reducing the playing area to the detriment of all. Trees are in effect seen by many as three-dimensional liabilities.

Below: New tree planting showing the weed free spot around each tree



But through careful management, trees and woodlands can provide these multi benefits with minimum disruption to the game itself. The cornerstone of successful management is the formulation of a comprehensive and detailed management plan which is practical and guides the course managers on how to manage their tree resource over a long period of time. This is very important as managers and committees change.

The Plan

The plan should be produced with the help of specialist advice. There is always temptation, especially when finances are limited, to avoid what is often seen as unnecessary expenditure. However the investment in expert advice from the outset can prevent costly mistakes and ensure the club's objectives are met.

A consultant can help lead the club through the minefield of grant applications and timber sales, securing additional income wherever possible. The provision of unbiased advice can often help the management committee make important and often difficult decisions regarding the long-term management of the trees. Consultants can also add weight to planning applications and help smooth the ruffled feathers of unhappy neighbours.

The formulation of a management plan primarily involves a thorough examination of all the trees and woodland on the course. Each individual tree and woodland block should be examined and information on species, age, condition and location recorded. The tree resource should then be evaluated in terms of its capacity to meet the long-term objectives of the club. It should seek to provide overall management advice and pre-

scriptions, for all trees and woodland areas, both existing and proposed.

In summary, management plans should:

- Involve a degree of professional input
- Set out the long term vision for the tree resource, both existing and proposed
- Contain guidance for the design of new planting
- Involve both the long term management aims and short term work programme
- Be comprehensive, practical and achievable
- Prioritise management
- Seek to maximise potential income from grants and timber sales
- Manage expenditure, utilising existing resources

Existing Trees

However where resources and funds are limited, the plan should seek to prioritise projects. The treatment of dead, dying or dangerous trees, where people are at risk, should be seen as of paramount importance. In the increasingly litigious world, a proactive approach to risk management and reduction can never be overstated.

Management prescriptions should seek the avoidance of large scale, high impact operations. The temptation to instantly 'fix' areas of concern should be avoided, and replaced with a desire for gradual improvement through evolution, maintaining the continuity of the golf course environment essential for the enjoyment of the members.

Attention should be focussed on key features within the playing landscape. Trees and copses of strategic value to the hole, as well as those of general aesthetic importance should be identified. A detailed assessment of their health and condition will often provide the necessary impetus



to begin thinking of ways in which the lives of such trees can be extended and replaced over time. As this process takes time, replacements have to be considered well in advance.

Under certain circumstances, the removal of unsuitable species, dangerous or badly damaged trees or trees encroaching into the field of play may be necessary. As the felling of trees is often a very emotive issue with members and committees, the opinions of those who will be affected need to be canvassed. A detailed plan provides an independent way forward.

New Planting

Where areas have been identified as suitable for the planting of new trees and shrubs, either to maintain important features, extend woodland or make better use of dead ground, careful attention should be paid to design and layout of the scheme. Tree planting designs should always seek to improve the natural beauty of the landscape, linking sin-



Above: The beauty of trees especially in the autumn

Below: A dogwood with its lovely red twigs provides welcome colour on the course in winter

gle trees and scattered areas of existing planting with natural curves and lines. Designs should mimic nature, forming the landscape into a more natural appearance.

The choice of species should reflect not just the objectives of the club. Species chosen should be suited to the site itself: the soil, climate, and aspect. Choice should also reflect resilience to damage both from players and golf ball damage and suitability within the landscape and the playing environment. Where nature conservation is important, trees which have been grown from locally produced seeds should be sourced. The use of mixtures of indigenous species will improve the naturalness of any planting scheme and if planted at a density of 1100 stems/ha or greater, will provide an immediate 'wooded effect', and could qualify for the payment of grant aid. However, individually planted specimen trees are required to replace those lovely single parkland trees often found on parkland and

designed landscape courses.

The size of plants chosen will be crucial. Experience has shown small bare rooted transplants between 60-90cm in height are more suitable to planting than large standards over 2m. Not only are these trees significantly cheaper to buy, plant and protect, but they also tend to suffer less mortality than their more expensive cousins. In addition, as the proportion of roots to shoots are more balanced, are more suitable to planting and offer significantly higher growth rates, often exceeding the height of the standard within a few years.

Each tree will require protection from mechanical, mammal and herbicide damage and often individual tree guards are appropriate on the golf course. The choice of shelter type is extremely varied with a multitude of different types and prices. The choice of guard should reflect the type of damage anticipated. As a general rule of thumb, tubes provide a better growing environment, are stronger

but more expensive and intrusive than spirals. A low level wooden frame is an excellent method of protecting specimen trees from lawn mower damage and we have used these to great effect at Dalmahoy.

Care and Attention

Of equal, if not greater importance is the aftercare of the newly planted trees. Within the plan, allowance should be made for their care for at least the first ten years after planting. Chemical weeding to remove weed competition from the base of each tree will be essential for at least the first three seasons, improving growth and reducing mortality considerably. However the benefit of a weed-free spot around each tree helps to keep both lawnmowers and golfers away from the trees and damage reduction. The control of weeds may need to be extended to where thistles, ragwort or other noxious weeds may begin to develop. This can be achieved through annual mowing or the application of a suitable herbi-





Above: In larger woodlands timber production provides some income

Left: Trees do grow old and, if not a risk, deadwood provides good roosting perches and is of high conservation value

Below: A recently thinned stand of beech

cide. The replacement of natural failures at the end of the first and second years will be required especially if the trees were planted under a grant scheme. Other operations will include the periodic maintenance of the tree guards to ensure they remain effective and are not restricting growth, the removal of bamboo canes where spiral guards have been used and pruning. Pruning young trees is an absolutely essential operation especially during the first few years because it is during this time that

these forks encourages trees to grow straight, because if left unchecked, could create mechanical weaknesses leading trees to split apart when they get older. Side branch pruning allows easy access into woodlands but you have to be careful not to turn every tree on the course into an unsightly 'lollypop' shaped tree.

Woodland Areas

Many courses are often bordered by or possess areas of existing woodland and mature trees. As they are often



located away from the fairways and if not directly affecting play, often receive little direct management, save for the periodic trimming of their edges and removal of fallen limbs from the fairway. These trees have often been around for centuries but such woods are often of key importance to the wider landscape, sheltering the course from the outside world, creating that essential feeling of escapism for the golfer.

By not managing your woodlands, you not only reduce the range of benefits which the trees can provide, but also run the risk of not ensuring landscape continuity. One only has to look back to the great storm of 1987 and Dutch Elm Disease in the 1970's to realise the risks of having stands of mature and single species trees, while we are unable to predict or avoid such devastating occurrences, their effects can be reduced by careful planning.

The creation of an uneven aged woodland, containing a diverse mix of species will be the key to longevity and resilience to factors outside the control of the course manager. Such a woodland will also be more beneficial to wildlife.

To create such a stand of trees, there is a range of management tools available to the manager. Thinning is the removal of the smaller, weaker, suppressed trees or unwanted species within a stand, leaving those of better form and greater stability to grow on to maturity. While removing around 20% of the trees, the actual

area of woodland is never reduced, as the remaining trees will eventually fill the spaces. What was once dense scrub can be transformed into an attractive managed woodland, for the benefit of the retained stand of trees. Selective felling is the removal of single trees or small groups, creating areas for replanting, natural regeneration or to allow existing, younger trees to develop.

The management of existing woodland does not necessarily involve large scale expensive remedial operations. Often the most appropriate method of management involves small scale, but regular work to achieve the objectives over a long period of time thus minimising disruption to both players and wildlife.

The management of trees is often secondary to the management of the greens, tees and fairways, as indeed it should be. After all, how often have you heard it said that: 'A game of golf spoils a nice walk in the woods!' But that said, trees usually play a crucial role on the course, and need to be maintained accordingly. A management plan will form the basis for the long-term maintenance and enhancement the golf course landscape. In an increasingly competitive industry, the beauty and quality of the course will become ever more important in retaining and attracting new members. Are your trees up to the task?

Antony Strawson is a Consultant with Eamonn Wall & Co the specialist golf course, tree planting and woodland management firm and is based at their English office in Retford. He can be contacted on 01777 7029390. www.eamonnwall.co.uk

Pruning Young Trees – this new leaflet just published by Eamonn Wall & Co is available free of charge by calling 01259 743212