The management of golf course boundaries is a frequent thorny subject for the Course Manager. Tree and Woodland Consultant Eamonn Wall has been advising golf courses for many years on the planning and planting of hedgerows which offer the golf course both screening and areas for wildlife conservation. He now outlines the benefits of careful planning.

Since the 1960s about one fifth of Britain’s 800,000 kilometres of hedges have been removed as farming became more extensive and fencing replaced hedgerows as they deteriorated. The impact of hedgerow removal on the appearance of the countryside aroused widespread criticism from a public largely ignorant of agricultural needs but attached to a traditional view of the landscape. Yet, in some parts of the country the network of hedges was planted in the 18th Century and so is quite recent. Other hedges are much older, and some can be traced back to Saxon times.

Hedges owe their existence to a number of utilitarian reasons, to contain stock, mark ownership of boundaries and to provide shelter for farm animals and game. Hedges have come to be regarded as a valuable part of our heritage and their importance for wildlife conservation is very high. As woodlands were removed from the countryside its wildlife still flourished on farmland in the small copses and hedgerows that remained. The mixture of shrub species and grassy verges associated with hedges provides ideal habitats for all kinds of wildlife from wild flowers to mammals and birds.

Hedges are often the only permanent vegetation on farmland, in contrast to fields which are regularly cropped and cleared. This stability helps to sustain wild plants and animals on farmland and provide conservation corridors linking small woodlands. Very old hedges can have an average of ten shrub species every 30 metres and in general an old hedge will have one species for every 100 years of its existence. Almost all the main groups of wildlife can be found in hedgerows including woodland birds for nesting, mammals and butterflies. Partridge is partly dependent on hedgerow bot-
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security and amenity, the provision of shelter for members, habitats for sporting and game cover and the prevention of trespassers onto the golf course.

As with all tree planting, the establishment of new hedgerows requires some careful planning in order to ensure success. Items to consider include soils, existing ground vegetation and general condition of ground along the proposed line, protection requirements from stock and/or mammalian pests (rabbits, hare, deer, voles) tree and shrub species growing locally and weeding requirements. After three to four years when the hedge plants are established the long term management will have to be considered.

Once you have decided upon the line of your proposed hedge it is important to establish the soil type to enable the correct choice of tree and shrub species. Also, the lines of many new hedgerows are often along old dykes and these surface stones need removal.

The choice of tree and shrub species will depend on the location and also on whether you would like to have a few taller trees to grow above the main hedge trees. Generally speaking hedges near farm buildings and houses are of beech and hedges out in the countryside are hawthorn dominated. Beech hedges are often planted pure whilst hawthorn hedges are usually planted in mixture with smaller quantities of blackthorn, hazel, holly, dogwood and dog rose. If the hedge is going to be allowed to grow tall, then some tree species such as rowan, cherry, crab apple, elm (for isolated areas in the West) can be included. Oak, ash, beech, birch, lime, chestnut are suitable as individual hedgerow trees. Native species are usually encouraged but one non-native to Scotland ideal for hedges is field maple common in English hedgerows.

Normal practice is to plant two staggered rows, 30cm between the rows and 30cm between the plants along the rows (7 plants/m). Minor species would be planted first in random groups occupying 1 to 2m and the main species say of hawthorn accounting for 75%-80% of the hedge would then be planted. When including some wild rose such as dog rose. These should be spaced along, the line in small groups of two or three plants. Traditionally one year old plants about 20-40cm in height were used but where weed competition will be strong two-year-old 40-60cm plants are usually preferable. Individual hedgerow trees should be 60-90cm in height to aid their growth and keep them above the general height of the hedge, often planted in guards for identification.

The best way to protect a hedge is to erect a stock fence on either side and where rabbits are a pest, attach rabbit proof mesh to the fence with the bottom 15cm turned out into the field and pegged down. However where stock are not an issue as on an arable unit, the hedge could be planted bare if no rabbit/hare pests exist or where they do, a simple temporary rabbit fence with posts at 10m spacing could be erected. Otherwise individual guards could be used, though often expensive, unsightly and require eventual removal.

Weed competition can kill young hedging plants or at the very least considerably slow growth rates. To achieve successful, cost effective establishment of hedges, weed control is essential. Many people begin to think about controlling weeds in the spring after the hedge has been planted but the correct time to decide on a control strategy is in the summer prior to planting.

Pre-planting control can serve two purposes. Firstly, removing thick weed growth especially dense grass swaths can make planting easier. Secondly, killing or removing weed cover will reduce competition during the early part of the first growing season. However this will depend on the location and also on whether you would like to have a few taller trees to grow above the main hedge trees. Generally speaking hedges near farm buildings and houses are of beech and hedges out in the countryside are hawthorn dominated.

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Post-planting control. Strimming or mowing weeds alongside a hedgeline can have little effect and may even be detrimental. Weeds not only compete above the ground for light but also below the ground for water and nutrients. Strimming weeds, especially grasses, may stimulate them to grow faster and compete more vigorously.

Physical methods of suppressing weeds such as mulch mats and bark chip mulch are generally very expensive. Mulch mats can often blow away on soft exposed sites and weeds may grow through the slits cut in the mat for the trees, necessitating some degree of chemical control. On certain sites plastic mulch mat in continuous rolls with the trees planted through can be successful but they usually require eventual removal and can harbour voles who strip bark off the hedge plants.

Herbicides approved for use on broadleaved trees and hedges cannot generally be applied directly over the young plants in the summer when they are in leaf so ideally an appropriate herbicide with residual action should be applied along the hedgeline in the winter. Each herbicide will have its own range of susceptible target weeds but the herbicides used most frequently for winter applications are:

- Kerb granules or Kerb flo (propyzamide). Provides effective control against a wide range of grasses.
- Stomp (pendimethalin). Controls a range of annual grasses and some broadleaved weeds including cleavers. Can be applied in a tank mix with Kerb flo.
- Flowable Atrazine (atrazine). Controls a range of grasses and some broadleaved weeds. However, Atrazine has doubtful environmental credentials and should never be applied near to water or where run off could occur. As with all chemicals take time to study its label.

During the first three to five growing seasons after planting further control may be required in the summer to deal with weed species not affected by the previous winter’s herbicide application or re-invading weeds. For the first two seasons after planting, there is little option but to apply Roundup to a strip along each side of the hedge taking care not to let the chemical come into contact with the hedging plants themselves. This may leave weeds such as thistles, nettles and willowherb in among the hedge and if these need to be removed the only option is to carefully pull them out by hand. However, once the hedging plants are 2-years-old they can be treated with an overall winter application of Caseron G granules (dichlobenil). The chemical is expensive but hawthorn and most other tree species are tolerant whilst a very wide range of weeds, including thistles and nettles, are killed. It does an excellent job.

The long term management of hedges depends on whether they are treated as shelterbelts and allowed to grow freely or as traditional tightly cut hedgerows. When the latter, it is recommended to cut in rotation every third year or longer so that there are flowers for the pollinators followed by berries and seeds for the birds. An 'A' shape is best for wildlife five to six feet high and eight foot through the bottom. Cutting should not take place during the nesting season (April - July).

Hedges thus provide many benefits and with careful planning their establishment can be fairly straightforward. New planting combined with the restoration of old hedgerows by coppicing or laying can greatly increase the amenity, wildlife and conservation value of a property. Happy planting this winter.

Eamonn Wall is a tree and woodland consultant and director with the nationwide tree planting and woodland management business of Eamonn Wall and Co. who specialise in the design and management of trees on golf courses. Tel: 01259 743212.

February 2001 Greenkeeper International
Kubota has donated to BIGGA's Education and Development Fund for the last 10 years and is well placed to see how that money has benefited the industry. Scott MacCallum met Deputy Managing Director Rene Orban in his Oxfordshire office.

A company knows it's got it made when one of its products becomes the market leader. It knows that it has really cracked it when the product name becomes the generic name for what it makes. One immediately thinks of Sellotape - it always sounded weird when Blue Peter presenters talked of "sticky tape" when making something amazing out of washing up bottles... or Squeegee bottles which was another generic name of its time.

We still talk of doing the hoovering although Mr Dyson may dream of us one day doing the Dysoning... Doesn't work does it?

In our industry you could make a strong case for Kubota being the generic name for the compact tractor.

"Take the Kubota and go and do ..." is a phrase that could be heard in many clubs and virtually everyone would know on which piece of kit to jump.

"As a company we don't offer a total package, our uniqueness is our speciality which we do play on and we are known for our compact tractor. We produce the top product in our field and in many areas it has become the generic name," said Kubota (UK) Deputy Managing Director, Rene Orban.

Rene admits, however, that the compact tractor market is now more congested than it once was.

"Two or three companies have joined the sector recently. It is quite a small market but I would imagine competitors have come in because they see scope for another brand or an area for them to diversify into. Perhaps it's because they want to take on Kubota," smiled Rene. You can be sure that Kubota welcomes the competition safe in the knowledge that they feel they have the products to cope.

"When we bring something out we know it is good because a lot of testing goes on before it is released. Speaking as the people who sell the machinery, it can be frustrating because we know what's coming up but we can't get our hands on it until it has been completely tested. Having said that I've always believed in the best policy," said Rene, who joined the company five years ago. Kubota (UK) Ltd is a wholly owned subsidiary of the Kubota Corporation which is one of the largest manufacturing companies in Japan with a worldwide turnover in excess of £6 billion and 15,400 employees worldwide. Kubota (UK), which also covers Ireland and, funnily enough, Iceland, works closely with its sister Kubotas in France and Germany.

"When we talk about development it tends to be on a European scale rather than just UK and some new product we've initiated while some of it has come from France," explained Rene, who collected a silver plate during BTME 2001 to recognise Kubota as one of only six companies to have given 10 years continuous support, as a Golden Key member.

"We have monthly European technical meetings and tend to put forward a consolidated view rather than an individual one."

Each of the national Kubota companies works in a similar way with local nationals working alongside Japanese management, and in Kubota's Thame headquarters there are three Japanese - the Managing Director, the Finance Director and the General Service Manager. The normal practice is for a five to seven year secondment to the British base.

The MD is Mr Hideaki Kusaka, but like many Japanese he answers to a European first name, in his case Cliff. He joined Kubota in June of last year...
having previously worked for Kubota in Japan and the US.

The relationship with Japan is extremely close and there are regular visits from the UK to Kubota's worldwide Headquarters to keep up to date with new developments and pass on the ideas of the British and European bases.

"I've just returned for a 10th visit to the United States and Japan with 32 dealers. The reason for the visit was to give them some idea of the sheer scale of Kubota as a company," explained Rene.

While no manufacturing takes place at the Thame base, just a few miles from The Oxfordshire golf club, Kubota (UK) employs 74 people and boasts 100,000 square feet of warehousing containing £12 million worth of machinery and parts. Current annual sales exceed a total value of £50 million.

Such is the reputation of the Kubota engine that many on the best known companies in the industry use the engine to power their equipment, although Kubota don't supply engines for installation into machines versions of which the company makes themselves.

"Supplying good quality engines for other companies must have a spin off for Kubota's own machinery business," explained Rene.

Since taking over from well known industry figure, Brian Hurley, Rene has seen Kubota's market diversifying and not, as might be the case in with some manufacturers as a reaction to the downturn in agricultural, which Kubota have never seen as a core market.

"Prior to my arrival Kubota had built up an incredible reputation in the trade and focussed on specific market segments, namely golf and local authority. In the last five years we have maintained our share of the golf and local authority markets but have looked at other markets as well. Add to that the product development and product extension we have made across the board and we have made good progress over recent years," he explained.

Included in these newly targeted areas are estate management, the hire market, contractors and landscaping. whose growth in market can be partly explained by the plethora of garden make over programmes like Ground Force and Home Front in the Garden.

"It is very true that the market for ride-on mowers has been growing quite considerably and I suspect a lot of that is due to the gardening programmes. Not necessarily the domestic user perhaps but certainly the contractor," he explained.

"We are suited to these markets and it means we now have a very broad base.

"Looking to the future Rene can see Kubota continuing to develop and improve its portfolio of machinery and equipment.

"When it comes to environmental issues we were one of the first companies to meet the strict Californian Emissions tests while this year we will be bringing out six new products bringing the total for the past two years to about 12. It is very much a case of continuous improvement."

"With ten years of continuous support for the Education and Development Fund Kubota's commitment to greenkeeper education is there for everyone to see.

"There has been huge progress in BIGGA and that has assisted our policy of training and making information available.

"Any organisation that represents a serious proportion of an industry acts as a catalyst for the supplier and the end user. We are not at the opposite ends of the spectrum but someone has to bring them together as our needs are slightly different from the greenkeepers."

"The needs of us both can be satisfied by better training, more knowledge and better communication and I'm pleased with what BIGGA has done," he said.

Kubota has always enjoyed a close relationship with its customers but it is something Rene is keen to build upon.

"We'd like to see more greenkeepers coming to visit us here. We are in a distribution place, not a manufacturing operation but we'd like them to come down, take a look around and just talk about things.

"We have some extensions going onto the premises so we've got plenty of room so that's the message I'd like to get to the Sections. If you can encourage groups of greenkeepers then we'd love to meet them and I'm sure the odd bottle of stout would be in order. I'd like that very much," said Rene, whose offices are actually very well placed for a number of Sections in both the Midland and South East Regions.

"In his time in the industry Rene has witnessed a change in the type of person now looking after golf courses.

"No disrespect to those who have been in the industry for years but the greenkeeper of 20 years ago is completely different to the one today and that's down to education and a more formal career structure which has brought people into the industry who perhaps previously wouldn't have considered a career in greenkeeping," said Rene.

"The progress of the greenkeeping profession can be mirrored by the progress made by Kubota (UK) over the last 20 years and you can be sure that the close relationship between the industry and the company will only be strengthened in the future.

February 2001 Greenkeeper International 35
The thirteenth BTME proved to be the best ever with record attendances, talented speakers, and busy stands. The occasion reinforced Harrogate week as a must for all greenkeepers and fineturf industry figures, and also attracted a large number of overseas delegates.

EVERYONE'S A WINNER AT BTME!

Above: Essay category winner David Roy receives his cheque from Sir Michael Bonallack and Elliott Small
Above: Richard Whyman accepts his place on the Bernhard's Canadian Scholarship from Stephen Bernhard
Above: New FEGGA Chairman Joe Bedford presents outgoing Claus Detlef Ratjen with a framed print
The insatiable thirst for learning displayed by visitors to Harrogate was well and truly quenched throughout the week with a huge variety of workshops, conference topics and seminar sessions.

Above: The plants and soil science workshop in full swing

Above: A delegate talks through his finished design in the Golf Course Design 2 workshop

Above: A packed conference session listens intently to Jonathan Smith during the Environmental Management section of the programme

Above and right: A packed auditorium applauds keynote speaker Richard Nobel as he recounts his motivational experiences behind his record-breaking landspeed attempt
THE KEY TO GREENKEEPER EDUCATION AND TRAINING

BTME gives BIGGA the opportunity of thanking those companies who have supported the Association over the previous year. The Chairman's Lunch on the Wednesday of the show is an enjoyable occasion and one at which Golden and Silver Key supporters are presented with plaques or badges. BIGGA President, Sir Michael Bonallack greeted the occasion and presented the awards.

BTME BANQUET THRILLS AUDIENCE AGAIN

The Searchers took the audience on a trip down memory lane with a scintillating set incorporating many of their hits including, Needles and Pins, Sweets for My Sweet', Don't Throw Your Love Away, Love Potion Number Nine, Sugar and Spice, Some Day We're Gonna Love Again, and When You Walk in the Room.
How to stop the grass growing from under your feet.

Longhand account.
Trinexapac-ethyl is the active ingredient in Shortcut that works by redirecting plant growth. It specifically targets the gibberellic acid site responsible for cell elongation in grass. Not only does Shortcut inhibit vertical growth but actually diverts plant growth downward into the root system to produce increased food reserves and lateral stem development. This in turn produces a thicker, healthier sward that better equips your turf to withstand temperature extremes, moisture loss, traffic and wear and even helps in the management of Poa annua. American research has also established that Shortcut can enhance the performance of a fungicide when jointly applied and has no adverse effect on seedling development.

Shortcut version.
A unique turf management tool that can reduce mowing frequency and grass clippings by half, improves turf colour and helps manage annual meadow grass.

Scotts
SHORTCUT®
The Scotts Difference
Changing Times at BTME

Neil Thomas reports on BTME 2001 and looks forward to changes next year

So it's over for another year and we reflect on a successful week in Harrogate, indeed on a BTME which surpassed expectations. Perhaps we came to Harrogate this year a little apprehensive not in terms of exhibitor numbers or the year on year growth of the show, but rather from the perspective of a gloomy autumn/winter period characterised by incessant rain and transport problems. Golf courses had been closed and trading had been difficult. Would this impinge on the BTME given also the current unreliability of our train services? Snow through Sunday did not auger well followed by rain on Monday and Tuesday. Low and behold, Wednesday dawned bright and clear.

Greenkeepers were about and a buzz was in the air. The trade began to smile and we were underway. By mid-morning on the first day it was clear that our apprehension had been unwarranted as visitors appeared in droves, clearly bent on casting aside the despondency of previous months and kick-starting a better year for the industry. Queues were forming at the registration points and certainly BIGGA had not anticipated the volume of visitors - a pattern repeated the following day. It was a nice problem but a problem nevertheless and one which will need to be resolved for 2002. Queuing in the sunshine is one thing, if the weather had been inclement it would have been quite another. While pre-registration is always preferable, we appreciate that many do not bother to fill in and return the card - hence the queues which this year were significant given the increase in attendees. Registration will be reviewed for next year. With a provisional visitor figure of 7,172 for the exhibition, some 29% upon 2000, we are delighted, but explaining the dramatic increase is more difficult. My best guess is that so many within the industry and the profession wanted, indeed needed, to get the year off to a good start and there is no better place to do it than at the BTME.

Looking back on the week, it seemed to have the right mix. From a successful conference, in depth workshops and comprehensive seminar programme to outstanding keynote speaker and hugely successful banquet, the infrastructure around the exhibition contributed to a rounded event during which the trade did good business. Some come purely for the exhibition others for the education and many more for both. Combine this with the social and perhaps the spiritual, for BTME is now an annual pilgrimage for many, and you indeed have a potent mix. Long may it last and we are greatly encouraged by the increase in visitor numbers this year.

Some thoughts on BTME 2002. BIGGA works closely with the BTME Steering Committee made up of representatives of the trade. During 2000, the Steering Committee set up a Working Party to look at future options for BTME in terms of opening days. The recommendation of the Working Party accepted subsequently by the Steering Committee and BIGGA's Board of Management was that for 2002 the exhibition would open on three days - Tuesday, Wednesday, Thursday with a later start time of 10.30am on the Tuesday. There would be a subsequent review of the opening days after the 2002 event. The increase in opening hours for 2002 has coincided with a sharp increase in visitors this year and this augers well for the future. BIGGA is well aware of the need to increase still further the visitor base and this will be a priority for 2002. BIGGA and the Steering Committee are looking to grow the event and will work closely together to ensure this is achieved. Breakdown next year will be on the Friday morning thus ensuring three full show days. This is considered essential if the exhibition is to prosper under the revised opening days.

Planning is already underway for BTME 2002. Bookings from new exhibitors are coming in at a fast rate and current exhibitors are requesting more space. We will do all we can to meet the needs and wishes of our exhibitors who make the BTME possible. It is not always practical to satisfy all needs but we will do our best in this regard. I believe that BTME 2001 has set up the year both for the trade and our members. I trust that the prevailing optimism after BTME will translate into a prosperous year all round and that the months ahead will be characterised by some warm and sunny days. Here's hoping.

Neil Thomas