CHESTER LE STREET GOLF CLUB
WOODLAND MANAGEMENT PLAN 2015

For and on behalf of:

Chester Le Street Golf Club
Lumley Park
Chester Le street
Co Durham
DH3 4NS
Tel: - 0191-3883218

October 2015

Prepared by :
John Nicholson Associates
18 Douglas Gardens
Durham
DH1 3PT

CONTENTS

1. INTRODUCTION

John Nicholson Associates have been asked to produce a plan that identifies the existing tree and vegetation cover and details the management required to ensure their sustainability. The trees and woodlands are an intrinsic element of the golf course, helping form the landscape in which golf is played. Management is vital to ensure their potential is realised and their long-term future safeguarded.

Consideration must also be given to the original parkland character of the course and the vistas to the town, river, cricket ground and castle should be emphasised as landscape features.

The purpose of this plan is to provide a practical, workable document that will enhance the aesthetic and conservation value of the property when implemented.

Trees and Woodlands are constantly developing but the slow rate of change often goes undetected by those who view them every day. Trees tend to be viewed as a permanent fixture rather than dynamic, living entities that have a limited lifespan. The use of this document along with the architectural plan will enable the committee to maintain a consistent policy in order to manage the trees and woodlands effectively.

Individual trees, and small copses, can have a major impact on the golfing strategy of a particular hole. Golf course design has few absolutes and is therefore subject to a wide spectrum of opinion. As a result a golf club committee often has a wide range of views as to the main issues and how they should be resolved. The aim of this plan is to provide an objective view on how the woodlands and trees impinge on the strategy and agronomy of holes.

The character of the course should be harmonised concentrating growth on the more desirable larger species of tree that compliment the parkland character. Much of the planting that has taken place although well intentioned has created a contrived appearance especially from holes 12-18. Many of the trees planted are out of scale with the parkland and some block scenic views to the broader landscape.

In a nutshell it should be an aim to have a net loss of trees but a net gain in quality. The trees that remain should be the larger parkland species that harmonise with the landscape. This would allow a better strategy to be created without compromising the landscape character. This would also benefit maintenance, as mowing time and leaf drop would be reduced.

Tree planting on golf courses often occurs without consideration to the subsequent size of the tree or their effect on the strategy of a hole. The trees then encroach altering the location of the fairway forcing play towards other holes. A knock on effect is then created as the adjoining hole is then planted with trees to compensate, this is then repeated on other holes and unnecessary congestion occurs. The strategies of holes are then changed, as the desired line of play is lost and slow play occurs as a result of looking for balls that ricochet or are amongst leaves.

The copses that were planted in 1998 now require thinning to allow the remaining trees to reach their potential during the process the smaller and short lived species which were planted as a nurse crop should be removed to concentrate growth on the more appropriate parkland trees. (lime, oak, ash, beech)

The shrubs that were used to provide autumn colour and to break up the edges of the woodland require coppicing to stop future encroachment and sustainability. The inside of the bush should be coppiced first so that any landscape impact is reduced, the normal prescription would be to coppice 20% per annum as no coppicing has been done then a 50% coppice in the first instance will be required. However if the maintenance is too onerous or the shrubs are in locations that cause lost balls and slow play then the shrubs should be grubbed out.

2. DESCRIPTION

2.1 Location

The course commands a prominent position below Lumley Castle overlooking the river and town.

2.2 Climate

Jan. 6-8ºc avg.
July 14-16ºc avg.

Annual rainfall 0-625mm.

Growing season 7-8 months.

2.3 Geology

Carboniferous coal measures

2.4 Soil Type

Clay with alluvial silt on the Haughs.

2.5 Drainage

Due to the soil type localised waterlogging can occur in winter months however an extensive field drainage system is present and should therefore make the site relatively free draining. The Haughs is part of the flood plain of the river wear and may flood in exceptional circumstances.

2.6 Size

unknown

2.7 Rights of Way

Drive to the castle.

3. WOODLAND DESCRIPTION

Chester Le Street Golf course was laid out within the parkland of Lumley Castle and has a distinctive parkland character.

The prevailing natural woodland type classification 10 that is oak dominated woodland with a lesser component of Ash. The areas of woodland planted in 1998 are now established and require thinning to release the climax crop.

Exotic species have been introduced throughout the course. These species include Scots Pine, Corsican Pine, hybrid Poplar, Rowan, Birch, Aspen, Cherry, Red Oak, Norway Maple, Whitebeam, Hornbeam, Willow and Purple Plum.

Aspen has established mainly along Lumley Park burn.

Poplar and willow are still present locally. Recent drainage works will be threatened by their presence, as they will invade field drains and drainage lines in search of water. It is often mistakenly thought that they will help drainage conversely they block drains and are inactive during winter months when water uptake is required. In summer they compete with the grass sward predisposing it to disease. It should therefore be an objective to remove all willow and poplar from the course.

Great strides have been taken to returning the parkland character however there are still a number of ornamental trees on the course that conflict with the landscape character, size, shape, colour, texture and form all need to harmonise in order to achieve landscape unity. Parkland trees should be large and majestic and should retain their own integrity without interference from other smaller specimens.

4. MANAGEMENT AIMS AND OBJECTIVES

4.1 Maintain and enhance the quality of the golf course

- To protect the golfing strategy of holes by creating sustainable woodland cover.
- To improve the quality of grass sward by managing the trees and woodland and stopping encroachment into the line of play.

4.2 Maintain and enhance the long-term landscape value of the course.

- Bring existing woodlands into management so their long-term impact on the landscape can be preserved.
- To Maintain the views across the course highlighting interesting features such as the castle and cricket ground

- To provide a unified landscape character

4.3 Enhance the value of the course for wildlife.

- Utilise native species.
- Thin existing woodland where appropriate to encourage development of natural regeneration of tree species and ground flora and a more diverse canopy structure.

4.4 Ensure safety of members, guests and employees.

- Fell or make safe trees identified as potentially unsafe. Make safe boundary trees.

4.5 Encourage long term vision and continuity of management policy.

- Ensure all work proposals are specific, measurable, achievable, realistic and costed.
- To ensure that the necessary licenses are obtained from the Forestry Authority.
- Review the Management Plan at Year 5.

5. METHOD

The trees and woodlands have been surveyed to identify and assess their ecological value and importance in order to preserve any environmentally interesting features.

The trees and woodlands have also been surveyed in order to produce a management prescription that will protect and enhance the sustainability of the woodlands.

The strategy of the course in relation to trees and golf has been assessed and suggestions have been made in a holistic manner. Similarly, the agronomic influence of the trees and woodlands has been investigated.

Various site visits have been made by John Nicholson, Ken Moodie and Ken Brown in order to ensure all aspects of golf course management are clearly identified.

6. GENERAL MANAGEMENT PRESCRIPTIONS

Recent decades have seen a natural increase in tree cover as regeneration of self-seeded oak, aspen and sycamore has occurred mainly along ditch and river edges. Whilst trees and woodlands are now part of the character of the landscape and strategy of the course, care must be taken to preserve the views that make the course well known.

A policy of consolidating and enhancing existing woodland areas should also be implemented. This will serve to maximise the benefits of tree cover whilst ensuring its long-term sustainability. Past planting, though well intentioned has lacked cohesion. Exotic's such, as willow and poplar have been introduced, often adjoining more attractive trees, removing their integrity and in some cases suppressing the more desirable species.

It should therefore be a long-term objective to create a more natural landscape, which has a continuous theme throughout the course. All the highly regarded courses have a natural appeal to them.

Poplar, Willow and Golf

Poplar and Willow are normally planted for their rapid growth. They are of course fast growing, but unfortunately it is often forgotten that they also have a relatively short life span. Commercial hybrid poplars have a rotation age of 40 years that means that beyond this point they will deteriorate very quickly. Further, poplar and willow are unsuitable for golf courses as their surface rooting habit often results in damage to expensive machinery. They liberally drop debris such as branches and twigs and will reproduce vegetatively through producing suckers from their roots.

It is often mistakenly thought that they will solve drainage problems by soaking up water in wet areas. Although they are high water demanders, short mown grass will normally require more water than a tree. Further, they will always find the easiest source of water, normally field drains, and will therefore compound drainage problems by creating blockages. It is not uncommon to find 40m of fibrous root completely blocking a drain. It should also be noted that poplar roots can be found at a spread of up to 2.8 times the height of the tree and therefore extensive damage can occur in areas thought to be well removed from the trees influence.

Finally, from both a landscape and conservation viewpoint, poplar has little value. Their shape, texture and colour all contrast with the native trees of the broader landscape. Poplar and willow have no timber value and are difficult to burn and are therefore expensive to remove. Their extensive root system can create a long-term management problem as they will regenerate aggressively from any remaining plant tissue. It is necessary to stop their re-establishment, as this will be to the detriment of other more desirable species.

The removal of the poplar and willow will have many beneficial effects. Drainage problems and unnecessary maintenance to field drains should be reduced and any suppressed species of more desirable trees such as oak or ash would be released.

As the club has invested heavily in drainage in recent years it would seem wise to implement a programme of removal.

6.1 Continuous Cover Management.

A woodland that is managed in a sustainable manner seeks to ensure that a young generation of trees is produced to replace those in senescence. In commercial forestry; this is achieved by clear felling then

restocking an area of woodland. When the objectives are aesthetic and conservation based, it is preferable to have a range of age classes within the wood. Continuous cover management has advantages in providing continuity of landscape and wildlife habitats. In mature woodland restocking occurs via natural regeneration or planting in gaps in the canopy. These gaps may arise as a result of natural tree death or wind blow. Where natural regeneration or planting is required and no gaps exist these will need to be created by selective felling.

6.2 Selective Thinning of Even-Aged Stands.

Assuming the average lifespan of for instance birch woodland on the golf course is 40-45 years, a significant proportion of the woodland area must be regenerated each year to prevent a rapid deterioration in future decades.

The removal of stunted stems and those of poor form will concentrate future growth on better, more attractive trees, particularly around tees and greens. Tree removal will allow better light penetration and air circulation that will improve the quality of the grass sward. The opportunity should be taken to break up stands that are very linear in appearance, thinning and scalloping edges to create a more natural appearance. Homogenous stands may then be inter planted in order to increase species diversity.

Where possible, in areas of woodland, the grass should be allowed to grow naturally. This will benefit tree growth and will improve the sustainability of the woodland as natural regeneration will be allowed to develop.

6.3 Trees and Golf Strategy.

Consideration should be given to the shape of the woodland edge in relation to the golfing strategy of holes. Trees can benefit the strategy of a golf course in many ways. They can be used to frame a fairway that cannot be seen due to the topography of the site. Trees can emphasise a dogleg hole by exaggerating the orientation of the fairway or strategically to add interest by creating a heroic carry that, if negotiated successfully, will reward the player with a birdie opportunity. Tees set into woods create the feeling of seclusion and woodlands can be designed to coalesce making a fairway appear narrower than it actually is.

However, care must be taken as trees form a strong three dimensional hazard which can easily destroy the intended strategy of a hole if planted in the wrong place. Trees are a dynamic entity, increasing in size over time, often encroaching into the line of play.

'Trees are a fluky and obnoxious form of hazard, but they afford rather good protection, and if a clump of these exists at such a spot it might well be considered justifiable to leave it standing.'

H.S.Colt Some Essays on Golf Course Architecture, 1920.

The aim of this document is to preserve and enhance the playing characteristics of the golf course and avoid radical change. The following points are raised for consideration:

6.4 Mammals and Pests.

Mild winters and warm summers can lead to a build up in the insect population, some of which can attack trees by eating the foliage. It is rare for this to cause permanent damage to trees.

Juvenile and semi-mature trees can be seriously damaged by squirrels. Bark stripping and often ring barking may occur, causing the top half to die, hence drastically affecting the form and growth of the tree. If the squirrel population begins to pose a significant threat to the trees, Warfarin baited traps can be used to control numbers. Normally a small level of damage has to be tolerated.

6.5 Controlling Damage by Golfers.

A pick and drop rule must be implemented for all newly planted copses as young trees can be decimated by a single golf ball strike.

A general move from thin barked species such as birch and beech to corky barked, golf ball tolerant species such as oak would further improve the longevity of woodland on the course.

6.6 Tree Safety.

On going monitoring of tree health and safety should be carried out on an annual basis. Particular attention should obviously be given to trees on and immediately surrounding the playing surfaces.

6.7 Thinning Semi Mature Copses

Copses normally require thinning 10 to 15 years after planting once the canopy begins to close. This will ensure that the trees produce an attractive branch free stem that is beneficial to both players and greens staff.

Thinning too early will produce shrubby scrub type trees with many low branches. Thinning too late will result in drawn trees that will be liable to wind blow or wind snap.

In order to produce a quality final crop it is necessary to thin areas of woodland over a period of 50 or so years. The final crop will often be as little as 30% of the original stems. However, with fast growing species such as conifer the annual increment growth can often be greater than the harvesting capacity of woodland managers therefore creating sustainable woodland cover with timber volume increasing year on year.

7.0 MANAGEMENT PROPOSALS AND PRESCRIPTIONS

General

As previously stated one of the most attractive features of Chester le Street is the views of the town, cricket ground, river and castle. If the *status quo* is maintained then these will be lost in the not too distant future and once a view has gone it is often forgotten. It is therefore essential to identify the views to be retained and to manage the arboreal landscape to ensure they are sustained. The policy of topping trees only deals with the symptoms rather than the problem and is a costly exercise that has to be undertaken regularly. The course has no shortage of trees therefore removing trees in the wrong location will not effect the overall experience and landscape of the course.

The planting that took place in 1998 has now closed canopy and requires thinning to release the climax crop. During this process species in character with the parkland should be favoured and nurse species removed. Edges should be scalloped to create a natural appearance this will allow a more interesting mowing regime to be implemented as the organic shape of the woodland can be mirrored. Stumps will need to be removed along the edges to ensure mowing can take place.

Much of the planting that took place was to allow trees too close to the line of play to be removed without a loss of landscape value. This programme should now be implemented.

It is therefore necessary to identify the trees of merit and ensure that their integrity is kept intact.

Linear stands of trees have been introduced between the fourth, eighth and ninth holes. This creates an unnatural appearance causes slow play and a very penal strategy with little opportunity for recovery. Further the density of planting means that there is little or no grass beneath the trees creating lies on either mud or roots neither of which are desirable.

With the proposed changes to the design of the holes the linear appearance can be broken and more enjoyable golf created by breaking the symmetry and creating space.

In the more open areas of the fields near the clubhouse, it is important to maintain the landscape character and enhance the strategy by introducing trees that are in scale with the landscape. The location of these trees needs to be carefully considered with regard the strategy and agronomics of the golf course. The smaller trees that are out of scale should be removed.

Much of the planting on the Broadwood field is too close to play and creates a claustrophobic feel to holes 12/13/14/15. It forces play towards other fairways and creates danger. The quality of the turf and the natural terrain should make these holes the best on the course.

Trees and woodlands should form the framework of the landscape and the strategy and views should form the picture.

Any restocking that is required should respect the *Genius loci* of the site species recommended would include Oak, Ash, Beech and Lime. It would be wise to implement a policy that no future tree planting should occur without the advice of a qualified arborist or golf course architect.

Views should be created and maintained to and from the castle and the ha-ha should be exposed as a true feature. Views of the river should be enhanced be controlling the invasive weeds that have colonised the riverbank this should be done by a combination of mowing and herbicide control.

Giant Hogweed

Appearance

Giant hogweed (*Heracleum mantegazzianum*), is a tall, cow parsley-like plant with thick bristly stems that are often purple-blotched.

The flowers are white and held in umbels, (flat-topped clusters, like those of carrots or cow parsley), with all the flowers in the umbel facing upwards. The flower heads can be as large as 60cm (2ft) across. It can reach a height of 3.5m (11.5ft) or more and has a spread of about 1-2m (3.5-7ft). Giant hogweed is usually biennial, forming a rosette of jagged, lobed leaves in the first year before sending up a flower spike in the second year and then setting seed. True biennials only live for two years, dying after flowering, but giant hogweed does not always behave as a true biennial and in fact some are perennial, coming up year after year.

Control

Although there is no statutory obligation for landowners to eliminate giant hogweed, local authorities will often take action to remove infestations in public areas. Plants that are undesirable, out-compete desired plants, or simply invade half the garden are classed as weeds and require control. Weeds from abroad with strongly invasive tendencies are termed 'invasive aliens' and pose a severe threat to wild or other uncultivated environments, such as railway embankments.

Because of the severity of the threat, legislation has been applied to invasive aliens, including giant hogweed. The Wildlife and Countryside Act 1981 (as amended) lists it on Schedule 9, Section 14 meaning it is an offence to cause giant hogweed to grow in the wild in England and Wales (similar legislation applies in Scotland and Northern Ireland). Also it can be the subject of Anti-Social Behaviour Orders where occupiers of giant hogweed infested ground can be required to remove the weed or face penalties.

Local Authorities have powers under certain circumstances to require giant hogweed to be removed. First, consider whether this can be done using non-chemical means such as digging out or suppressing with mulch. Where these methods are not feasible, chemical controls may need to be used.

When controlling giant hogweed always wear gloves, cover your arms and legs, and ideally wear a facemask when working on or near it. Cut plant debris, contaminated clothing and tools are potentially hazardous too. Wash any skin that comes in contact with the plant immediately. Ensure that contractors working on your land are aware of the risks and competent to deal with this weed.

Non-chemical controls

Consider if non-chemical controls are an option; On a garden scale, appropriate measures include pulling up young plants by hand when the soil is moist. Do this in **May** when the giant hogweed has reached a reasonable height, but before it has produced its flowering spike. For larger plants it might be necessary to loosen the roots with a fork first.

Never let hogweed set seed, but allow the flower spike to form and then remove it before the flowers fade. At this stage, the plant is less likely to survive trimming than earlier in the year. Remember that perennial forms have been identified by RHS research and preventing them from setting seed will not reduce giant hogweed populations quickly.

Protect yourself from any skin contact with the sap, especially your face, when cutting stems, and carry out control measures in overcast weather avoiding sunny periods. Wash off any sap as soon as possible with plenty of cold water.
Larger scale areas are probably best left to the professionals, who should wear full protective clothing, especially if they are using a strimmer. Strimmers send sap and fragments flying so face protection is essential.

Chemical controls

Choose a weedkiller that is appropriate for purpose by reading the label carefully before buying or

using. Those of low persistence such as contact weedkillers, diquat or pelargonic acid for example, will kill the top growth. However, systemic weedkillers based on glyphosate are usually the best choice as these kill roots also. Residual weedkillers persist in the soil for several weeks so particular care must be taken when using them.

Giant hogweed prefers moist fertile areas often near waterways. It is essential that weedkiller never under any circumstances enters waterways. Seek advice from the Environment Agency before undertaking spraying near rivers, streams and ponds.

Glyphosate Where there are many plants, try applying a tough weedkiller containing glyphosate (e.g. Scotts Roundup Ultra 3000, Scotts Tumbleweed, Bayer Tough Rootkill, Bayer Garden Super Strength or Doff Maxi Strength Glyphosate Weedkiller). Ideally, spray the young foliage in May. Plants should be re-treated in August or September, if necessary. Alternatively, cut back flowering plants and then spray any young foliage that re-grows in August and September. Mature plants are likely to need more than one treatment to kill them. Remember that glyphosate damages any plants it touches, so cover up ornamental plants with polythene or cardboard boxes before spraying.

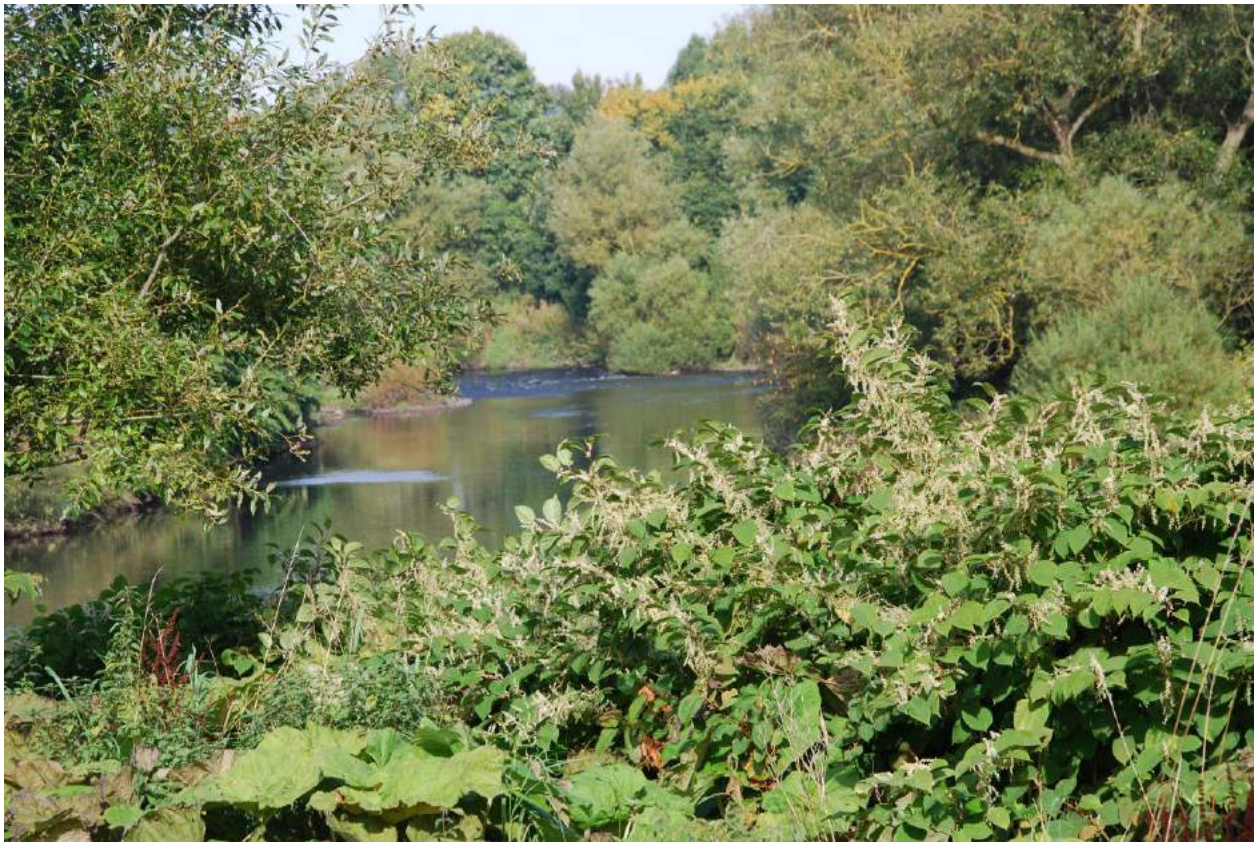
Triclopyr (selective systemic weedkiller) Applying Vitax SBK Brushwood Killer (based on triclopyr) to the hollow cut stems after cutting back may be effective. Triclopyr is a residual weedkiller that does not harm long grass.

Disposing of giant hogweed

Giant hogweed is a **controlled waste** (similar to **Japanese knotweed**) so, if it is taken off site, can only be disposed of in licensed landfill sites with the required documentation. To avoid this, dispose of any plant material (dug up or cut down) by composting or burning.

The smaller, native hogweed, *Heracleum sphondylium*, is not classed as controlled waste but should still be disposed of with care to avoid human contact.

Japanese Knotweed



Appearance

In spring and summer, bamboo-like **shoots** grow to 2.1m (7ft) tall. Leaves are up to 14cm (5½in) in length and the creamy-white **flower** tassels produced in late summer and early autumn reach up to 15cm (6in).
The stems die back to ground level in winter.

The problem

Japanese knotweed was introduced from Japan in 1825 as an ornamental plant. The plant is not unattractive but its rapid annual growth and relentless spread, allows it to easily overwhelm other garden plants. Where established as a wayside weed, native plants are also aggressively over-run. Although it does not produce seeds, it can sprout from very small sections of rhizomes and, under the provisions made within the Wildlife and Countryside Act 1981, it is an offence to cause Japanese knotweed to grow in the wild. Much of its spread is probably via topsoil movement or construction traffic.

Control

Non-chemical controls
When tackling Japanese knotweed, **cultural control methods** pose some problems;

- Digging out is possible, but due to the depth that the rhizomes can penetrate, regrowth usually occurs. This method also creates problems over disposal as **Japanese knotweed is classed as 'controlled waste'** under the Environmental Protection Act 1990. This requires disposal at licensed landfill sites. Specialist Japanese knotweed contractors are usually licensed to safely remove the weed from site but check first before employing their services. Alternatively, it can be destroyed on site by allowing it to dry out before burning. **On no account should Japanese knotweed be included with normal household waste or put out in green waste collection schemes**
- If digging out is attempted, remove as much root as possible, then repeatedly destroy regrowth. In this way the energy reserves in the remaining underground parts will be gradually exhausted; a process which may, however, take several seasons

Biological control

- A plant sucker (psyllid) is being released in the UK as a biological control for Japanese knotweed. It is currently only being released at a handful of trial sites and is not available to gardeners. However, if successful it will be released more widely and will become widespread in Britain over the next five to ten years by natural spread

Chemical controls

Glyphosate

- Perhaps the most effective and simplest method for the home gardener to tackle Japanese knotweed is with the glyphosate-based weedkiller Scotts Roundup Tree Stump & Rootkiller. This has label recommendation for controlling Japanese knotweed, instructing it to be applied to the cut canes. Bayer Garden Super Strength Weedkiller also has label control for this weed
- Alternatively, try other tough formulations of glyphosate (e.g. Scotts Roundup Ultra 3000, Scotts Tumbleweed, Bayer Tough Rootkill or Doff Maxi Strength Glyphosate Weedkiller)
- Glyphosate is usually applied to the foliage and is passed within the plant to the underground parts
- It is useful to cut away old stems during the previous winter to allow good access. The best time for spraying with glyphosate is at the flowering stage in late summer. However, it is difficult to spray at this stage, when the weed is 2.1m (7ft) or more high
- A more practical approach is to allow Japanese knotweed to grow to about 90cm (3ft), which will usually be reached in May, and spray then. There will be regrowth and consequently a second application in mid-summer is useful. Check during September and if it has grown once more, spray again before growth begins to die down in the autumn. Check again the following spring
- Avoid spray coming into contact with garden plants. Glyphosate-treated knotweed will often produce small-leaved, bushy regrowth 50-90cm (20in-3ft) in height the following spring. This is very different in appearance to the normal plant and it is essential that this regrowth is treated
- It usually takes at least three to four seasons to eradicate Japanese knotweed using glyphosate. Professional contractors, however, will have access to more powerful weedkillers that may reduce this period by half

Residual control

- The residual weedkiller Bayer Ground Clear Weedkiller containing glyphosate/flufenacet/metosulam comes in a soluble sachet. It may provide a moderate check in growth, but because of the extremely persistent rhizomes, is unlikely to eradicate the weed

Himalayan Balsam

Appearance

Himalayan balsam is a tall growing annual, 2-3m (6-10ft) in height. Between June and October it produces clusters of purplish pink (or rarely white) helmet-shaped flowers.
The flowers are followed by seed pods that open explosively when ripe.

The problem

Each plant can produce up to 800 seeds. These are dispersed widely as the ripe seedpods shoot their seeds up to 7m (22ft) away.
The plant is spread by two principal means;

- The most widespread distribution tends to be by human means where individuals pass on seed to friends
- Once established in the catchment of a river the seeds, which can remain viable for two years, are transported further afield by water

Control

Plants that out-compete other more desirable plants or simply invade half the garden are classed as weeds and require control. First, consider whether this can be done using non-chemical means such as pulling or digging out, or suppressing with mulch. If this can't be achieved, consider using chemical

methods.

Non-chemical control

The main method of **non-chemical control**, and usually the most appropriate, is pulling or cutting the plants before they flower and set seed. Conservation authorities regularly organise 'balsam bashing' work parties to clear the weed from marshland and riverbanks.

Chemical control

Where non-chemical control methods are not feasible, chemical controls may need to be used. Choose a weedkiller that is most appropriate for the purpose by reading the label carefully before buying or using. Contact weedkillers and glyphosate have low persistence in the soil, being virtually inactivated on soil contact. Residual weedkillers persist in the soil for several weeks or months and can move deeper or sideways in the soil, leading to possible damage of underlying plant roots.

Before using weedkillers alongside waterways it is necessary to contact the **Environment Agency** (see telephone directory for your local office). It can advise on suitably qualified contractors, as can the **National Association of Agricultural and Amenity Contractors**.

Take care when applying weedkillers near ornamental plants. Cover them with plastic sheeting while spraying, and only remove it once the spray has dried on the weed foliage.

It may take a couple of seasons to obtain good control of Himalayan balsam, as additional weed seedlings germinate after the parent plants are killed off.

Diquat, fatty acids, acetic acid and pelargonic acid

The non-selective contact weedkillers diquat (Scotts Weedol 2 - use by end Dec 2015), acetic acid (Scotts Weedol Fast Acting), fatty acids (Bayer 3 Hour Weedkiller), pelargonic acid (Doff 24/7 Superfast Weedkiller) can be applied before flowering.

Glyphosate

Himalayan balsam can be controlled with a weedkiller based on glyphosate (e.g. Scotts Roundup, Scotts Tumbleweed, Bayer Garden Super Strength Weedkiller or Doff Maxi Strength Glyphosate Weedkiller). Glyphosate is a non-selective, systemic weedkiller that is applied to the foliage. It is inactivated on contact with the soil, so there is no risk of damage to the roots of nearby ornamentals, but care must be taken that the spray doesn't drift onto their foliage. Glyphosate is most effective when weed growth is vigorous. Treat Himalayan balsam at early flowering stage to ensure the weed is knocked back before it has chance to self-seed.

Yardage Markers

Holm Oak have been planted as 150yard markers adjoining the fairways. They create an unnecessary hazard close to the line of play and create an unnatural appearance within the parkland setting. They slow maintenance as mowing is disrupted and are no longer relevant as there are yardage posts and markers on the fairway. Further most golfers now have measuring devices of some form.

They should be removed.

7.1 Hole by Hole - Assessment

Hole 1

The first tee and left of the 11th green are suffering from shade and a lack of light. This stresses the grass sward and causes areas to remain wet for longer than necessary periods. The trees and shrubs that have been planted to the right of the path are beneath the canopy of larger trees and will become heliotropic (one-sided looking for light). This will cause them to grow towards the green and tee compounding the problem. They should be removed.

To increase light and air flow to the tee the epicormic growth around the base of the limes to the rear of the tee should be removed. The small lime to the rear of the tee and the ash, laurel and oak to the left of the tee should be removed. This will improve light and air to the playing surface removing stress from the grass sward and safeguarding against disease.

The hedge that has been planted to the right of the tee will compete for water and nutrient with an already stressed grass sward this should be removed.

The first tee is suffering badly from a lack of light and air if quality surfaces are to be achieved then an improvement in the environment around tees and greens needs to be made.

The 2 small birch trees to the front left of the tee serve no purpose create unnecessary maintenance as mowing is complicated, cast shade and cause slow play they should be removed.

The copse to the right of the fairway now requires thinning in order to release the more desirable stems during thinning the nurse crop of faster growing species such as birch and cherry should be removed to concentrate growth on the more sustainable ash, lime and oak. The copse should be thinned by 40% shrubs such as dogwood should be coppiced to stop encroachment and to create more attractive new growth that will ensure sustainability. If coppicing is too onerous then the shrubs on the edges of coppices (especially where they influence play) should be removed.

To the right of the fairway are a number of small ornamental trees that are out of scale with the landscape create unnecessary maintenance, reduce the speed of play and remove the integrity of the woodland beyond; these should be removed and the stumps ground to allow more efficient maintenance. Stump removal will be essential in areas where play occurs, as grass cutting will be required.

To the right on the apex is a stand of lime, alder, rowan and cherry. The more sustainable lime trees should be released by removing the trees around them this will allow the limes to reach their true potential as landscape trees. One cherry may be retained to maintain the orientation of the hole and to penalise a blocked shot to the right.

The copse to the left of the hole dictates the strategy and penalises the high handicap golfer it removes the adventure of the tee shot by removing the temptation to go for the green. It causes maintenance issues as it creates shade in an already shaded area and increases mowing time, as the trees have to be circumvented. The copse should be removed and a more adventurous strategy employed with bunkering.

To the left and rear of the green are a number of thorn bushes these reduce light and air to the green and surround and form a very strong hazard close to the green they should be removed. This would also have the benefit of opening the view to the river and park.

Hole 2

If the medal tee is to be retained then an improvement in light and air is required. Permission should be sought to thin the trees beyond the boundary in order to develop a better sward.

The limes to the left of the yellow tee should be crown lifted to increase light and air to the playing surface and to stop encroachment at present the left of the tee is hardly used as player naturally favour the unimpeded line of play.

To the left of the fairway are 5 cherries that are in poor condition, are out of scale with the landscape and increase maintenance. They only penalise a very bad shot in a position from which it is unlikely to recover (230 yards uphill to the green). They should be removed to increase the landscape value.

If the small out of scale trees to the left were removed then the landscape value would be increased as attention would be focused on the more attractive parkland trees.

To the right on the end of the copse are 3 maples that are beginning to encroach on the view to the castle these should be removed to safeguard the landscape character of the course.

The Norway maple to the left of the Hole spoil the parkland character as they are out of scale if they were removed then the strategy could be maintained by architectural means. This would then allow a view to be created behind the green from the Haughs and public footpath to the castle.

The 2 birch trees to the left of the green cause wear as they channel traffic to the next tee and form a very penal hazard close to the green these should be removed. This would create space to add some interesting contours.

To the rear of the green beyond the boundary trees have been planted by the castle drive permission should be sought to remove some of the trees so that the view to and from the castle is maintained. This would also benefit the 11th tee that is suffering badly from a lack of light and air.

The medal tee on the 2nd hole is suffering badly from shade and lack of airflow.

Hole 3

The medal tee will never have a good grass covering while the trees surround the tee it should either be abandoned or permission should be sought to remove the trees and shrubs surrounding the playing area.

Adjoining the yellow tee is a sycamore with a large cavity and die back in the crown it has a target area of the tee and footpath from the 10th hole and competes with grass sward on the tee for water and nutrient. The tree should be removed. Permission should also be sought to thin the trees beyond the boundary to improve light and air to the tee box.

The sycamore to the left of the tee has a large cavity and posses a threat to safety.

The ash to the right of the fairway has numerous fungal infections including ash heart rot, ganoderma, pleurotus and honey fungus.

The ash to the right of the fairway is in dangerous condition and exhibits the fruiting bodies of a number of pathogenic fungi it has poor vigour and is likely to drop large limbs without notice. The tree should be felled for safety.

To the right of the fairway are a number of cherries that are out of scale with the landscape and are in very poor condition these should be removed and replaced by 2 parkland trees further from play. This will improve the strategy of the hole and increase the landscape value of the course. Two tree spade transplants should be introduced in this area to maintain a strategy.

The cherries are in poor condition and conflict with the landscape character.

The copse to the right should be thinned to release the better stems and more appropriate species. During thinning the edges should be scalloped to create a natural appearance and the shrubs on the edges removed as they form too penal a hazard.

To the right of the green is a large lime that adversely affects the green, the bunker and the surround. The location of the tree means that the tree is suffering compaction to the roots. It has die back and shows poor vigour. It therefore has a limited life span and has no real landscape value as it is located on low ground within an area that is well wooded. Further there is an equally attractive specimen to the right of it, which would be exposed if the tree were removed. The tree should be removed and the area landscaped.

The lime to the right of the green is suffering from severe compaction of the roots and causes major problems with maintenance.

A vista to and from the castle to the Haughs could be created by removing the poplars to the rear of the green this would have the added benefit of improving light and air to both the playing surface and the public footpath. This would help to dry out the paths and would make the walk along the path a pleasanter experience. It would also expose the Lumley Burn as an attractive feature and would improve the ecology of the river by creating a mosaic of habitats by creating areas of dappled and full sunlight.

Himalayan balsam is beginning to spread from the riverbanks into this area this should be controlled before it dominates the ecosystem and reduces the wildlife value.

Lumley Burn forms a very attractive feature and should be utilised to improve the pleasure of the footpaths.

Hole 4

The walk from the 3rd green should be improved by removing the poplar along the riverbank this would create a vista to the castle and burn. The large lime by the winter hole should be exposed as a landscape feature this would have the added benefit of increasing light and air to the footpaths. This would help dry them in winter reducing the amount mud.

The removal of the poplar would also benefit the 3rd and 9th greens as light and air to the playing surface would be increased.

Laurel has been planted along the edge of the tee this competes for water and nutrient and restricts light and air to the tee. It screens the attractive trees beyond and will limit regeneration it should be removed.

The remainder of the copse should be thinned to concentrate growth on the better stems during the process the linear nature of the copse should be reduced by scalloping the edges.

On the walk to the tee a alder has been planted for no apparent reason this channels wear especially to the winter tee, it should be removed.

The hole appears linear mainly due to the narrow band of trees that separate the hole from the 9th fairway. However, with judicious removal the symmetry can be broken by thinning the stand to individual parkland trees that are in scale with the landscape. This will improve the landscape value and will concentrate growth on the remaining trees. During the process species that are more in keeping with the landscape such as oak and ash should be favoured.

Towards the green on the left the large core woodland requires thinning to release the remaining trees and avoid wind blow. During the process the edges should be scalloped to create organic shapes. Where greens and tees exist the edge should be relocated to improve light to the playing surface. Thin the woodland by 35% favouring the more desirable species. Shrubs should be coppiced to stop future encroachment and to ensure sustainability. If coppicing is too onerous or the shrubs form too penal a hazard then removal will be necessary.

To the left of the green the woodland edge should be relocated to allow better light and air penetration and will allow traffic to be directed further from the green during winter months when wear rates increase, this will help dry the grass sward and reduce the occasion of disease to the green and surround.

The planting to the rear of the green should be removed to improve light and air to the playing surfaces of the 4th green and 5th tee, the area can then be developed with soft mounding this would add interest to a shot that runs through the green and would maintain separation between the green and tee.

The landscape of the hole would be improved by removing the linear appearance to the left.

Hole 5

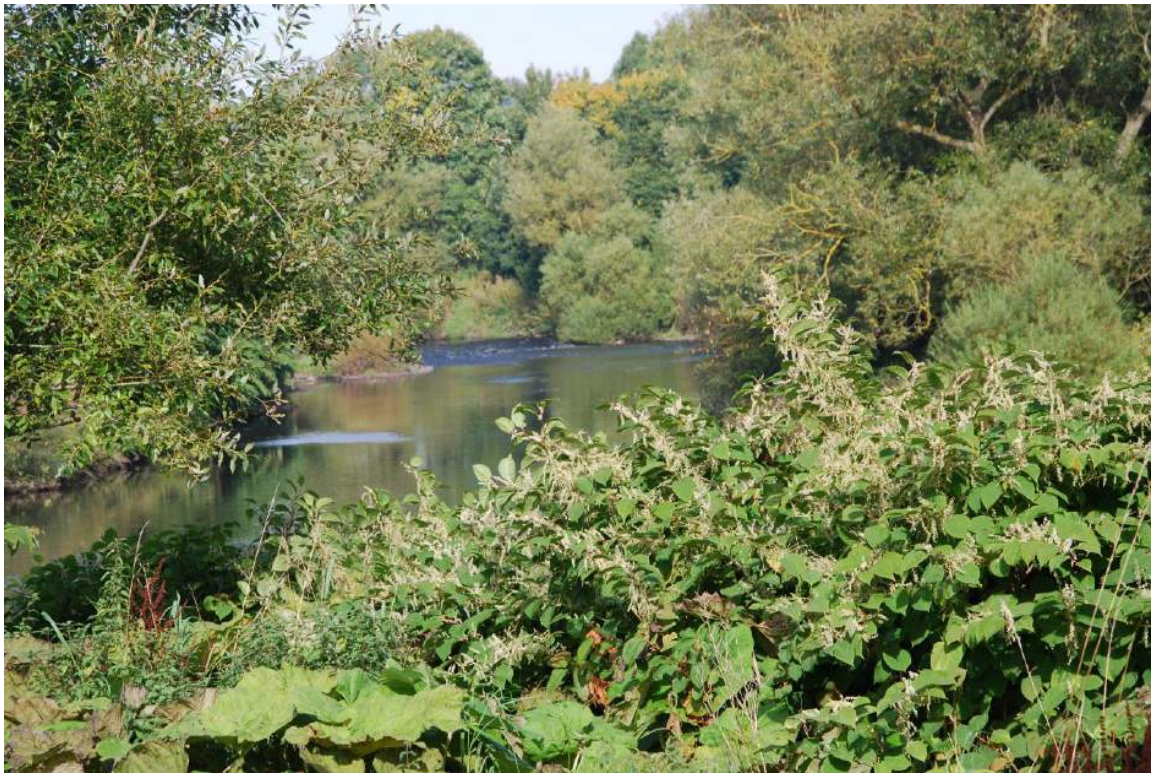
The copse to the right of the fairway screens the view to the green and forces play away from the river reducing the drama of the hole and removing the possibility of any strategy as the preferred line of play cannot be identified. The copse should be removed and a bunker added to allow more visibility and a true strategy to be created.

The weeds on the riverbank should be controlled to permit a better view of the river. This should be done by a combination of mechanical control and herbicide application.

To the front right of the tee the small triangle on the boundary should be planted to screen the motorway from view. Plant 50 alder.

To the left of the hole the core woodland should be thinned as per hole 4 during the process the area nearest the tee should receive a high density of thinning to allow full visibility to the left of the fairway. The edges should be scalloped to create a more natural appearance. The area around the winter tee should be thinned to improve the sward and increase the rate of transpiration. This will improve ground conditions as the area will dry more efficiently.

Towards the green to the left is an attractive large specimen tree that should be exposed as a feature. This will break the symmetry and increase the landscape value and will allow the tree to reach its true potential.



Removing invasive weeds from the riverbank will open views to the river and increase the wildlife value.

Hole 6

To the right of the tees the trees should be removed to open views of the river this will also allow visibility to right of the fairway and improve light and air to the playing surface. The weeds on the riverbank should be controlled by a combination of mechanical and chemical control.

The copse to the left of the tee should be thinned to improve light and air to the tee and to highlight the better stems. Thin by 45%.

The trees to the right on the dogleg should be removed to allow better visibility to the fairway.

To the left of the hole short of the bunker are a number of trees that form a very penal hazard close to the line of play and only penalise the shorter hitter. They should be removed.

To the right of the hole are a number of small trees and shrubs these should be removed so that the large hollow can then be developed as fairway this would add to the drama of the hole and would create a greater awareness of the river.

The holm oak and 3 cherries to the right of the hole should be removed to allow play further to the right and to open views of the river.

Holm oaks have been planted through-out the course as yardage markers most are located too close to play and create a very unnatural appearance they should be removed to protect the strategy and landscape value of the course.

The area of core woodland to the left should be thinned to concentrate growth on the better stems and allow them to reach their potential, during thinning the edges should be scalloped and shrubs coppiced to stop encroachment and create sustainability.

The stand at the rear of the green should be thinned to final spacing this will increase light and air to both the 6th and 7th greens and will ensure growth is concentrated on the more desirable species. During the process space should be created to allow a winter tee to be constructed to the right of the green this will allow traffic in the winter to be re-routed away from wear areas.

The encroachment on the right of the 6th hole removes the orientation of the fairway and forces play to the left away from danger.

The hollow to the right of the hole should be used as an integral part of the hole by removing the scrub and cutting the fairway further right.

Hole 7

The trees to the right of the hole are beginning to encroach this effectively reduces the size of the tee as players naturally favour the unimpeded line of play during the thinning of the copse the edge should be relocated to allow full use of the tee.

The copse to the rear of the tee should be thinned to release the better stems during the process space should be created to allow a back tee to be constructed. At present all the par 3s are of similar length the 7th has a large green that is more appropriate for a longer shot.

To the left of the tee the copse should be thinned to improve light and air to the playing surface the stand of dogwood should be removed to stop encroachment and reduce maintenance. Scalloping the edges of the copse should break the linear nature to the left.

To the left of the hole the cherries that were planted in the semi rough adversely affect the winter tee and slow maintenance as mowing time is increased they screen the natural woodland beyond and are surface rooting. This will cause damage to machinery and create unnecessary expense. They should be removed.

To the right of the green the willows should be removed to expose the view to the river and church spire. This will also benefit the green by increasing light and air to the playing surface.

The copse in the walk off to the 8th tee channels wear and casts shade on the green and surround this should be removed to safeguard the agronomics of the green and surround.

Hole 8

The area to the rear of the tee should be cleared of weeds to give a view to the river and park beyond this will add interest to the landscape.

Encroachment is occurring to the left of the hole screening the view to the green the shrubs and hornbeam should be removed to give full visibility to the hole.

The woodland to the left now appears linear during thinning scallops should be created to break the symmetry. Individual specimen trees should be selected and exposed to increase the landscape interest.

The right of the hole appears very linear and creates very unfair penal hazard close to the fairway the linear stand should be broken to individual trees. This will allow a more adventurous recovery shot and will improve the landscape value of the hole.

The holm oak to the right adjoining the fairway should be removed. These markers conflict with the landscape, are too close to play and cause unnecessary maintenance. All should be removed from the course.

The core woodland surrounding the green should be thinned and the edge relocated to allow more light and air to the playing surfaces.

The orientation and strategy of the hole would be improved by removing the hornbeam and shrubs for the apex.

Linear stands of trees look unnatural and create a very penal hazard, which makes for uninteresting golf.

Hole 9

From the present tee the left of the hole encroaches and screens the view to the fairway. This creates a very contrived landscape that looks unnatural and a very penal hazard that removes the pleasure of the game and causes slow play. The density of planting ensures that there is very poor grass sward and a large number of roots within the under-storey. The trees to the left of the hole should be broken into individual trees this will break the linear appearance of both the 9th and 4th fairways.

The tee should be relocated to the right and further back this will effectively straighten the hole giving a more attractive line of play and will safeguard players on the tee.

During management of the core woodland an area should be cleared to allow the construction of a new tee nearer the 8th green on the high ground.

To the right of the hole on the apex of the core woodland the shrubs should be removed as they cause slow play and lost balls. A shot in this area will be penalised by the trees towards the green and a fairer challenge will be created.

To the right towards the green the stand of dogwood should be removed to stop future encroachment.

To the left of the hole towards the green are a number of trees within the semi rough they create a very penal hazard on one of the most difficult holes on the course. They slow maintenance and screen the more attractive copse beyond. They should be removed.

To the rear and left of the green the poplars should be removed to give a view to and from the castle. This will also benefit the 3rd and 9th green as light and air will be increased.

To the right of the green the weeds should be cleared to open the view of the confluence of the Lumley Burn and river Wear. This will add landscape interest and improve airflow to the playing surface.

The copse by the 4th tee should be thinned to ensure a sustainable screen and to improve light and air to the playing surface during the process the laurel should be removed.

To the left on the walk off the alder should be removed as it channels traffic and therefore increases wear.

The areas of core woodland on the Haughs have closed canopy and require thinning to release the climax crop.

An attractive view from the 9th green can be opened to view by removing the poplar on the stream bank.

Hole 10

The 10th hole is one-dimensional with only one option from the tee. Within the original plan of 1997 the core woodland to the right was planted to allow the trees to the right of the Hole to be removed. The woodland is now established and the whitebeam, poplar, and willow to the right of the road should be removed along with the trees to the left of the road.

This would allow the flatter plateau to be utilised as playing area this would add options from the tee creating a more interesting strategy. It would spread wear, as presently there is only one landing area. The new area of woodland to the right of the hole should be thinned during the process shrubs should be removed and the end of the woodland to the right of the 10th green to improve light and air to the green and surround this will also help to dry the bank to the right of the green.

(A tree spade could be used to move the trees in the stand to the left of the road. The parkland species can be used on the upper field to replace the smaller ornamental trees that conflict with the landscape character of the course.)

Consideration should also be given to creating a new tee to the left this would add another dimension to the Hole be creating alternative lines of play.

This would then allow a more adventurous shot to be attempted some will no doubt say that you are making the hole easier. Fairness and challenge are often confused strategy requires risk and reward and

if the risk significantly out ways the reward then the strategy is lost, as no one will attempt the brave shot.

The danger the out of bounds is still to contend with as well as the copse of thorns near the green. A shot that is pushed or sliced will have the woodland to the right as a penalty and given more players will be tempted to use longer clubs then the risk is increased. Ideally the road should be relocated to the right this would allow a landing area to be created on the flatter plateau creating more options from the tee.

This would also create space to add a fairway bunker as both a focal point and a hazard. The 10th is presently the weakest hole on the course but could be a very interesting and fun hole.

Finally if the status quo remains and the trees (beech, ash and oak) to the left of the road mature then the hole will become unplayable as the canopy of the trees will be half way across the fairway.

The 2 thorns to the front left of the tee create unnecessary maintenance and serve no purpose they should be removed to speed up mowing.

The trees to the left of the path when mature will be the same size, as those on the left of the Hole. The Hole will then become unplayable.

The bridge over Lumley Burn to the left of the hole could be the true landscape feature it was designed to be if the scrub was removed in the foreground. This would increase the landscape interest of the hole and would help harmonise the landscape, as it would increase the awareness of the estate setting.

Hole 11

The tee is suffering from shade due to the trees to the left this adversely affects the quality of the grass sward. The 2 birch trees within the boundary should be removed and permission sought to remove 7 trees on the castle drive. This would also benefit the 2nd green and would ensure views to and from the castle are maintained.

To the left of the hole on the dogleg are a number of individual trees that look out of place and are very penal as they are close to the fairway they slow maintenance and are surface rooting. They should be removed.

Towards the green on the left the area is very wet the new planting which has been introduced to the right of the footpath should be removed as previously mentioned, as it will cast shade and could potentially block the new drains that are being installed.

The grass sward is very stressed due to the heavy shade cast by the trees to the right.

Hole 12

To the left rear of the tee pine and laurel have been planted these compete with the grass sward for water and nutrient and block the view from the clubhouse to the 12th hole they should be removed to safeguard the playing surface and improve the view from the clubhouse.

The birch and lime to the right of the tee are adversely affecting the quality of the tee by causing shade, reducing airflow and competing for water and nutrient. They are similarly affecting the 18th green a tree will spread its feeder roots approximately 2.5 times its height and will seek out water and nutrient. Therefore tees and greens are prime targets for trees. Further the trees make the right of the tee uncomfortable this effectively reduces the size of the tee as players naturally favour the unimpeded line of play concentrating wear on a smaller than necessary area. All of which has an adverse effect on the agronomy.

The trees should be removed the area can then be contoured to maintain separation between the tee and green.

The trees to the right cast shade and compete for water and nutrient.

Trees have been planted to the right of the hole for no purpose they block views and create unnecessary maintenance. Many of the trees are inappropriate species that will block drains or conflict with the parkland character. The trees should be removed retaining only the lime, oak and Norway maple. This would safeguard drainage and would create space for a ditch to be constructed to allow a more efficient outlet for drains.

To the front left of the tee the thorn encroaches restricting the use of the tee it should be removed.

On the left of the hole are a number of dead and dying trees that create a health and safety issue as they adjoin the footpath and 13th tee, these should be removed and the remainder of the area thinned to concentrate growth on the healthier stems.

A view should be created to the rear of the green of the castle this would make a more attractive backdrop and would add to the strategy of the hole by removing the depth of field and making clubbing more difficult.

It would also bring the ha-ha into the landscape, as a true feature the ditch in front of the ha-ha should be made a lateral water hazard to allow a drop to be taken when an unplayable lie occurs.

A view to and from the castle could be opened out at the back of the 12th green this would create a fine backdrop to the hole.

Hole 13

The tee is suffering badly from shade the copse of sycamore and elm scrub to the left of the tee should be cleared this will improve light and air to the tee will give create a view towards the castle.

To the right of the tee the multi stemmed ash is in very poor condition it should be coppiced to increase light and air to the tee while maintaining a screen from the 12th tee.

The regeneration that has occurred along the length of the Ha-ha should be removed to expose the stonework and to safeguard the structure. This would also enhance the presence of the out of bounds.

The 13th hole has been compromised by the planting of birch and oak to the left in an area that was once fairway this has result in a domino effect as play has been forced to the right towards the 14th fairway. Trees have then been planted between 13 and 14. This the forces play on the 14th towards the 15th and so on till you reach 18.

This has adversely affected the strategy on all the holes mentioned spoiling what should be the best holes on the course. The grass sward in this area is the best for golf with bent and fescue grasses dominating. Trees have a symbiotic relationship with the mycorrhizal fungi in the soil this causes enrichment and creates an ecosystem that favours the less desirable grasses.

It would therefore benefit the landscape, strategy and agronomy of the course to reduce the number of trees in this area. Many of the trees introduced are only a few yards from the fairway unfairly penalising a shot that narrowly misses the target conversely a player who is very wide receives no punishment.

The species composition is also poor as the majority of the trees are out of scale with the landscape character.

The 5 stands of trees to the left should be removed and the fairway relocated to the left away from the 14th hole. This will bring the out of bounds more into play and create a better line of play.

To the right of the hole many inappropriate trees have been planted these include poplar, willow, birch, alder and rowan. They conflict with the landscape character in form, texture, scale and colour and create a very penal situation on both the 13th and 14th holes. They should be removed and some contouring introduced to maintain the golfing challenge and ensure that views are maintained. Replanting may then be introduced with a few parkland trees such as lime and oak the location to be decided after clearance has taken place and needs evaluated.

The ha-ha to the left of the hole should be cleared of regeneration and views to the castle created to enhance the landscape value of the course.

To the rear of the green the copse of pine and rhododendron should be thinned and the shrubs removed to increase light and air to the green.

The trees to the right of the approach compromise the landscape value they should be removed and contouring introduced to maintain the golfing challenge. This would create an awkward lie and a fairer shot over bunkers to a sloping green.

Hole 14

To the left of the tee is a line of birch and poplar that serve no purpose are out of scale with the landscape and create unnecessary maintenance they should be removed.

The drive on the 14th hole is very tight and trees are located immediate to the fairway penalising a shot only a few yards off the line of play. The dogleg occurs 200 yards from the tee making the hole extremely awkward for the mid to high handicap golfer.

Willows that create an exceedingly penal hazard dominate the left of the hole. Tree removal should take place to allow a better sight of the green and the tree should be thinned in conjunction with the architectural report.

The more appropriate larger trees further towards the green should be retained to protect the ladies tee and dissuade a shot down the 15th fairway. The opening up of the 14th fairway will create a more attractive route of play encouraging play in the correct direction.

To the rear of the green trees have been planted that screen the view of the church spire and cast shade on the green these should be removed. This will also benefit the agronomy of the green by improving light and air and removing competition for water and nutrient.

The church spire would form a pleasant backdrop to the 14th green.

Hole 15

A cypress has been planted to the right of the tee this serves no purpose, screens views across the course and adversely affects the agronomy of the tee it should be removed.

To the right of the hole whitebeam have been planted between the stands of pine, they are out of scale with the landscape and form a very penal hazard on the 18th hole. They should be removed the challenge on 18 would still be maintained by the pine and the slope of the green. The removal of trees would also benefit maintenance as mowing time and leaf drop would be reduced.

To the right near the 18th tee the planting appears very linear and unnatural the stand should be broken into individual trees favouring the more desirable parkland species such as oak the need to protect the tee would be removed if the 18th tee were moved to the left of its present location.

Towards the green on the right the trees within the short mown grass should be removed they form a very penal hazard on the longest par 4 on the course. This would also reveal the more attractive natural copse beyond The area could then be developed as fairway taking play away from the 14th tees thus improving safety.

The stand of pine and shrubs behind the green serve no purpose cause shade to the green and create an appearance similar to the 13th hole. The stand should be removed to enhance the agronomy and to give the hole more individuality. Further the stand channels traffic to the 16th tee causing unnecessary wear near the green.

The trees that have been planted in the walk off area are also contributing to wear and should be removed, as they serve no useful purpose.

The copse between holes 15/16/17 requires thinning to release the better stems during thinning shrubs should be coppiced and edges scalloped to increase the landscape and wildlife value of the course.

Nurse species such as birch, alder and cherry should be targeted to concentrate growth on the more sustainable species such as oak and ash.

It is essential to maintain the unique views to and from the course. Linear stands of trees look unnatural and create a very penal hazard.

Trees in walk off areas channel traffic causing unnecessary wear.

Hole 16

The copse to the right of the yellow tee should be thinned to release the better stems during the process the edge should be relocated to stop encroachment.

Gorse has been planted extensively in the carry, this is creating unnecessary blindness and is causing enrichment to an area that used to be bent and fescue grass. Gorse naturally fixes nitrogen from the air and deposits it in the soil creating an ecosystem that favours the broadleaf grasses that are undesirable for golf. The gorse should be dug out and any regeneration controlled. The area should then be mowed on a regular basis using a cut and collect machine to reduce fertility and safeguard against re-colonisation.

The stand of trees to the left of the hole requires thinning to create sustainable cover and to concentrate growth on the more desirable species.

The 2 thorns on the approach create unfair hazard increase maintenance and confuse the landscape they should be removed.

Hole 17

The woodland that was planted to the left of the hole now requires thinning in order to release the better stems and more desirable species.

The cherry and birch to the left of the tee cause shade and reduce airflow they should be removed to improve the agronomics.

To the right of the fairway the poplar and birch detract from the landscape of the hole, the 2 large oaks further up the fairway should be the focal point of the landscape. The poplar and birch only penalise the high handicap golfer serve no strategic purpose. They should be removed.

The woodland to the right should be thinned as per hole 15.

Towards the green on the left are 3 very poor quality small trees that create maintenance and will never reach their potential they should be removed to ease maintenance and increase the landscape value.

The dogwood to the left of the green should be coppiced to stop encroachment and to create sustainable cover.

The rear tee is too shaded to ever be in good condition consideration should be given to abandoning it.

The poplar and birch screen the much more attractive oaks and remove the framing effect from the hole.

Hole 18

The stand of pines to the left of the tee, cast heavy shade, reduce airflow and block views from the course to the cricket ground. The stand should be removed the tee relocated to the left creating a better line of play.

To the left of the landing area the trees should be removed back to the area of woodland this would allow the fairway to be relocated further left on a flatter landing area and would mean that the second shot is played away from the car park improving safety. It would create a fairer shot to the green as play would be into the slope rather than with the slope. This should also add to the safety of the car park.

This would move the line of play away from the 15th tee and would allow the trees to the right of the hole to be thinned targeting the whitebeam that appear unnatural and form too penal a hazard. The remaining trees should be thinned to concentrate growth on the better stems and more desirable species.

The birch and lime behind the green cause problems with the 12th tee and 18th green they should be removed and the area contoured to stop balls running through the green to the tee.

This will also improve the view to and from the clubhouse.

The woodland to the left of the hole requires thinning to create sustainable cover during the process the path to the practice ground should be improved by increasing light to the surface of the path this will help to dry the path making the surface more acceptable.

The spruce to the left of the green appear very unnatural and do not really protect the car park they channel traffic creating wear consideration should be given to landscaping the area to enhance exit from the course. Mounding could be created and gorse planted on top to safeguard the car park.

The view to and from the clubhouse could be greatly enhanced by removing the trees behind the 18th green.