



# Upper Barn & Crowdhill Copses

## Management Plan

# 2014-2019

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## THE WOODLAND TRUST

### INTRODUCTION

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

### PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations. Please either consult The Woodland Trust website [www.woodlandtrust.org.uk](http://www.woodlandtrust.org.uk) or contact the Woodland Trust ([wopsmail@woodlandtrust.org.uk](mailto:wopsmail@woodlandtrust.org.uk)) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

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## WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland. Our strategic aims are to:

- Protect native woods, trees and their wildlife for the future
- Work with others to create more native woodlands and places rich in trees
- Inspire everyone to enjoy and value woods and trees

All our sites have a management plan which is freely accessible via our website

[www.woodlandtrust.org.uk](http://www.woodlandtrust.org.uk). Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
4. The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
- 10 Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

## SUMMARY

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site - their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

## 1.0 SITE DETAILS

<b>Site name:</b>	Upper Barn & Crowdhill Copses
<b>Location:</b>	Fisher's Pond
<b>Grid reference:</b>	SU484202, OS 1:50,000 Sheet No. 185
<b>Area:</b>	28.43 hectares (70.25 acres)
<b>Designations:</b>	Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Special Area of Conservation

## 2.0 SITE DESCRIPTION

### 2.1 Summary Description

An ancient woodland site largely replanted in the 50s and 60s. Crowdhill Copse is a curved belt running southeast of a small stream valley. The larger Upper Barn Copse lies north and is popular with locals. The copses are home to 11 species of fern.

### 2.2 Extended Description

Upper Barn Copse and Crowdhill Copse are two blocks of ancient woodland situated in a rural area north of Fair Oak, a residential district near Eastleigh to the north of Southampton. Main access is via Harding's Lane which runs beside Stoke Park Wood, a large Forestry Commission Plantation on Ancient Woodland Site. There are many good links with the local rights of way network, another bridleway leads from the track between the two copses to the Fox Pub to the north of Fair Oak.

Crowdhill Copse is the southern part of the Trust's land - and is a broad curved woodland belt running mainly to the south east of a small stream valley. Upper Barn Copse is a larger area of woodland lying to the north of Crowdhill and approached by a bridleway over which the public and the Trust have rights of access.

Viewed from outside the two copses have broadleaf edges which blend well into the landscape. Internally though, they appear superficially, to be typical ex Forestry Commission plantations. More

detailed inspection reveals a rich and expanding ground flora, old woodbanks and some older boundary trees - all pointing to the copses' ancient past. The woods were once part of the Bishop of Winchester's hunting grounds and were only significantly replanted with exotic conifers in the 1950's and 60's. They are classed as Plantations on Ancient Woodland (PAWs) and the Trust has been undertaking work to restore the woods to their former native glory.

They were acquired by the Woodland Trust in March 1990. Since then a programme of thinning the conifers in favour of native broadleaved trees has been followed and the woods are gradually changing from a mixed plantation dominated by non-native conifers including Western red cedar, western hemlock and Douglas fir to a mixed woodland tending to be dominated by native broadleaves including oak, ash and beech. Significant natural regeneration of native broadleaves is occurring and the thinning is helping to blur obvious planting lines over much of the wood.

This restoration process is almost complete in Crowdhill Copse, which now has an excellent range of native species of varying age. The display of woodland plants in the spring is spectacular and demonstrates the value of the restoration process and the future potential of Upper Barn Copse.

Upper Barn has significant areas of conifer as well as beech plantation. The restoration process has secured the remnant features and further thinning will encourage natural regeneration of native broadleaves, creating an understory and allowing the woodland plants to expand their range. The display of bluebells under the beech plantations is particularly impressive.

The path and ride layout provides good access to most parts of the copses, making them popular with local people. The paths can be muddy and, from time to time, rutted due to timber extraction operations. A main ride runs the length of Crowdhill Copse while in Upper Barn the ride layout is based mainly on two radiating systems, with other spurs and informal internal boundary paths. External rights of way bound much of Upper Barn and there are ten entrances to the copses.

The copses have considerable wildlife value and contain at least 11 species of fern in addition to many other plants associated with ancient woodland, including bluebells, butcher's broom and Solomon's seal. They are well linked to other woodlands and hedgerows in the area although they are mainly surrounded by farm fields (improved grassland and arable). Raptors can be heard within the woods (buzzards and sparrowhawks) and long tailed tits and goldcrests are common.

The woods form an important part of the landscape and surrounding network of woodland habitats. There are proposals for a housing development comprising 330 homes adjacent to Crowdhill Copse. If this goes ahead there is potential for negative impacts on the woodlands.

## 3.0 PUBLIC ACCESS INFORMATION

### 3.1 Getting there

Upper Barn and Crowdhill Copse are two woods just north of Bishopstoke. To the south they adjoin the Forestry Commission's much larger Stoke Park Wood. Crowdhill Copse can be accessed from Harding Lane, at the end of which is a parking area for a couple of cars. Upper Barn can be accessed from the same point by walking up through Crowdhill Copse, or more directly by public footpath from the east side from the Fox & Hounds pub on the B3354 Winchester Road.

A public footpath runs up through Crowdhill Copse and connects to a bridleway leading by a field to Upper Barn. Another public footpath crosses Upper Barn at the southern end. This connects to several permissive paths within the wood. The paths are mostly grassy and liable to be muddy when wet. Access points are mostly hunting gates and kissing gates.

Nearest Bus Stop : Fox & Hounds Pub, Crowdhill. Accessible from Winchester and Bishop's Waltham by Stagecoach Service No. 69. From there walk west down track to Crowdhill Copse. Also Sandy Road, Fair Oak, accessible from Eastleigh by Solent Blue Line Service No. 2. (Information from Traveline May 2007 [www.traveline.org.uk](http://www.traveline.org.uk) 0871 200 2233).

Nearest Station : Eastleigh 2.5 miles

Nearest Public Toilet : Bishopstoke Recreation Ground (2 miles) (Information from Eastleigh BC 02380 688409)

### 3.2 Access / Walks



## 4.0 LONG TERM POLICY

The long term intention is that both Upper Barn and Crowdhill Copse will be semi-natural woodland with a diverse species and age composition, primarily dominated by native broadleaf species and with diverse, well developed typical shrub and field layers, all representative of the survival and extension of ancient woodland components from the pre-plantation period. Scattered over-mature Douglas fir and Scots pine will remain but will not be regenerating significantly.

The remnant ancient woodland features such as specialist ground flora, precursor and veteran trees, deadwood and archaeological features will have been secured and the management will concentrate on shifting the canopy gradually towards a species composition that is mainly native. Opening up ancient woodland features will continue, releasing advanced native regeneration through gradual thinning. The thinning in Upper Barn Copse will need to be closely monitored as bramble and bracken can respond vigorously to increased light levels and they may require some control to ensure they don't suppress natural regeneration. With this in mind a proportion of non-native conifer will be retained for an extended period to provide essential canopy cover. Although not a threat to woodland flora the beech plantations in Upper Barn will be thinned and other species of regenerating native broadleaves will be favoured with a view to increasing species and age diversity. Coppicing along ride edges will ensure young trees continue to regenerate, increasing the structural diversity. The increase in the number of native species present, age diversity and increasing extent of woodland plants will all contribute to the woodlands being more resilient to threats such as climate change , pests and diseases.

The effect of deer on natural regeneration will be monitored and if deer are deemed to be a contributing factor in preventing regeneration then protection of regeneration in fenced enclosures, increasing deer control by culling or a combination of both will be utilised.

Existing on-site access facilities will be maintained and enhanced to suit the existing local demand, which is classed as Grade A - high usage. The potential increase in housing adjacent to the site will likely increase visitor numbers. The upgrading of the main ride through Crowdhill Copse will improve access, particularly during the winter months and is in line with Eastleigh Borough Councils Local Plan.

## 5.0 KEY FEATURES

The Key Features of the site are identified and described below. They encapsulate what is important about the site. The short and long-term objectives are stated and any management necessary to maintain and improve the Key Feature.

### 5.1 Ancient Semi Natural Woodland

#### Description

Although the copses are being managed by gradually thinning to favour mainly native broadleaves, thus encouraging the formation of a mainly native broadleaf high forest structure planting lines and groupings of non-native conifers can still be seen. Crowdhill Copse is developing well towards being a broadleaved woodland with secure remnant features. Upper Barn Copse still has some areas of western hemlock which threaten ground flora due to shading and vigorous regeneration, whereas the areas of Norway spruce and Douglas fir do not pose a great threat to surviving ancient woodland components. Whilst the beech plantations show good ground flora, to become more resilient they will require thinning to encourage species and structural (age) diversity. A more ancient management history can also be traced. The copses were once part of the Bishop of Winchester's hunting grounds and it was only in the 1960's that the woods became extensively replanted with a mix of conifers and broadleaved trees. Some of the boundary trees pre-date FC management and a rich ground flora points to a more traditional woodland past. Although the ride layout is one of straight rides radiating from fixed points, this layout is commonly found in old parkland woods. Woodland, heath, plantations and remnant forest is all to be found in this part of Hampshire, which despite its close proximity to Southampton and its satellite towns still contains large undeveloped areas open to public access.

The copses are of a large enough size to support a varied wildlife mix - this is much enhanced through links with neighbouring woods, shaws, hedgerows and farmland. The rich flora and wildlife that exists in and around the woods is well documented in the species lists and survey information (see Appendix 3 for details). The following are present and of note: ground flora (including ancient woodland indicators) - moschatel, butcher's broom, Solomon's seal, bluebells, and 11 species of fern. Butterflies/moths - silver washed fritillary, barred hook tip. Many deer inhabit the area.

There are various watercourses within the copses, some of which arise from within Upper Barn Copse. These create small valleys, adding diversity to the otherwise flat site, they also form microclimates and wildlife corridors linking with habitats beyond the copses.

#### Significance

The amount of ASNW left in Britain has been drastically reduced over the last century. Approximately 40% of England's ASNW is found in the South East. ASNW is very important due to the continuity of woodland cover over hundreds of years and contains many rare and threatened species and often represents the most natural habitat present in the landscape. The planting of conifers during the 1950's & 60's had a significant negative impact on our ancient woods. Securing the remnant pre-plantation features and restoring these sites back to native broadleaved woodland will enable the woodland plants and wildlife to flourish. Ancient woodland is irreplaceable and the restoration and prevention of its loss are two of the main aims of the Trust.

Upper Barn & Crowdhill Copse lies in a mixed mosaic landscape with farmland, woodland and other semi-natural habitats. The woodlands are important as they interconnect with these other wooded habitats providing corridors and important habitats for wildlife to move around the wider landscape.

## Opportunities & Constraints

### Opportunities

- to engage local wildlife groups.

### Constraints

- The ground can be very wet and muddy during winter
- All timber must be extracted through Crowdhill Copse making a long extraction route

## Factors Causing Change

Squirrel Damage, Deer Damage, Succession to broadleaved woodland

## Long term Objective (50 years+)

All ancient woodland components will be secure and improving in condition. Two well developed, closely linked copses with a good mix of locally occurring native broadleaved trees of varying ages (from naturally regenerating seedlings through to older boundary trees). There will also be occasional coniferous trees - including tall western hemlocks, Douglas fir, Norway spruce. This will be achieved by the continuation of a gradual restoration process that reduces the remaining conifers to less than 20% of the canopy across the 2 copses. The beech 'plantations, will look more natural with a good structure and an increased diversity of species.

The ground flora will continue to be rich and increasingly well developed. The seasonal streams will continue to provide important wildlife habitats and links with other habitats outside the copses. Some of the banks will be particularly rich areas for ferns.

## Short term management Objectives for the plan period (5 years)

Objective: Secure remnant ancient woodland components creating a diverse structure, species and age composition including saplings and mature specimens

During this plan period this will be achieved by:

- In 2014 thin to waste the remaining clusters of conifer in Crowdhill Copse 0.5 ha
- 1.75ha of coppicing along approximately 1800m of rides. The coppicing will create rides between 5 & 20m wide, with scalloped edges.
- Once coppiced the rides will be maintained with a central grassy zone and scrub edges. This will be achieved by an annual path cut in August and coppicing alternate sides of the rides on a 5 year rotation
- An annual tree safety survey and remedial work will be undertaken within recommended timescales.
- An annual deer impact assessment will be undertaken and a cull will be implemented in conjunction with the Forestry Commission
- A PAWs re-survey will be undertaken in 2018

## 5.2 Informal Public Access

### Description

Upper Barn and Crowdhill Copses are two well used and popular woodlands with the local general public. Although they are two separate entities, they are linked by a track running over non-Trust land (part of a public bridleway), over which the public and the Trust have appropriate rights of access,

The copses contain a good network of paths and rides that connect with the local rights of way system (some of which run through the copses), and link them to the adjacent Stoke Park Wood. Crowdhill Copse, being nearer to the local population centres of Fair Oak and Horton Heath is generally more frequented, along the ride and public footpath that bisects the copse along its length. This links with a bridleway that leads from Fair Oak to Upper Barn Copse. The linking section of bridleway between the two copses is privately owned although the public and the Trust have appropriate access rights.

### Significance

Informal public access fulfills the Trust's corporate aim of inspiring everyone to enjoy and value woods and trees. The woods link well with the local rights of way network and adjacent Forestry Commission land (open access) enabling longer walks. The woods provide suitable areas for the walking and exercising of dogs and other suitable outdoor enjoyment. Fair Oak has a population of just under 10,000 making these woods a valuable green space.

Having been wooded for many years the copses are an important link to the area's past and are visually important in the local landscape.

### Opportunities & Constraints

#### Constraints

- Mud and rutting of paths can be an inconvenience during and after thinning/extraction and in wet weather.
- The adjacent proposed housing estate will likely increase visitor numbers & have a negative impact on flora & fauna

#### Opportunities

- to help some paths and rides to dry out quicker by scalloping edges, particularly near intersections and where it will not unduly damage the ground flora.
- The adjacent proposed housing estate will likely increase visitor numbers & provide an opportunity to engage with the local community
- Permissive access for horse riders and cyclists through Crowdhill Copse could also be considered

### Factors Causing Change

### Long term Objective (50 years+)

A well established and safe network of paths for informal public access. Visitors will find the woods aesthetically pleasing, with the entrances and paths allowing easy access to enjoy the woodland environment.

### Short term management Objectives for the plan period (5 years)

Objective: All rides and paths within the site (approx. 4.2km) will be maintained annually for pedestrian use.

During the plan period this will be achieved by:

- implementing an appropriate path cutting regime, one cut in July/August.
- A surfaced track will be created along the main ride through Crowdhill Copse (approx 600m) in 2014 to enable management and future timber extraction as well as providing improved pedestrian access.
- All site infrastructure such as signs, footbridges, culverts and steps will be inspected annually and any remedial work undertaken in the appropriate timescale.
- A walk-over tree safety survey will be undertaken along maintained paths and rides every three years with any remedial work undertaken in the appropriate timescale.

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## 6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
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## APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	0.76	other oak spp	1968	High forest	Gullies/Deep Valleys/Uneven/Rocky ground	Ancient Semi Natural Woodland, Informal Public Access	Planted Ancient Woodland Site, Site of Local Nature Conservation Importance
<p>A small triangular area of woodland in the extreme south-west of Crowdhill Copse (Cpts 1-3 make up the whole of Crowdhill Copse). It is bounded to the south-west by a public bridleway, beyond which is Forestry Commission land. There is a ride on the eastern edge (with an open field to the south-east). To the north a public footpath separates cpt 1a from 2a.</p> <p>Many conifers have been thinned from the original planting arrangement of three rows of conifers between two rows of broadleaves. This gives the woodland a more natural feel, although a few western hemlock and other conifers remain, intermixed with the oaks, alders, ashes and wild cherry. Broadleaves now dominate most of the cpt, but one critically threatened area of WH remains on the west side by the stream. In the understorey are some regenerating ashes and other native broadleaves as well as occasional to frequent hazels.</p> <p>Ground flora is sparse where disturbed by recent thinning but includes honeysuckle, foxglove, ferns and many brambles near the rides. Other species include tormentil, holcus mollis (a typical soft woodland grass).</p>							
2a	3.66	other oak spp	1957	High forest	Very steep slope/cliff/quarry/mine shafts/sink holes etc	Ancient Semi Natural Woodland, Informal Public Access	Planted Ancient Woodland Site, Site of Local Nature Conservation Importance

This cpt runs to the western and northern sides of the central footpath and ride that forms the boundary between 2a and 3a.

In a shallow valley a small seasonal stream runs the length of 2a, providing topographical and wildlife interest. This area is relatively undisturbed away from the footpath and northern and western fringes.

Some Norway spruce and western red cedars are left in 2a. The western red cedars are generally of poor form. All level areas to the east and south of the seasonal stream were thinned in summer 2003 and again in 2009 there remains a threatened block to thin to waste along the stream, to be done in 2010.

Where recently thinned the remaining species mix is dominated by oak, ash and alder. Birch and sweet chestnut are also present. The area to the north and west of the stream is dominated by ash. Due to the steep topography, in the valley there are some areas left unthinned where tall thin ashes and alders are drawn up to the light.

There are some yews naturally regenerating and the occasional wild cherry. Hazel is frequent in the understorey.

The ground flora includes: bracken, ivy and many ferns - plus many of the species mentioned in 1a - but is suppressed by shade in the valley.

3a	4.76	other oak spp	1968	High forest		Ancient Semi Natural Woodland, Informal Public Access	Planted Ancient Woodland Site, Site of Local Nature Conservation Importance
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This appears similar to cpts 1 and 2 but the mix here contains more native broadleaves - 100% in much of the cpt. Central and southern parts of 3a were thinned in the summer of 2003. Only some isolated lawson cypress to remove.

Oak now dominates with some ash, wild cherry, goat willow (mainly at the eastern end) and birch. In the southeastern corner, the spur (see map) relates to a mature hedgerow.

The understorey contains wild cherry, holly and frequent hazel.

Ground flora by the ride edge appears a little richer than 1a and 2a also containing greater knapweed, tall thistles and an occasional sycamore seedling.

At the eastern end a path runs in a north/south direction in a broad ride. To the east of this is a small woodland fringe.

4a	3.42	Beech	1958	High forest		Ancient Semi Natural Woodland, Informal Public Access	Planted Ancient Woodland Site, Site of Local Nature Conservation Importance
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This compartment forms the southern half of the south-eastern quadrant of Upperbarn Copse. It is bounded to the north-east and western sides by rides separating it from cpts 8a (to the north-east) and 5a (to the west). To the south is an open arable field. A public bridleway runs next to the wood at the northern edge of this field.

Within cpt 4 are some pure stands of tall western hemlock thinned in 2009 and beech. Still threatened but edging towards secure now. The southern edge near the field and along the rides contain a mix of mature native broadleaves and hedgerow species including oak ash and birch. Some of the western hemlock is regenerating naturally, in deep shade. Thinning has favoured native broadleaves. There are some older, larger boundary oaks.

In the middle of the rectangle formed by cpts 4 and 8 is an intersection of five rides/paths, providing varying degrees of light and shade. An attempt was made in the past to enhance intersections by pollarding some beeches - most of these have failed. These are now unattractive features and they are not large enough to provide significant dead wood habitats.

A number of small seasonal watercourses - are present in cpt 4 and small valleys add interest to the wood.

Ground flora mainly occurs at the intersections and includes brambles, soft rush, scaly male ferns and other ferns, tall thistles, various tall grasses and bracken.

The hedgerow in the south is of interest and there are signs of an old woodbank going west. The hedgerow (which in effect surrounds the wood) contains: hawthorn, field maple, spindle, holly and alder buckthorn.

In the extreme north a further important intersection unites all five rides that radiate from the centre of Upperbarn Copse, splitting the copse into its 5 compartments - 4a to 8a, this is very sunny.

5a	2.97	Western hemlock	1959	High forest		Ancient Semi Natural Woodland, Informal Public Access	Planted Ancient Woodland Site, Site of Local Nature Conservation Importance
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Internally, though there are still blocks of dense western hemlock thinned 2009 suppressing ground flora and native tree and shrub regeneration. Still threatened but edging towards secure now. The internal path that runs through 5a can appear a little dismal and dark to some visitors. Where this is not the case there is good ground flora with many ferns, bluebells, foxgloves, bramble and honeysuckle.

Other species in 5a include: conifers - some tall noble firs, a few western red cedars; broadleaves - oak (old on banks) alder, ash, field maple, birch, beech and sweet chestnut.

Internally, though there are still blocks of dense western hemlock suppressing ground flora and native tree and shrub regeneration. The internal path that runs through 5a can appear a little dismal and dark to some visitors. Where this is not the case there is good ground flora with many ferns, bluebells, foxgloves, bramble and honeysuckle.

Other species in 5a include: conifers - some tall noble firs, a few western red cedars; broadleaves - oak (old on banks) alder, ash, field maple, birch, beech and sweet chestnut.

6a	3.34	other oak spp	1964	High forest		Ancient Semi Natural Woodland, Informal Public Access	Planted Ancient Woodland Site, Site of Local Nature Conservation Importance
<p>Similar in character to much of Upperbarn Copse with pure western hemlock to the south and norway spruce to the north, thinned 2009. Still threatened but edging towards secure now. (less conifer dominated than 5a). It contains an interesting wooded valley with a slatted wooden bridge carrying the informal boundary path. There are good wood edges habitats beside the ride and next to the field. The boundary woodbank is prominent some old oaks, much butcher's broom and there is a deep seasonally wet ditch in the north. A prominent internal woodbank also runs partly through this cpt.</p> <p>Oak, western hemlock, ash, alder, field maple, birch beech and sweet chestnut are all present in the canopy. The understorey contains hazel and holly in addition to regeneration of the other species mentioned.</p> <p>There is a grassy ride (somewhat overgrown at the edges) between 6a and 7a, which is blind at the northern end. This contains many rushes and typical woodland grasses such as holcus mollis and dyschampsia cespitosa.</p>							
7a	2.50	Ash	1958	High forest		Ancient Semi Natural Woodland, Informal Public Access	Planted Ancient Woodland Site, Site of Local Nature Conservation Importance
<p>This is the western part of cpt 7 between cpt 6 to the west and 7b to the east. It is bounded by rides to the east and west - the eastern ride between 7a and 7b is overgrown and has a neglected appearance, in places. (NB Former Maps and plans refer to this sub-cpt as 7b - the lettering has been changed in this plan to follow a logical "clockwise" sequence in Upperbarn Copse).</p> <p>Here there is a good mix of species including occasional birches and goat willows. There are some good form ash poles and straight wild cherries, in addition to the dominant oak and ash standards. There still remain a few Norway spruce , thinned 2009. Still threatened but edging towards secure now.</p> <p>Some brambly patches are in lighter areas, mainly next to the ride and field edges, and there are many sedges, rushes and ferns. Ground flora near the external edge contains bluebells.</p>							
7b	2.38	Ash	1958	High forest	Sensitive habitats/species on or adjacent to site	Ancient Semi Natural Woodland, Informal Public Access	Planted Ancient Woodland Site, Site of Local Nature Conservation Importance

This is the area to the east of the ride that runs through the middle of the length of cpt 7. (NB Former maps and plans showed this as 7a - see comments in this plan under Sub-cpt 7a, Description)  
 It is the most remote and thus the most undisturbed part of Upperbarn. It has a light and airy feel. It appears the most diverse compartment and includes the following: stub pollarded oaks on the woodbank, very large stands of butcher's broom.  
 Ash, beech, wild cherry, alder and birch are all present in the canopy. Minor areas of norway spruce were thinned 2009.  
 The understorey is well developed and there are signs of past coppicing of ash, with some large old stools. Holly and hazel are frequent locally.  
 Occasional tall alders and a fine small beechy valley in the south add variety to this compartment. In the south east corner is a small but interesting area of hazel coppice, next to a seasonal stream, the valley of which marks the boundary between 7b and 8a.  
 There are some dead wood habitat piles next to this valley.  
 The ground flora is also rich and different here, with ancient woodland indicators such as Solomon's seal, enchanter's nightshade and dog's mercury all present in addition to all the other ground flora species mentioned in other compartments.  
 The land to the east is grazed pasture, and there are some fine views over undulating countryside from the informal eastern perimeter path.

8a	4.64	Beech	1958	High forest	Very steep slope/cliff/quarry/mine shafts/sink holes etc	Ancient Semi Natural Woodland, Informal Public Access	Planted Ancient Woodland Site, Site of Local Nature Conservation Importance
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This is the south-eastern part of Upperbarn Copse. It is somewhat denser than the rest of the copse and has remained relatively undisturbed since the last thin. There are some windblown trees, some rotting log piles giving many niches for invertebrates, fungi and micro-organisms. There is some ash with hazel under in this compartment; some large Douglas firs of good form have been retained following past thinning. These and some western hemlock were thinned heavily in 2009. Still threatened but edging towards secure now. The main species here though is beech under which grow many bluebells. Also present in the canopy: alder and birch - the understorey within the beech plantation area is undeveloped, although at the edge hazel is present.  
 Butterflies abound in summer in the main ride.

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**Appendix 2: Harvesting operations (20 years)**

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2015	7a	Ride edge Coppice	1.50	40	60
2016	5a	Ride edge Coppice	1.00	0	0
2016	8a	Ride edge Coppice	1.00	0	0

## GLOSSARY

### **Ancient Woodland**

Ancient woods are defined as those where there has been continuous woodland cover since at least 1600 AD. In Scotland ancient woods are defined strictly as sites shown as semi-natural woodland on the 'Roy' maps (a military survey carried out in 1750 AD, which is the best source of historical map evidence) and as woodland all subsequent maps. However, they have been combined with long-established woods of semi-natural origin (originating from between 1750 and 1860) into a single category of Ancient Semi-Natural Woodland to take account of uncertainties in their identification. Ancient woods include Ancient Semi-Natural Woodland and plantations on Ancient Woodland Sites (see below). May support many species that are only found in ancient woodland.

### **Ancient Semi - Natural Woodland**

Stands in ancient woods defined as those consisting predominantly of native trees and shrubs that have not obviously been planted, which have arisen from natural regeneration or coppice regrowth.

### **Ancient Woodland Site**

Stands in ancient woods that have been converted to plantations, of coniferous, broadleaved or mixed species, usually for timber production, including plantations of native species planted so closely together that any semi-natural elements of the understorey have been suppressed.

### **Beating Up**

Replacing any newly planted trees that have died in the first few years after planting.

### **Broadleaf**

A tree having broad leaves (such as oak) rather than needles found on conifers (such as Scots pine).

### **Canopy**

The uppermost layer of vegetation in a woodland, or the upper foliage and branches of an individual tree.

### **Clearfell**

Felling of all trees within a defined area.

### **Compartment**

Permanent management division of a woodland, usually defined on site by permanent features such as roads. See Sub-compartments.

### **Conifer**

A tree having needles, rather than broadleaves, and typically bearing cones.

### **Continuous Cover forestry**

A term used for managing woods to ensure that there are groups or individual trees of different ages scattered over the whole wood and that some mature tree cover is always maintained. Management is by repeated thinning and no large areas are ever completely felled all at once.

### **Coppice**

Trees which are cut back to ground levels at regular intervals (3-25 years).

### **Exotic (non-native) Species**

Species originating from other countries (or other parts of the UK) that have been introduced by humans, deliberately or accidentally.

### **Field Layer**

Layer of small, non-woody herbaceous plants such as bluebells.

### **Group Fell**

The felling of a small group of trees, often to promote natural regeneration or allow planting.

### **Long Term Retention**

Discrete groups of trees (or in some cases single trees) that are retained significantly past their economic felling age. Operations may still be carried out within them and thinning is often necessary to maintain stability.

### **Minimum Intervention**

Areas where no operations (such as thinning) will take place other than to protect public safety or possibly to control invasive exotic species.

### **Mixed Woodland**

Woodland made up of broadleaved and coniferous trees.

### **National vegetation classification (NVC)**

A classification scheme that allows an area of vegetation to be assigned to the standardised type that best matches the combination of plant species that it contains. All woodlands in the UK can be described as being one of 18 main woodland types (W1 - W18), which principally reflect soil and climatic conditions. For example, Upland Oakwoods are type W11, and normally occur on well drained infertile soils in the cooler and wetter north and west of Britain. Each main type can be subdivided into numerous subtypes. Most real woods contain more than one type or sub-type and inevitably some woods are intermediate in character and can't be properly described by any sub type.

### **Native Species**

Species that arrived in Britain without human assistance.

### **Natural Regeneration**

Naturally grown trees from seeds falling from mature trees. Also regeneration from coppicing and suckering.

## **Origin & Provenance**

The provenance of a tree or seed is the place where seed was collected to grow the tree or plant. The origin is the geographical location within the natural range of a species from where seeds/tree originally derives. Thus an acorn collected from a Turkey oak in Edinburgh would have an Edinburgh provenance and a southern European origin.

## **Re-Stocking**

Re-planting an area of woodland, after it has been felled.

## **Shrub Layer**

Formed by woody plants 1-10m tall.

## **Silviculture**

The growing and care of trees in woodlands.

## **Stand**

Trees of one type or species, grouped together within a woodland.

## **Sub-Compartment**

Temporary management division of a compartment, which may change between management plan periods.

## **Thinning**

The felling of a proportion of individual trees within a given area. The remaining trees grow to fill in the space created.

## **Tubex or Grow or Tuley Tubes**

Tubes placed over newly planted trees or natural regeneration that promote growth and provide protection from animals such as rabbits and deer.

## **Weeding**

The control of vegetation immediately around newly planted trees or natural regeneration to promote tree growth until they become established. Either by hand cutting or with carefully selected weed killers such as glyphosate.

## **Windblow/Windthrow**

Trees or groups of trees blown over (usually uprooted) by strong winds and gales.