

Priory Grove

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 <u>www.woodlandtrust.org.uk</u> or contact the Woodland Trust (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.

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 <u>www.woodlandtrust.org.uk</u>. 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.
- 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

Site name:	Priory Grove
Location:	Monmouth
Grid reference:	SO526139, OS 1:50,000 Sheet No. 162
Area:	31.57 hectares (78.01 acres)
Designations:	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, National Nature Reserve, Planted Ancient Woodland Site, Site of Special Scientific Interest, Special Area of Conservation

2.0 SITE DESCRIPTION

2.1 Summary Description

Priory Grove occupies a ridge running north-east, parallel to the river Wye, together with a secluded stream valley behind the hill. It forms part of a striking landscape within the Wye Valley Area of Outstanding Natural Beauty (AONB) and is clearly visible from the A40 and the A4236. Pedestrian access to the site is via a network of public and permissive footpaths which can be reached from the A4236, but more easily from Hadnock Road, a minor public road between the woods and the river. Priory Grove is important, and included within the Fiddlers Elbow Site of Special Scientific Interest (SSSI) and National Nature Reserve (NNR) and is part of a more extensive Special Area of Conservation (SAC). The designated interest is the broadleaved semi-natural woodland habitat, which includes European and UK priority types of ash and beech woodland (Tilio-Acerion and Asperulo-Fagetum types).

2.2 Extended Description

Priory Grove occupies a ridge running north-east, parallel to the river Wye, together with a secluded stream valley behind the hill. It forms part of a striking landscape within the Wye Valley Area of Outstanding Natural Beauty (AONB) and is clearly visible from the A40 and the A4236. Pedestrian access to the site is via a network of public and permissive footpaths which can be reached from the A4236, but more easily from Hadnock Road, a minor public road between the woods and the river.

The site almost entirely supports ancient woodland, most of which is semi-natural, with oak, beech, ash and birch dominant. Wild cherry, small-leaved lime, hazel, willow and aspen are also significant. A small area has been planted with sweet chestnut and there is a block of planted larch (the only non-ancient woodland) at the north-eastern end of the site. The woodland is largely mature high forest in character with much evidence of past coppicing, and includes a large number of charcoal hearths. Younger coppice and coppice with standards (cut since 1990) are present at the southern end. The woodland supports a notable dormouse population.

Priory Grove is important, and included within the Fiddlers Elbow Site of Special Scientific Interest (SSSI), is a National Nature Reserve (NNR) and is part of a more extensive Lower Wye Valley Special Area of Conservation (SAC). The designated interest is the broadleaved semi-natural woodland habitat, which includes European and UK priority types of ash and beech woodland (Tilio-Acerion and Asperulo-Fagetum types).

Fallow deer are present and currently appear to be having a significant impact on tree and shrub regeneration at the site.

The key features of the site are:

the ancient semi-natural woodland,

the secondary woodland which can be managed from a conifer plantation towards native woodland,

informal public access.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Priory Grove can be reached by the Monmouth to Staunton 722 bus, which can be requested to stop at the end of Hadnock Road opposite the Mayhill public house. By car, the site can be reached along Hadnock road where limited parking is available in lay-bys.

The main public entrance is opposite a lay-by at the southern end of the site and there is an information board at this point.

The site can also be entered via public and permissive footpaths running through the site and connecting with the A4136 Staunton Road.

Although the gradients may pose restrictions to some groups of visitors, an improved, waymarked route with benches, leaning rails and interpretation was completed in 2000 as part of the Gwefr y Coed (Wild About Woods) project, supported by the Millennium Festival Fund. Through this project a leaflet and series of interpretation panels were also provided.

The nearest 2 sets of public toilets are in Monmouth, close to the old bridge and behind Agincourt Square.

3.2 Access / Walks

4.0 LONG TERM POLICY

The site will comprise of ancient semi-natural woodland (ASNW) and secondary plantation that is native broadleaved woodland. The majority of the site will develop naturally as high forest with natural processes driving management. The veteran beech coppice stool/ pollards trees will be components of the woodland by being managed as necessary to prevent them becoming over shaded and will be protected from deer browsing to prolong their lives.

Deer numbers will be kept at a level that their impacts will be minimal and not affect successful tree recruitment, therefore there will be a diverse age structure. Deer numbers will be monitored, and deer culling will be at appropriate levels in response to this. Deer exclusion fencing may be necessary to aid monitoring.

There is a historic tradition of coppice management both at Priory Grove and across the Wye Valley AONB, as evidenced by the many charcoal hearths. In the southern part of the site (where more recent coppicing has been most successful), opportunities may be taken to manage the coppice with standards, however the continuation of coppicing will be reviewed regularly.

The ride and path network will be managed for public access for as wide a range of visitors, as well as for operational purposes and ride edge habitat.

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

The majority of the woodland is ancient semi-natural, characterised by mature high forest developed from remnant coppice and naturally regenerated and planted maidens. A small area at the southern end of the site is being managed as coppice with standards. Oak, ash and beech are all widespread, with wild cherry, birch and aspen locally frequent to abundant. Mature yew occurs to the south-west of the site and old beech pollards and coppice stools form an avenue either side of the ridge track which divides compartments 1 and 2, these are also scattered within compartment 1c. Compartment 2b supports mature sweet chestnut that was thinned in 1998/99, and the ancient woodland components are secure. Hazel is frequent in the understorey along with field maple. The ground layer is often dominated by bracken and bramble but bluebell, greater woodrush, male, broad-buckler and hard ferns are also frequent. Ransoms, primrose and soft-shield fern occur at the edges of the site and along ride margins. Dormice occur within the woodland, being particularly abundant on the western slopes.

Significance

The woodlands of the Lower Wye Valley SSSI are one of the most important areas of woodland in Britain because of their extent, their contiguity and the variety of semi-natural woodland types represented. Priory Grove contains Tilio-Acerion forests (which include NVCs W8e and W8f) of European priority interest; Asperulo-Fagetum beech forests (which include NVC W14) of European interest and Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinon betuli (which include NVC W10a) of national interest. Beech is believed to be native to the site and the veteran beech stools/pollards are likely to be of invertebrate and mycological interest. The avenue of beech stubs along the ridge track is striking in appearance and of some significance to the historic landscape. The site contributes significantly to the local landscape and as Monmouth is approached from the east.

Opportunities & Constraints

There is an opportunity to leave natural processes of trees dying and natural regeneration taking place. Within the sweet chestnut stand there is an opportunity to fully restore the semi-natural character through the gradual thinning, however the access is difficult and the ancient woodland components are secure and the sweet chestnut is not regenerating.

Coppicing can be continued, thus enhancing structural diversity and continuing a traditional a management practice with biodiversity benefits of increased early successional habitat. Parts of the site are highly visible in the landscape, meaning easy visibility from the A40 and coppice coupes are accordingly carefully designed. Limited markets for coppice produce and high working costs on steep slopes are constraints to coppice management. Although several species and species groups are likely to benefit from coppice management, no species on the site are known to be coppice dependent and the value of continuing traditional coppicing at this site will be reviewed periodically.

Dormice and bats (EPS) are present and must be considered during the planning of operations. Similarly badger setts are present (confidential). Deer browsing is having a significant negative impact on the natural regeneration of shrubs and trees and is a significant hindrance to coppice regrowth.

There is an opportunity to prolong the survival of existing beech stools and pollards which are of heritage and biodiversity value along the ridge track.

Deer grazing/browsing may be a threat to the existing veteran trees and to any re-cut or newly cut individuals.

Grey squirrels may also be a threat to the vigour and survival of veteran trees.

Factors Causing Change

Deer browsing impeding natural regeneration, sycamore is present and potentially invasive, squirrel damage may effecting tree health, lapsed coppicing on former coppice stands will revert to high forest.

Long term Objective (50 years+)

Semi-natural woodland will be dominated by a range of site-native species (including veteran beech stools and pollards) with and a characteristic ground layer that is regenerating with sufficient saplings to ensure the continuity of woodland in the long-term, and thus creating an under-storey. The south of the site may be managed as coppice with standards. The ride network will be maintained for public access with biodiversity enhancements.

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

To perpetuate veteran beech pollards and stools. Where these are occasionally being detrimentally encroached upon creating heavy shading causing defoliation of the beech, adjacent trees will be felled to waste within this management plan term. As part of the same operation, some stools may be recut or partially recut, if individual trees are identified as obviously benefiting from this after light levels have been increased through adjacent trees being felled to waste.

Deer impacts on the vegetation will be effectively monitored annually, informing the on-going prescribed deer cull with the aim of seeing improved natural regeneration throughout the site and any unprotected coppicing regrowth to be successful in coppiced areas.

Experimental deer exclusion plots will be established and monitored during the management plan term to encourage natural regeneration and to aid deer vegetation impacts assessments to be made.

Coppice areas, including the coppice area at this site, should be considered and selected for recoppicing in the context of the wider SAC, as opportunities arise, working in conjunction with NRW.

Eradicate invasive non-native Japanese knotweed and control Himalayan balsam.

Biodiversity surveys, E.G. fungi and moth surveys will be encouraged by external recorders and data fed back to NRW, this may inform future decisions with regard to site management.

5.2 Secondary Woodland

Description

Sub-compartment 4A supports larch estimated to have been established around 1955 and last thinned in 1999. The area was mapped as fields from at least as early as 1765 up to and including the 1900s.

The understorey comprises frequent elder, although the stand is bounded to the south by ancient woodland and to the east and west by tracks which support ancient woodland species. Bramble and bracken form a tall dense field layer within the stand .

Significance

The Woodlands of the Lower Wye Valley SSSI (which this sits outside) are one of the most important areas for woodland conservation in Britain because of their extent, their contiguity and the variety of semi-natural woodland types represented. Priory Grove contains Tilio-Acerion forests (which include NVCs W8e and W8f) of European priority interest; Asperulo-Fagetum beech forests (which include NVC W14) of European interest and Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinon betuli (which include NVC W10a) of national interest. Although mapped as fields from at least as early as 1765, the location of this secondary plantation (surrounded by ancient woodland and or ancient woodland species) implies that it could readily take on semi-natural woodland characteristics and extend woodland habitat.

Opportunities & Constraints

There is an opportunity to extend the surrounding ancient semi-natural woodland habitat through the gradual removal of planted conifers to favour neighbouring ancient woodland species (through natural regeneration and planting).

Deer grazing/browsing appears to be having a significant negative impact on the natural regeneration of shrubs and trees. Dense bracken and bramble beneath open canopy/gaps also seems to be hindering regeneration.

Factors Causing Change

Natural ageing of the even-aged larch trees. Bracken is dominant in the field layer with potential to suppress natural regeneration, and deer browsing is likely to be having a detrimental impact on natural regeneration as well. Threat of Phytophthora ramorum.

Long term Objective (50 years+)

The plantation area will develop the characteristics of the adjacent semi-natural woodland, and be similar in composition and structure to the ancient semi-natural high forest present on site.

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

Thin larch; create some planting plot mosaics to establish broadleaves.

5.3 Informal Public Access

Description

There are no surfaced paths. A public right of way runs north-south on the western side of the stream. There is a network of permissive paths throughout, giving access on generally shallow gradients. There is waymarking and the provision of benches. It is possible to park on the Hadnock Road and gain access from the west; other access points are via pedestrian access from adjacent land and a private property (with own gate fitted into the boundary fence). The site is used by very few people.

Significance

Priory Grove is both close to the county town of Monmouth and within the Wye Valley AONB which is popular with visitors. Ancient woodland is a significant feature in the area which can provide quiet, informal public access.

Opportunities & Constraints

The opportunity is taken for visitors to have an a full appreciation of the extent of the semi-natural ancient woodland via a well maintained pathway network. Views are limited due to the height of the canopy. The low number of visitors constrains any further requirement to further enhancement of visitor infrastructure. The noise from nearby A40 is a constraint on visitor experience.

Factors Causing Change

An increase in site visitors. A change in the way visitors use the site.

Long term Objective (50 years+)

Maintain paths and infrastructure to a high standard to ensure a positive experience by visitors.

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

Facilities maintained in good condition for the enjoyment of visitors. Tracks mown at least once annually.

6.0 W	ORK PROGRAMME		
Year	Type of Work	Description	Due By

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	2.50	Oak (sessile)	1920	High forest	Sensitive habitats/species on or adjacent to site, Site structure, location, natural features & vegetation		Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, National Nature Reserve, Site of Special Scientific Interest, Special Area of Conservation

Sub compartment 1a has a moderate to steep westerly aspect. It has the character of high forest although there is much evidence of past coppicing. The NVC is W10a.

The sub compartment is a fairly open stand of mixed broadleaves. Oak maidens are the most abundant, estimated to have been established around 1920, with a small number of older trees possibly established around 1900. Mature and veteran beech and ash, including mature coppice stools, also make up a percentage of the canopy. The remaining canopy is composed of younger ash, small leaved lime and beech coppice, all estimated to have been last cut around 1955. Other species occasionally scattered throughout the stand include wild cherry, silver birch and sycamore. The understorey is composed of occasional to frequent hazel coppice. Ground flora species include bluebell (abundant in places), lords and ladies and patches of bramble and abundant bracken.

1b 1.6	60 Oak (sessile)	1960	High forest	Sensitive habitats/species on or adjacent to site, Site structure, location, natural features & vegetation, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, National Nature Reserve, Site of Special Scientific Interest, Special Area of Conservation

Sub compartment 1b has a steep westerly aspect. The NVC is primarily W10a. The sub-compartment was coppiced in 1990 but many of the coppiced stools did not respond well (due to age, species and deer damage) although hazel remains dense in places. A small proportion of maiden oak, beech and wild cherry were retained (estimated to have been established around 1960). Abundant regeneration of silver birch has begun to fill the gaps with occasional aspen, hazel and willow species some of the sub-compartment remains open in places, dominated by bracken with patchy bramble.

1c5.10Mixed native broadlea ves1980High forestSensitive habitats/species on or adjacent to site, Site structure, location, natural features &Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, National Nature							
vegetation, Very steep slope/cliff/quarry/ Area of Conservation	1c	5.10	Mixed native broadlea ves	1980	High forest	Sensitive habitats/species on or adjacent to site, Site structure, location, natural features & vegetation, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, National Nature Reserve, Site of Special Scientific Interest, Special Area of Conservation

Steeply sloping, north-west facing sub compartment (NVC W10a with W8f and W8e towards the southern end). The sub-compartment is dominated in most areas by a dense young canopy comprising mainly birch coppice and maidens, although goat willow coppice is dominant at the bottom of the slope. Other species present include hazel, beech and small-leaved lime coppice, with sessile oak, wild cherry and yew. Yew is present as several large standards throughout the sub-compartment and beech pollards/stools form an avenue along the ridge track on the eastern boundary as well as being scattered through the area. A small selection of these will be re-coppiced periodically, therefore not impacting negatively on their value as potential value as dormouse nest sites. There is an area of more open ground between two streams at the south western end containing mature wild cherry and oak, with wild garlic abundant underneath. Ground layer flora includes bluebell, broad buckler, male and hard ferns, wild garlic, greater woodrush and ivy.

1d	5.60	other	1980	Coppice	Landscape	Ancient Semi
		willows			factors, Sensitive	Natural
					habitats/species	Woodland, Area
					on or adjacent to	of Outstanding
					site, Site	Natural Beauty,
					structure,	National Nature
					location, natural	Reserve, Site of
					features &	Special Scientific
					vegetation, Very	Interest, Special
					steep	Area of
					slope/cliff/quarry/	Conservation
					mine shafts/sink	
					holes etc	

Steeply sloping, north-west facing sub-compartment (NVC W10a with W8f and W8e). The canopy is of mixed age and structure with much of relatively recent coppice origin. Goat willow, birch and small-leaved lime are the most common species, with sessile oak, ash, wild cherry, aspen and yew also present, many retained as standards. A small area at the western end was coppiced in 1990 and further coupes have been cut since then (most recently in 2006/07). Yew trees occur as large individuals throughout but are most abundant around the old quarry.

The ground layer flora is rich and diverse with dog's mercury, wild garlic, ransoms, bramble, fern species, ivy, wood anemone and bluebell.

2a	3.50	Oak (sessile)	1900	High forest	Sensitive habitats/species on or adjacent to site, Site structure, location, natural features & vegetation	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, National Nature Reserve, Site of Special Scientific Interest, Special Area of Conservation

Sub compartment 2a has a moderate easterly aspect. The NVC is W10a and is comprised of mixed broadleaves, dominated by large oaks estimated to have been established around 1900. Other species within the stand, estimated to have been established/last coppiced between 1950 and 1965, include ash in the north with beech, silver birch and small leaved lime coppice in the south and west where the stand is denser. Occasional field maple is also located within the stand, as is occasional douglas fir. The south western edge is bounded by an avenue of veteran beech stools/pollards. The understorey comprises patchy hazel coppice (especially in the north), of which a proportion of the stools are of a relatively old age.

Ground layer species include bluebell, bramble and bracken.

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2b	0.70	Sweet chestnut	1970	High forest	Sensitive habitats/species on or adjacent to site, Site structure, location, natural features & vegetation	Area of Outstanding Natural Beauty, National Nature Reserve, Planted Ancient Woodland Site, Site of Special Scientific Interest, Special Area of Conservation

Sub-compartment 2b has a gentle to moderate south-easterly aspect. The NVC is W10a. The tree cover is mixed broadlaves with dominant sweet chestnut high forest estimated to have been established in 1920 and thinned in 1998/99. Sycamore and silver birch are scattered within the stand and the understorey comprises occasional hazel coppice. The western edge is bounded by an avenue of beech stools/pollards; there is little deadwood and the ground layer is predominantly a thin coverage of bluebell with bramble and greater woodrush.

Sub-compartment 2c has a moderate to steep south-easterly aspect. The NVC is W10a with a small area of W8e in the south-west corner.

The woodland comprises thinned semi-mature broadleaf coppice of silver birch, ash, beech, and occasional sycamore, all estimated to have last been coppiced around 1960. The north west edge is bounded by an avenue of veteran beech stools/pollards.

The understorey is composed of occasional hazel coppice and the ground layer species include bluebell.

3a2.20Ash1975High forestSensitive habitats/species on or adjacent to site, Site structure, location, natural features & vegetationAncient Semi Natural Woodland, Area of Outstanding Natural Beauty, National Nature Reserve, Site o Special Scientif Interest, Special							
Area of Conservation	3a	2.20	Ash	1975	High forest	Sensitive habitats/species on or adjacent to site, Site structure, location, natural features & vegetation	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, National Nature Reserve, Site of Special Scientific Interest, Special Area of Conservation

Sub compartment 3a is a thin stand situated along both sides of a small ephemeral watercourse running south-north, with a wider area at the southern end which also borders the A4136. The aspect is gently northern and the ground is quite wet.

The area to the north is NVC W10, predominantly made up of broadleaved coppice including ash, goat willow and hazel as well as rare sweet chestnut and small leaved lime. All are estimated to have last been coppiced around 1975 and a number of the hazel coppice stools are of a relatively old age.

The southern end of the sub-compartment is NVC W8f with W8eat the bottom. It has a different character and is made up of both coppice and standards. Species include sweet chestnut, ash, and small leaved lime, all estimated to have been established/cut around 1950. The understorey of the entire sub-compartment is composed of occasional to frequent hazel coppice with a small proportion of young cherry.

Ground layer vegetation includes bluebell, hart's-tongue fern and ransoms in the south as well as primrose along the ride edges in the north. Bracken and bramble are locally abundant.

4a	3.20	Europea	1960	High forest	Sensitive	Area of
		n larch			habitats/species	Outstanding
					on or adjacent to	Natural Beauty
					site, Site	
					structure,	
					location, natural	
					features &	
					vegetation	

Sub-compartment 4a has a moderate to steep westerly aspect.

It is a stand of planted larch estimated to have been established around 1955 and last thinned in the autumn of 1999, giving a moderate to light canopy.

The understorey comprises frequent elder, becoming more abundant in the east of the stand. Bramble and bracken form a tall dense ground layer, with little evidence of woodland specialist flora other than around the edges. This compartment is not an ASNW site.

4b	6.40	Beech	1940	High forest	Sensitive habitats/species on or adjacent to site, Site structure, location, natural features & vegetation	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, National Nature Reserve, Site of Special Scientific Interest, Special Area of Conservation

Sub-compartment 4b has a moderate westerly aspect. The NVC is W14 and W10a with open areas supporting W25, but likely to have previously been W10a.

The woodland is a fairly open mixed broadleaf stand containing both maiden and coppice stems. The canopy is dominated by beech, estimated to have been established around 1940, ash

(especially in the north) and oak maiden and coppice stems, estimated to have been

established/last cut around 1955. Wild cherry is also present, becoming more abundant in the southeastern corner and estimated to have been established around 1955.

A number of small areas within the stand have been felled but regeneration and planting (in 2003) have largely failed, probably due to deer damage, combined with dense bramble growth. Further beating up was carried out in 2007.

The understorey is composed of patchy hazel coppice and the ground layer consists of patchy bramble, bluebell, lords and ladies, ransoms, greater woodrush and broad-buckler and male ferns with soft shield fern and primrose along the ride edges.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2019	4a	Clear Fell	2.64	338	891

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.

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