Brampton Ash, Hardwick, Sywell & West Woods Forest Plan 10 year review 2017 - 2027





### Certificate of Approval

for

#### Tree Felling

This is to certify that tree felling under

Central/01 (17)

Forest Design Plan for Brampton Ash, Hardwick, Sywell & West Woods 2017-2027:

has been approved by the Forestry Commission as

being in accordance with Government policy for

the sound management of a renewable resource.

This certificate is valid only for the

period of the felling approval.

Signed DUMIN

Forestry Commission Officer

Date 15th August 2017



Brampton Ash, Hardwick, Sywell & West Woods

# Forest Plan

#### **Contents**

Forest Plan 10 year review	5
The Brampton Ash, Hardwick, Sywell & West Woods Forest Plan Brief	
Application for Forest Plan Approval	9
Introduction	
1.0 Key Characteristics and Survey Data	12
1.1 Location	12
1.2 Geology and Soils	12
1.3 Aspect and Natural Character Area	13
1.4 Hydrology	14
1.5 Archaeology and Heritage	14
1.6 Designations, Habitats and Species	15
1.61 Designations	15
1.62 Species of Note	15
1.7 Social and Community Interest	15
2.0 FC Management Objectives	16
3.0 Forest Plan Objectives	17
3.1 Woodland	17
3.11 Current Species, Age Structure and Production	17
3.2 Environmental	21
3.21 Retentions	21
3.22 Biodiversity	21
3.3 Social	22
3.4 Archaeology and Heritage	22
3.5 Landscape	23
4.0 Restocking and Future Management	24
4.1 Felling & Thinning	24
4.2 Natural Regeneration & Restocking	25



## Brampton Ash, Hardwick, Sywell & West Woods FP

4.3 Other Management	25
5.0 Meeting and Monitoring Objectives	29
6.0 Economic forecast	31
7. Consultation	33
7.1 Consultees	33
8. Maps	34
8.1 Location	34
8.2 Designations	35
8.3 Current Species	38
8.4 Recreation & Access	41
8.5 Silvicultural Systems	44
8.6 Felling Map	47
9. Relevant Forestry Commission & Government Policies	53



## Forest Plan 10 year review

This section is a brief review of the current Forest Design Plans, known as "Rockingham Forest South – Design Plan 90/91", "Hardwick & Sywell – Design Plan 92(2)" and "West wood – Design Plan 92(5)" as well as the separate Sywell Management Plan. The Hardwick, Sywell and West Wood plans where due to expire in 2012/13; but were rolled over until 2016 whist Brampton Ash's plan expired in 2016 and was rolled over to 2019. This allowed time for the construction of a new plan and consultation on the review. The new plan will be known as "Brampton Ash, Hardwick, Sywell and West Wood" and will again run for 10 years with a mid-term review at the 5 year point.

The purpose of this 10 year review was to assess the previous plans and set a direction of travel for the new plan; in line with OGB 36 – Forest Design Planning. The proposed plan will continue to adhere to UKFS and UKWAS as well as working toward delivering results in areas identified by SSSI plans and local consultees.

The objectives for the previous plans generally focussed on the following themes:

1. Restoration of plantations on ancient woodland sites (PAWS) to semi natural woodland:

This has occurred in all of the woodlands and the components of conifer now total less than 1ha. This objective can be seen as completed and all future management should involve compatible species.

2. Expansion of the numbers and range of key indicator species and habitats:

It is difficult to quantify how successful this has been without surveys and major research. However this generally continues to be an aim for future management of these woodlands.



- 3. <u>Restoration and management of woodland to reflect cultural and historic environment:</u>
  - No opportunities to fulfil these aims are known to have arisen, however it remains government policy to protect historic features and this will be reflected in the new plan.
- 4. <u>Promoting woodlands and woodland management within the local (and wider) population through community engagement and publicity:</u>
  - The majority of these woods have no public access so opportunities for this are limited. For this reason it's unlikely this aim will be taken forward into the new plan. However during consultation of the new plan; the sustainable and active management of these woods will be promoted to stakeholders.
- 5. Working with partners to maximise and leverage local and regional expertise and share knowledge:
  - Again, access and opportunity have limited this objective; however the Brampton Ash SSSI will continue to be managed by approval of Natural England.
- 6. <u>Designing woodlands that will support government's policy of sustainable</u> development:

These woodlands will continue to be managed sustainably. This will be assured through the  $FSC^{\otimes}$  and  $PEFC^{\text{TM}}$  certification schemes and approval of the forest design plan by Forest Services.

In addition to this; the Sywell Management plan has been successful in meeting the planning requirement of a designated clear space at the end of the Sywell airport runway; whilst maintaining woodland, open habitat and a source of income for the Forestry Commission. The objectives of this agreement will be captured in the new plan to provide felling approval for these works for a further 10 years.



# The Brampton Ash, Hardwick, Sywell & West Woods Forest Plan Brief

The Forest Plan comprises three blocks of woodland known as Brampton Ash, Hardwick & Sywell and West Wood. They are situated to the North and East of Northampton in Northamptonshire. The 320 hectares covered by the plan is a mixture of freehold and leasehold; managed by the Forestry Commission.

The woodlands are mostly broadleaf and Ancient Woodland (ASNW) or Planted Ancient Woodland (PAWS). It also contains a Site of Special Scientific Interest (SSSI). This area has its own specific management plan which will be addressed in the full Forest Plan. West wood is the only wood with open public access. In addition there are a number of historic ground features and earthworks.

The Brief for the new plan has been written to highlight economic, environmental and social benefits; the three key priorities in our district strategic plan. The approved Forest Plan will provide an operational plan that will deliver sustainable forest management. It has been developed to find the right balance of forest management based on the environmental, social and economic considerations associated with the forest and its surrounding landscape.



#### Terms of Reference for the Brampton Ash, Hardwick, Sywell & West **Woods Forest Plan**

	Important Themes	Particular Issues to be addressed
Economy	Timber Production	Demonstrate a structured and sustainable programme of timber harvesting to include infrastructure requirements (roads and main drains).  Select suitable species and appropriate silvicultural techniques to regenerate (either naturally or through planting) commercially productive but more structurally and species diverse and resilient crops.
Environment	Statutorily designated sites and non-designated priority habitats	Demonstrate appropriate management to maintain the current extent and ecological value of the non-designated priority habitats.  Make appropriate provision within the Forest Plan for the particular requirements of these sites as detailed in the SSSI Management Plan.
	Trees of Special Interest	Identify existing locations of TSIs and demonstrate appropriate management to both maintain the current resource and to recruit future veteran replacements.
	Deadwood	Identify appropriate areas to increase deadwood habitat and propose management to maintain a sustainable resource.
	Species and habitats	Identify key species and sites and make appropriate provision for their requirements.
People	Landscape	Diversify species composition and structure, and plan sympathetically designed and appropriately scaled interventions to improve and maintain the visual integration of the forest into the wider landscape.
	Informal Public Access	Recognise the location and scale of demand in making appropriate provision for public access, where there is open access woodland or public rights of way.



## Application for Forest Plan Approval

#### 1. Plan area identification

Forest District:	Central England Forest District

Beat: Northants South Beat

Name: Brampton Ash, Hardwick, Sywell & West Woods

Nearest Town: Northampton
Total Plan Area: 320 hectares

OS Grid Ref: Centre of Sywell: SP 823 701

Local Planning Authority: Northamptonshire – Kettering & Wellingborough

Bedfordshire - Bedford District

#### 2. Designations

Site of Special Scientific Interest (SSSI). Notable plant, insect and mammal species.

#### 3. Date of commencement of plan

As soon as possible after the approval date.

### 4. Planned operations within 10 year period of the plan

Area (ha)	Conifers	Broadleaves	Total
Felling	0	0	0
Restocking*	0	0	0
Ride Widening	0	21.0	21.0
Thinning	0	458.0	458.0

\*Restocking refers to that area that may be under planted if conditions are suitable, as well as that area which has recently been clearfelled. It also covers natural regeneration of widened rides and coppiced areas.

Signed	
Forest Management Director (FE)	Field Manager (FS)
Date	



## Introduction

This plan updates one of two plans approved in 2003. These covered Hardwick, Sywell & West and Leighfield, Owston & Brampton Ash respectively. The plan will also include and take forward proposals approved in the separate management plan for Sywell, from 2009. Due to changes in beat boundaries, it was decided to reshuffle the woods, with Brampton Ash joining Hardwick, Sywell and West woods in a new plan. Leighfield and Owston are now on a different beat and will get their own plan in the near future.

The new plan sets out our management proposals for the next 50 years and facilitates approval for felling and thinning, both conventional and unconventional, for the next 10 years.

This Forest Plan is guided and directed by a number of policies and strategies, the main points of which are summarised below (Fig.1). Delivering this plan will require the Forestry Commission to be responsive to shifts in our operating environment, and to be increasingly flexible in our approach in order to sustain this responsiveness over decades to come.

Fig 1. Forestry Commission England's Planning Strategy

#### **National Forest Policy**

The FC sets out it's vision and aims for Forestry in England at a **national** level. This is outlined in the Strategic Plan for the Public Forest Estate in England.



#### **Forest District Strategic Plan**

The District Strategic plan sits between the national and local planning levels and supports the aims and objectives within the districts, according to the FE England National Policy and gives direction for the management of woodlands at a **District** level.



#### **Forest Plans**

Forest Plans are used by the FC to demonstrate sustainable forest management on the public estate in the long term and to define a 10 year programme of approved work. They explain how a **local** area of forest will be managed and why and is produced in consultation with internal and external stakeholders, and following UKWAS, PEFC and UK Forest Standards.



#### **Operational Site Plans (Ops 1's)**

Management plan for **specific operations** on site, undertaken in accordance with the above and by following national guidance as set out in the UK Forest Standard.



## 1.0 Key Characteristics and Survey Data

#### 1.1 Location

- See Location map
- The Forest Plan area lies to the North & East of Northampton, covering Northamptonshire and the edge of Bedfordshire; roughly surrounding the route of the A6.

#### OS Grid References:

	Brampton Ash	Hardwick	Sywell	West Wood
Nearest	Desborough	Hannington	Sywell	Souldrop
Village	SP 801 831	SP 812 710	SP 820 672	SP 985 616
Access Point	SP 798 849	SP 825 706	SP 823 701	SP 992 620
Centre of	SP 798 846	SP 828 705	SP 828 693	SP 992 625
Wood				

The area covered by the Forest Plan amounts to 320 ha of which 269 ha is woodland. Of the planted area, 83.5% is broadleaved woodland and 0.3% is conifer (See Fig.2). 2.6% of the plan area is currently open space; this element will increase and decrease rotationally due to usual clearfelling, thinning and restocking operations and natural regeneration.

## 1.2 Geology and Soils

 Research into local soil types suggests Brampton Ash & West Wood sit on lime rich loamy/clayey soils with impeded drainage, on Jurassic mudstone bedrock. Hardwick and Sywell are next to similar soils, but actually sit on slowly permeable, seasonally wet slightly acid but base-rich loamy and clayey soils; over limestone/mudstone bedrock.



### 1.3 Aspect and Natural Character Area

- The plan area is made up of three separate blocks of woodland and lies mostly in Northamptonshire, with the exception of West Wood, which is in Bedfordshire.
- Brampton Ash, Hardwick & Sywell sit within the Northamptonshire Vales
  National Character Area (NCA) and is described by Natural England as
  follows; "Relatively little woodland cover but with a timbered character
  derived largely from spinneys and copses on the ridges and more
  undulating land".
- West wood is in the Yardley Whittlewood Ridge NCA and is noted for being;
  "Well wooded with blocks of semi-natural ancient woodland, wood pasture
  and historic parkland" and "a sense of history is maintained by the still
  extensive ancient semi-natural broadleaved woodland, which has networks
  of rides and occasional open grasslands ('forest lawns'), containing typical
  species such as oak, ash and field maple, with birch and aspen present
  locally"
- These woodlands lie within a rolling landscape which is predominantly in agricultural use and interspaced with small settlements and larger towns such as Corby, Kettering Wellingborough and Rushden. Nearby are transport links provided by the A14 and A6, with access to the A1 and M1. The woodlands are predominantly broadleaved, 130-140m above sea level with the exception of west wood which is 100m.
- The rolling rural landscape of this part of the world provides few points where these woods are very visible. There are roadside views of West Wood and to a lesser extend Hardwick & Sywell.



## 1.4 Hydrology

- All of the woods contain forest drains.
- The local area receives an average of 638mm of rainfall per year and it rains on average 117 days per year (according to long term Met Office statistics).

## 1.5 Archaeology and Heritage

- Brampton Ash contains Extensive boundary wood bank and ditch; a linear hollow of possible periglacial origin and a possible Iron Age or Roman site.
- Hardwick and Sywell also have wood banks, drainage ditches and a brick lined well. The well is 17m deep and was built between 1920 & 1922 to drive a steam engine which was used to haul timber from wood.
- West wood contains ditches, wood banks and ridge & furrow.



### 1.6 Designations, Habitats and Species

### 1.61 Designations

- The north east corner of Brampton Ash is designated as Site of Special Scientific Interest (SSSI).
- All four woods are entirely Ancient Semi Natural Woodland (ASNW) or Plantation Ancient Woodland (PAWS).

#### 1.62 Species of Note

- Hardwick & Sywell are a designated lepidoptora site for Wood White (Leptidea sinapis) and White Admiral (Limenitis camilla)
- Badger (Meles meles) setts.
- Dormice (Gliridae spp) within Brampton Ash.
- Plant species of note include: Birds Nest Orchid, Butterfly orchid, Broadleaved helleborine (*Epipactis helleborine*), Herb paris (*Paris quadrifoli*), Lesser centaury (*Centaurium pulchellum*) and Narrow-leaved everlasting pea (*Lathyrus sylvestris*).

### 1.7 Social and Community Interest

- Brampton Ash has a lease of pheasant shooting rights to a third party. However there are no release pens or pheasants being released into the wood.
- Until recently, Sywell had problems with anti-social behaviour near the
  entrance to the wood and within the woodland edge. A programme of
  understory clearance was undertaken; this has opened up the first 100m of
  the wood and reduced anti-social behaviour.
- West wood has an active archery club, with ranges set up throughout the wood.
- Other than West Wood, none of the woods are open access other than defined public rights of way.



## 2.0 FC Management Objectives

**Economic** - produce sustainable timber yields, encourage and support new and existing business activity associated to the public forest estate and to make the economic potential of our forests and woodlands more resilient in the face of a changing climate. Growing and diversifying our income from a wide range of sustainable activity on the estate, including non-forestry activities.





Environmental -Τo increase where possible the environmental contribution made by the Estate to the range of ecosystem services delivered and to protect enhance its overall biodiversity and heritage value at both the landscape and local level.

**Social** - Enable everyone, everywhere, to connect with the nation's trees and forests so that they understand their importance and act positively to safeguard forests for the future.





## 3.0 Forest Plan Objectives

#### 3.1 Woodland

Brampton Ash is shown as woodland on the Ordnance Survey  $1^{st}$  edition of 1891. It was replanted with Norway Spruce in the 1950s and 1960s. This in turn was mostly felled and partially replanted with poplar in 1997; with the rest left to naturally regenerate.

Hardwick & Sywell was originally broadleaved but completely replanted with Norway Spruce between 1956 and 1957. This in turn was mostly felled and left to naturally regenerate with broadleaves between 1998 and 1999.

West wood is recorded as woodland as far back as the domesday book. In 1934 it was acquired by the Forestry Commission and replanted with Oak, Scots Pine and Norway Spruce, although most of the conifer has since been removed through thinning.

The woodlands will be managed using a variety of silvicultural systems to allow for the commercial harvesting of conifer and broadleaved species. All forest operations will be carried out in accordance with current best practice and will be assessed at the Operational Planning stage. Operations comply with UK Woodland Assurance Scheme (UKWAS), UK Forest Standard (UKFS) and Forest District Strategic Plan to ensure that the woodlands are managed sustainably.

### 3.11 Current Species, Age Structure and Production

The plan area is predominantly broadleaf woodlands with a small area of Conifer. Approximately 84% of the area is planted with 2.6% being open space. In addition, the cycle of clearfelling and restocking provides rotational open space which will be restocked or naturally regenerate in due course. Of the planted area, 83.5% is Broadleaf and 0.3% is Conifer. See Fig. 2 Current Forest Structure. Table 1 shows a breakdown of species composition.

Fig. 2 Current Forest Structure

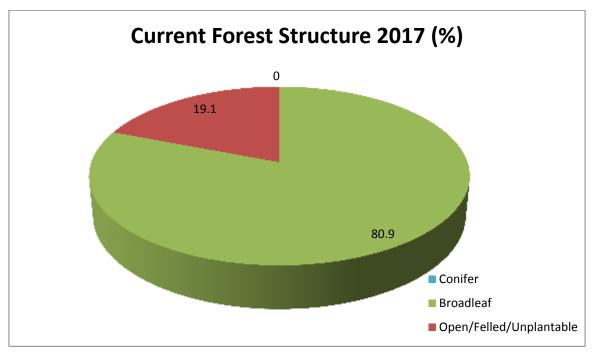


Fig. 3 Current Land Use

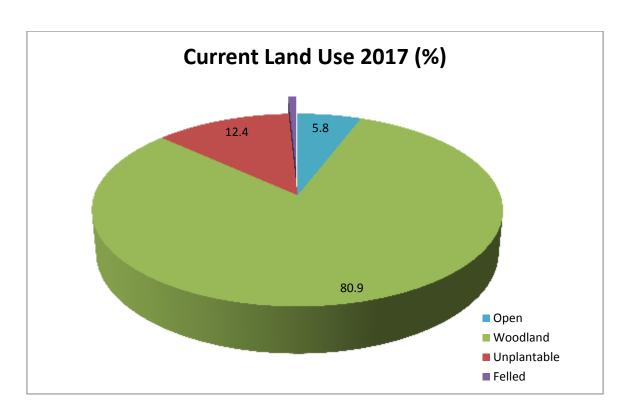




Table 1 - Current Species (as of 2017)

Species	Area (ha)	Percentage of
		Total Area
Conifer		
Scots Pine	0.2	0.0%
Total Conifer	0.2 ha	0.0%
Broadleaf		
Oak	73.9	23.1%
Birch	47.1	14.7%
Ash	39.7	12.4%
Hazel	33.4	10.4%
Poplar	23.6	7.4%
Other Broadleaf	41.5	12.9%
Total Broadleaf	259.2 ha	80.9%
Other		
Unplantable	39.9	12.4%
Felled	2.7	0.8%
Open	18.6	5.8%
Total Other	61.2ha	19.1%
Total Area	320.6 ha	100 %

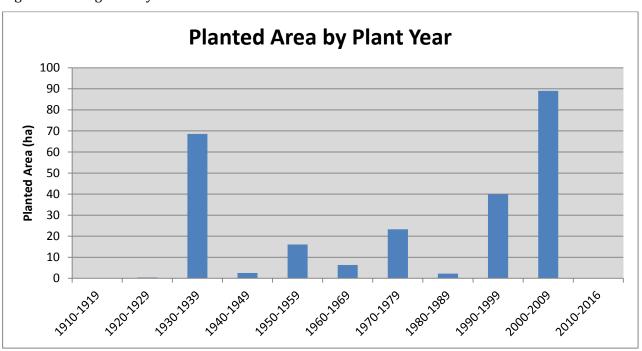
The woodland has been managed sustainably in the past and this will continue. Table 2 shows the current production forecast from the previous plan.

Table 2 – Current Production Forecast

	Forecast Period	All Species	All Conifers	All Broadleaves
	2017- 2021	443	0	443
Volume	2022- 2026	799	1	797
to	2027- 2031	405	0	405
7cm	2032- 2036	561	1	561
	2037- 2099	774	1	773

Note: values given are for m<sup>3</sup> per year for each year of that period.

Fig. 4 – Planting Area by Period



- Figure 4 above shows how much area was planted in which time period.
- 45.8% of the plan area is designated Ancient Semi Natural (ASNW).
- 51.8% is designated Plantation Ancient Woodland (PAWS).
- 2.4% of the plan area is undesignated secondary woodland.



### 3.2 Environmental

#### 3.21 Retentions

Deadwood will be retained where appropriate, working towards the
Forestry Commission's policy on retention and creation; which is set out
in the Forestry Commission's Practice Guide – Managing deadwood in
forests and woodlands. One way of achieving this would be leaving
brash on site from felling, thinning and coppicing operations as well as
retention of trees of special interest (TSIs), including veteran trees.

#### 3.22 Biodiversity

- Management for biodiversity, habitats and species within the north east corner of Brampton Ash will be in line with the objectives and recommendations of the SSSI plan.
- More generally; the Forestry Commission maintains records on biodiversity and these are consulted at the operational planning stage. Important species will be highlighted and protected as part of this. We also welcome records from organisations and groups that can help us improve our understanding of biodiversity within our woodlands. In addition; all four of these woods will be surveyed and remapped in the next few years. These surveys will cover trees, structure and open space. This will help improve our understanding of the environmental value of these woods as well as their economic value and opportunities for management.
- The Forestry Commission has its own rigorous polices and standards in addition to the United Kingdom Forest Standard (UKFS); to which management and operations within these woods will adhere.



 The plan area does not meet the UKFS 10% open space targets, by currently having only 5.8% open space. This will increase during the plan period due to ride widening and transitional open space created by coppicing and felling.

#### 3.3 Social

- The scope for access at Brampton Ash, Hardwick and Sywell are limited by the lack of provision for access in their leases.
- In West Wood although there is potential for access; but we feel its location and being situated next to a busy road without parking, limits scope for recreation. Use by the Archery Club is positive under the circumstances and we have no plans for this not to continue.
- We will continue to promote access where possible; as well as actively
  engaging and encouraging local groups and individuals where there is
  mutual benefit from their involvement in these woods.

## 3.4 Archaeology and Heritage

- A number of features have been identified and outlined in section 1.5.
- These will be identified at the operational planning stage and specific protection or preservation strategies will be implemented for any features which may be adversely affected by operations.
- Heritage features and operations in their vicinity will be managed in line with Forestry Commission and UKFS policy. If there are any new finds of importance, the County Archaeologist will be informed.



## 3.5 Landscape

- There are no plans for any dramatic changes within the woods that would have an impact on the local landscape. Changes will be small, subtle and mainly internal.
- Internal landscape changes will include; ride widening within all of the woods and small canopy openings with restocking in line with the principles of group selection. This will be in addition to the normal cycle of thinning planned for all three woodlands. This management should improve light and access within the woods, provide open and transitional habitats for species and provide a source of income from timber. It will also give us the opportunity to improve final crops and refresh areas that have not done well or have been overthinned.



## 4.0 Restocking and Future Management

Of the 320 ha plan area:

### 4.1 Felling & Thinning

- Most of the coupes will be managed as group selection. This will involve thinning to achieve high quality final crop trees and include small clearfell pockets. Restocking will be achieved by natural regeneration and planting. Broadleaves will be favoured in ASNW or PAWS areas whilst conifers will be used in the few areas of secondary woodland.
- 12.3ha in Sywell will be managed to remain as open space. This is part of a maintenance agreement with Sywell Aerodrome to maintain clear space at the end of their runway. A further 22.4ha will be managed as selective fell. Any trees that grow tall enough to become a safety concern to aircraft taking off and landing at the airfield will be felled and allowed to naturally regenerate. As this area is already relatively well established, we see this being small scale on an individual tree basis. This will be a continuation of the requirements of the separate management plan for Sywell, approved in 2009.
- We intend to manage rides in all woods, so they remain at a width of 20m by felling or thinning as appropriate, throughout the plan period. This will create and maintain open space and improve access; providing economic, social and environmental benefits. This will total 21ha across the three woods and has been mapped as clearfell coupes on the felling and silvicultural systems maps. This widening will mostly involve clearing scrub, vegetation and in some cases edge trees. Open space will also be created around the pond in Brampton Ash. It is currently under a low canopy so opening the area up should improve its condition.
- Throughout the plan all compartments will be thinned on an 7 year rotation. In some areas this will be a thinning biased towards achieving



volume whilst in others it will be biased towards improving canopy structure. This will improve the quality of existing trees whilst opening up canopy gaps for succession of understory trees.

### 4.2 Natural Regeneration & Restocking

- If suitable regeneration is not achieved by year five; beat up, supplementary planting or full restocking with appropriate species will be implemented as appropriate to ensure woodland cover is restored. As felling is happening in stages within the woodlands, it will be possible to use the results of regeneration in previous felling coupes to influence whether supplementary planting or complete restocking is required from the outset in future nearby coupes.
- In ASNW/PAWS areas, restocking will be with native broadleaves or up to 20% horary native broadleaves, by planting or Natural Regeneration.
   Restocking in SSSI areas will be purely native broadleaves.
- Due to local pressures such as high deer populations and the presence of Calamagrostis; restocking may be used sooner to ensure trees are reestablished on felling coupes.

### 4.3 Other Management

- The majority of all three woods will be managed as continuous cover forestry (CCF). This will mostly be by means of Group Selection. The aim of this is to improve the best trees by gradually removing poor quality trees over time. The Group Selection model will allow us to improve the age structure and recruitment of younger trees by making holes or strips on a small scale in the woodland. These will then be restocked or allowed to regenerate naturally at a high density.
- The three woods will be surveyed in the next few years to remove and explain the large unplantable component in all three woods.

## Brampton Ash, Hardwick, Sywell & West Woods FP

• The amount of open ground within the Forest Plan increases to 12.4%. This will mostly be achieved by ride widenings which will benefit wildlife by creating edge habitat and will open up the main walking routes. Table 3 and figure 5, 6 & 7 show a breakdown of future forest structure:

Figure 5 - Future Forest Structure (2067)

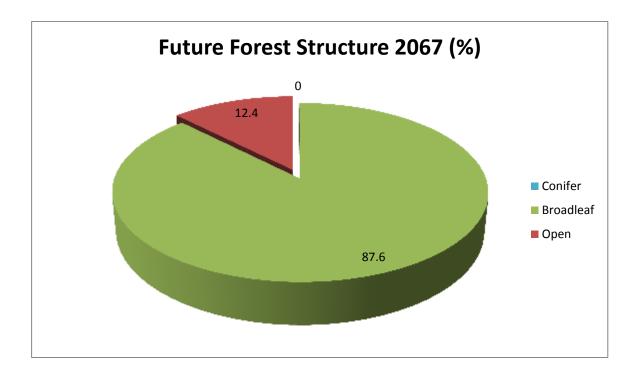


Figure 6 - Future Land Use (2066)

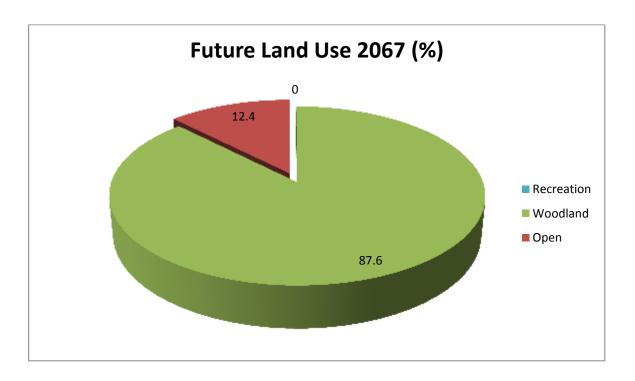




Table 3 – Future Species (as of 2067)

Species	Area (ha)	Percentage of
		Total Area
Conifer		
Mostly Scots Pine		
Total Conifer	0.2	0.0
Broadleaf		
Mostly Ash, Beech,		
Birch, Hazel,		
Sycamore, Oak &		
Poplar.		
Total Broadleaf	280.8	87.6
Open	39.6	12.4
Total Area	320.6	100

The aim is to achieve restocking by a mixture of planting and natural regeneration as appropriate; because of this proportions of species have been estimated. On a coupe by coupe basis, the decision may be taken to opt for planting rather than natural regeneration, if that offers the most effective means of achieving the plan objectives. This gives us the flexibility to counter threats such as pests and diseases; as viable regeneration may not lead to canopy cover in the future.

Section 8.7 Future Species suggests species making up the majority of each coupe based on the species that are currently dominant in each coupe and management proposals such as diversification.



## 5.0 Meeting and Monitoring Objectives

Objective	Description	Proposals	Methods of Monitoring
Woodland	The woodland will be managed to produce high quality commercial conifer and broadleaved timber using a variety of silvicultural systems which will be chosen to meet the other management objectives.	The timing, scale and shape of future felling operations will be designed to create a diverse woodland structure whilst being sympathetic to environmental objectives.	Monitored through our Geographical Information System (GIS) database and review of operations as part of the operational planning process.
Biodiversity	These woods contain many species and habitats of local and national interest.	All management within SSSIs will be in line with the relevant SSSI plans for these areas. Other constraints will be highlighted and mitigated for during the operational planning process.	Operational planning process by beat planning and environment/herita ge teams. Consultation with Natural England on matters concerning SSSIs when appropriate.
Biodiversity	Open space.	The current areas of open space will be managed to maintain their value to wildlife. New open spaces will be created by ride widening.	Beat team to monitor regeneration on open ground and manage in a way that's sustainable, but will provide positive outcomes for relevant species.

## Brampton Ash, Hardwick, Sywell & West Woods FP

Heritage	Protect and conserve designated and non-designated features.	Protect, preserve and restore features as appropriate, in line with UKFS guidance.	Beat team review all known heritage features at the operational planning stage and to liaise with local/national historical
			bodies as and when appropriate.
Forest Standards	The woods will continue to be managed in a sustainable and productive way.	Guidelines set out by UKWAS, UKFS, and Forest District Strategic Plan will be adhered to.	Mid-term monitoring of the FP, UKWAS and SGS audits and Beat staff.
Survey	Records currently show almost 40 ha of unplantable ground, which is not evident when visiting the woods.	The woods will be surveyed to improve our data and remove the unplantable component.	Project monitoring by Planning Team and Beat Forester.



## 6.0 Economic forecast

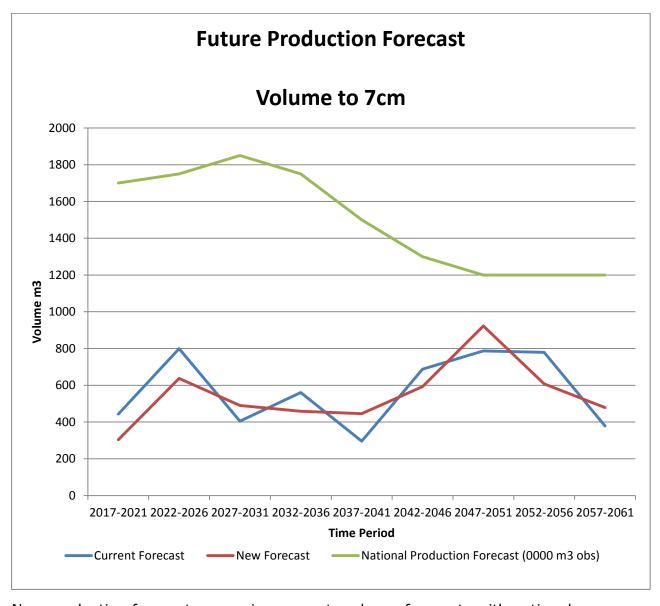
The woodland will continue to be managed sustainably as set out in previous and current objectives relating to Forest Standards. Table 4 shows the future production forecast which takes into account changes in silvicultural systems and felling years.

**Table 4 - Future Production Forecast** 

	Forecast Period 2017-	All Species	All Conifers	All Broadleaves
Volume	2021	304	0	304
to	2022- 2026	637	1	636
7cm	2027- 2031	490	0	490
7cm	2031	490	U	490
	2036 2037-	459	1	458
	2099	830	1	831

Note: values given are for m³ per year for each year of that period.





New production forecast comparing current and new forecasts with national average.



## 7. Consultation

### 7.1 Consultees

- **Archery Club, West Wood**
- **Bedfordshire County Council**
- **Brampton Ash Parish Council**
- **Brampton Ash Shoot**
- **Historic England**
- **Desborough Town Council**
- **Euroforest**
- **Landlord of Brampton Ash**
- **Landlord of Hardwick & Sywell**
- **Mendip Forestry**

- Natural England
- Northamptonshire County Council
- Tilhill Forestry
- Souldrop-Knotting Parish Council
- Sywell Parish Council
- Wildlife Trust for Bedfordshire, **Cambridgeshire &** Northamptonshire

Other interested parties will be directed via on site signage to Desborough, Wellingborough and Rushden Libraries, where copies of the plan will be held. Consultation of the plan will also take place on the Citizenspace website.

All of the Forestry Commission's woodlands are assessed against the UK Woodland Assurance Scheme (UKWAS) and as a result, Forestry Commission woodlands now carry the Forest Stewardship Council (FSC®) stamp of approval.



Forestry Commission woodlands have been certified in accordance with the rules of the Forest Stewardship Council.

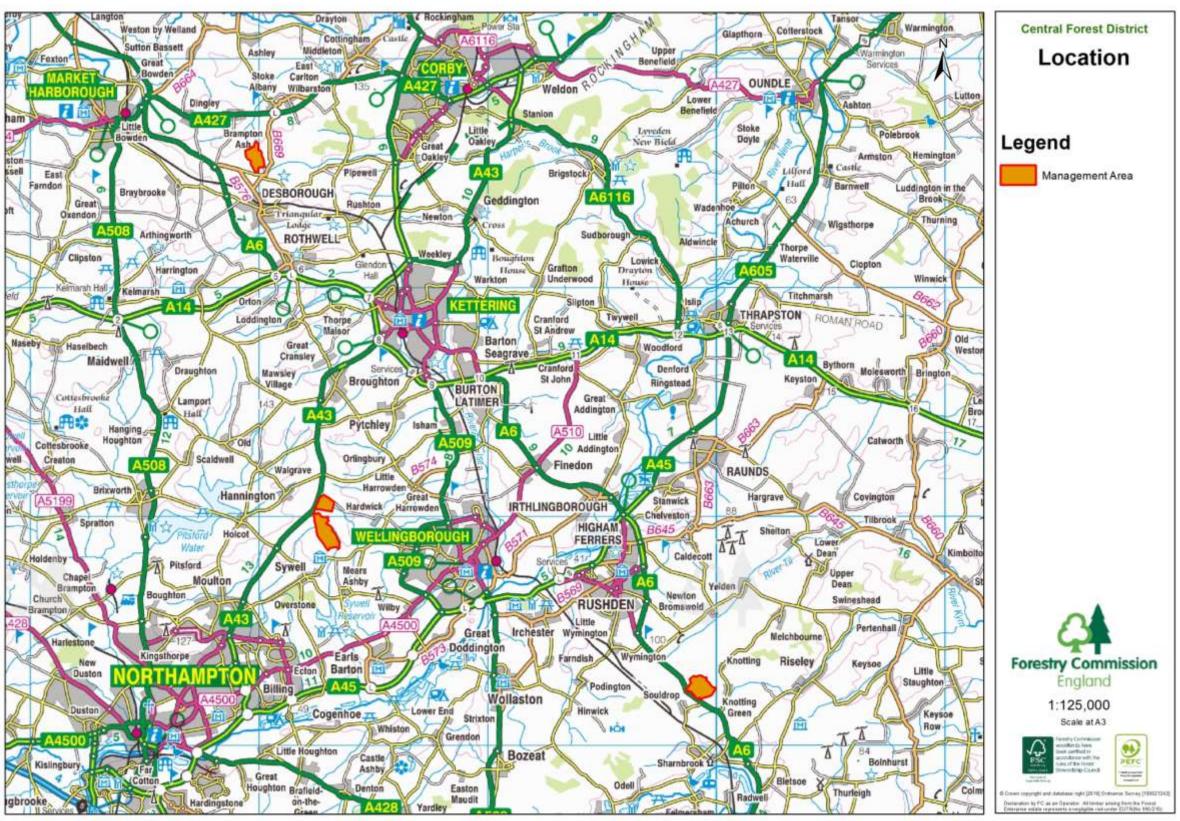
The mark of responsible forestry



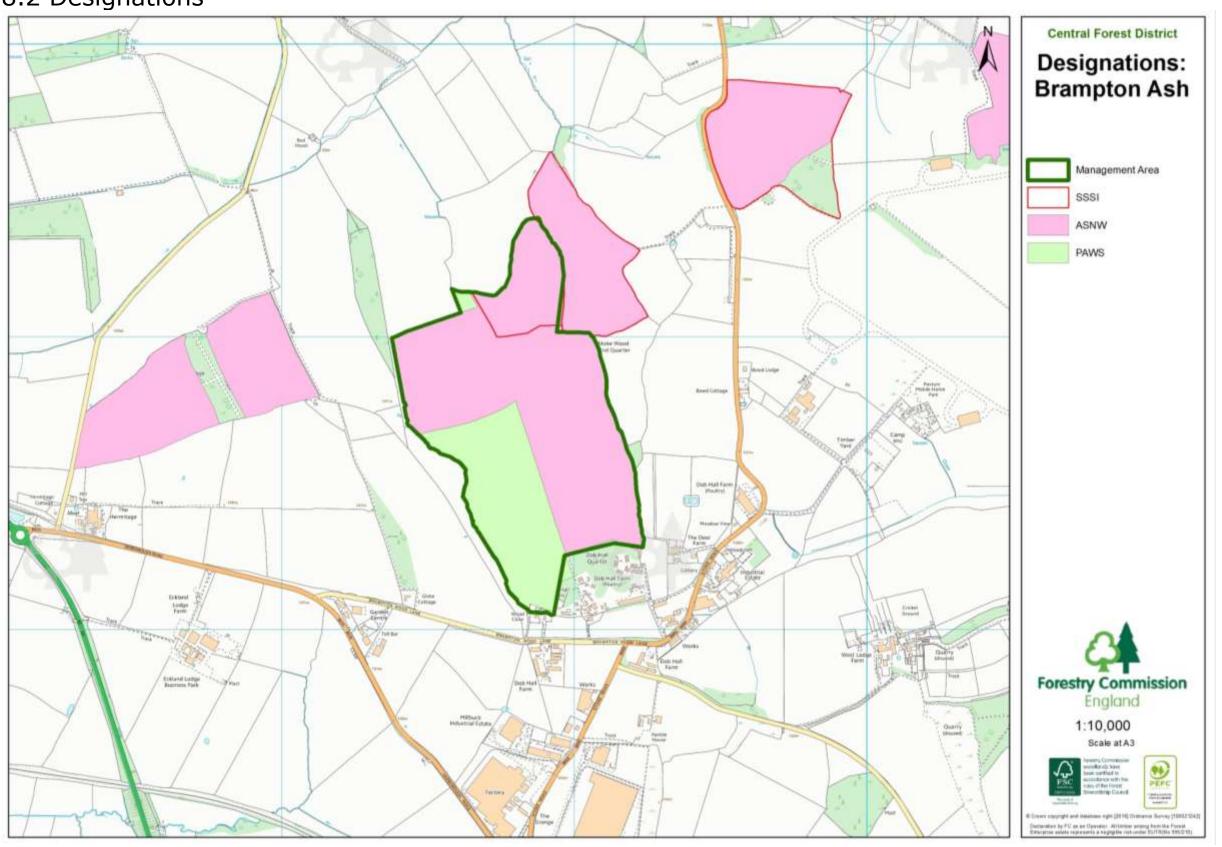


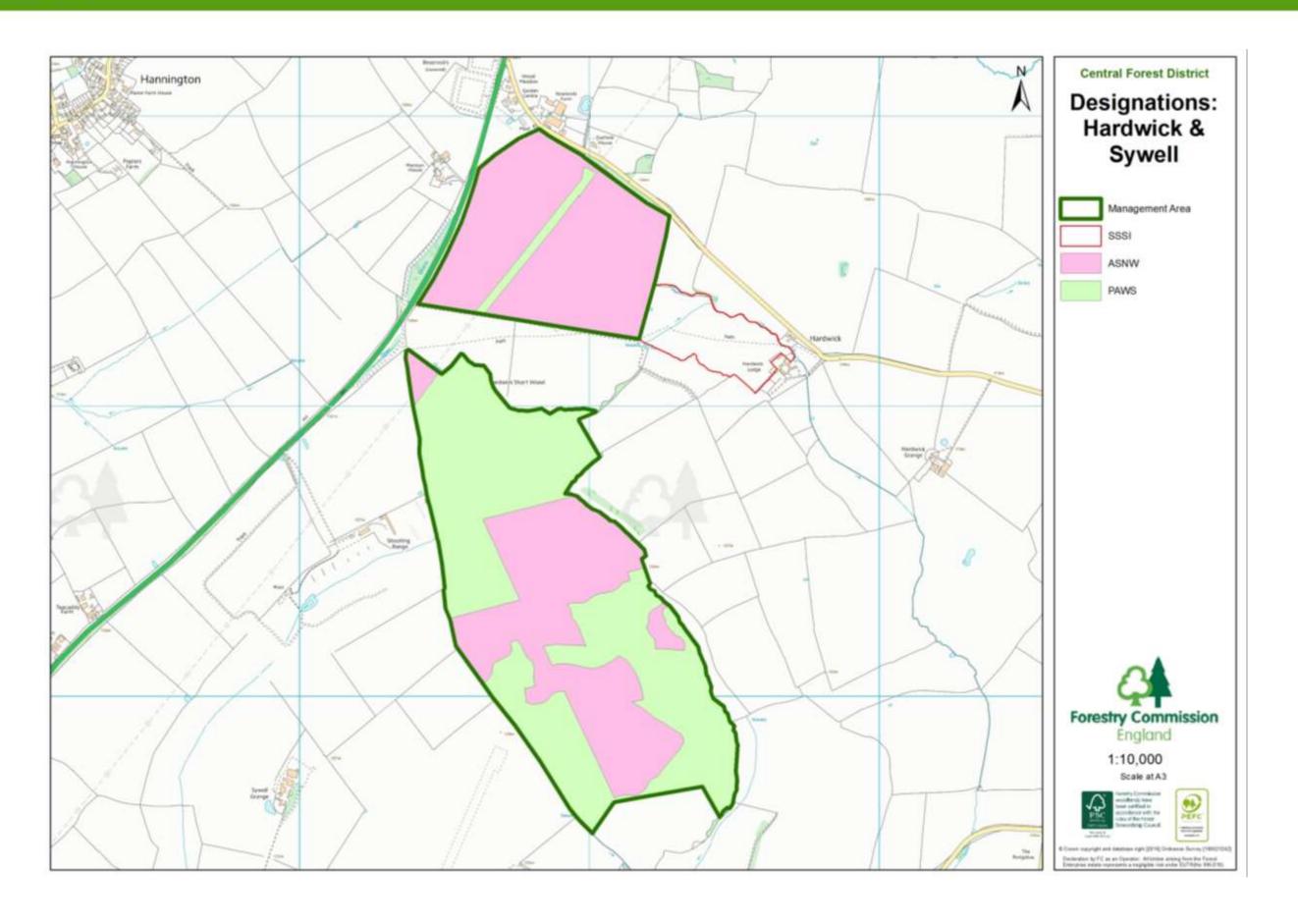
## 8. Maps

## 8.1 Location

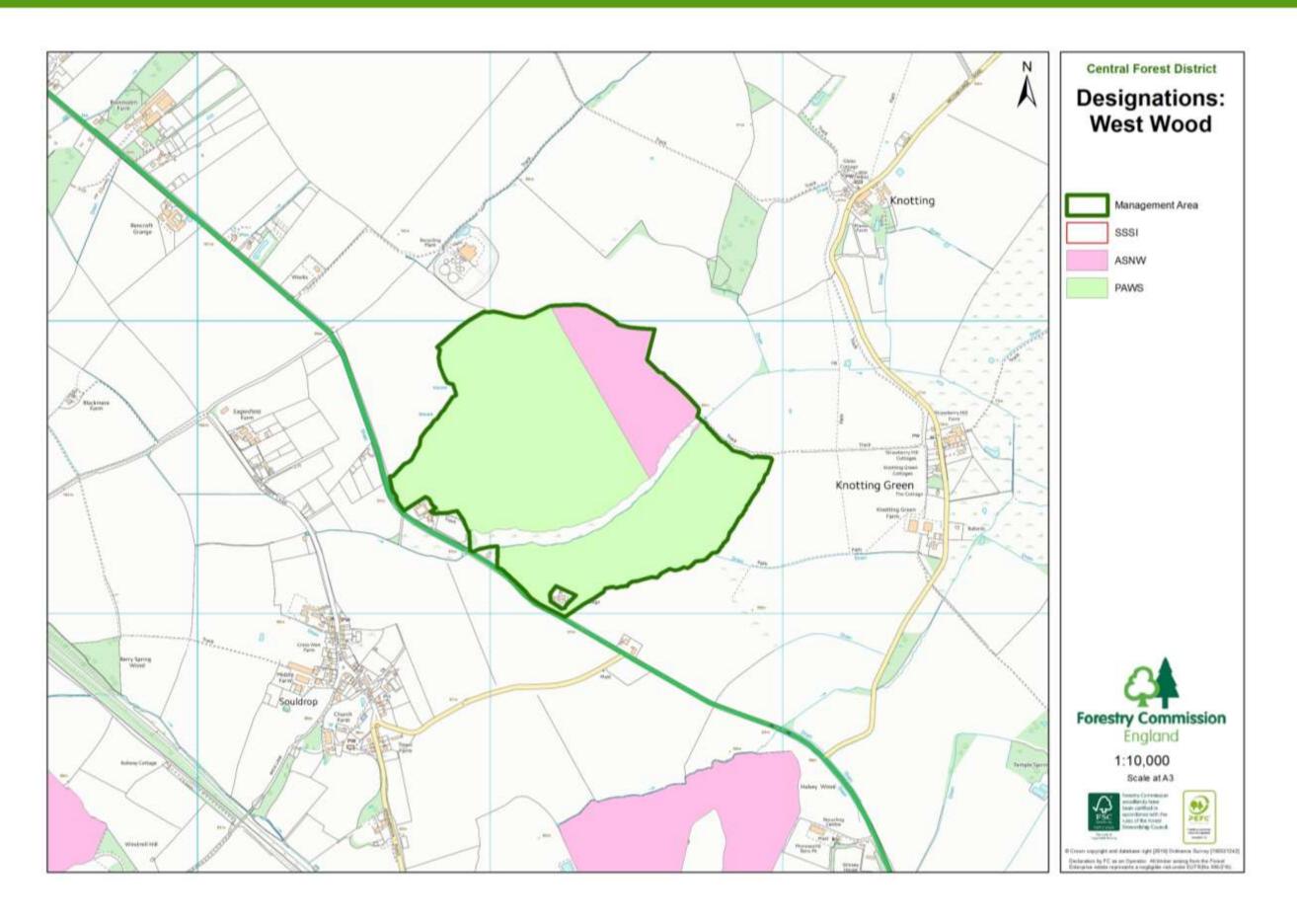


## 8.2 Designations

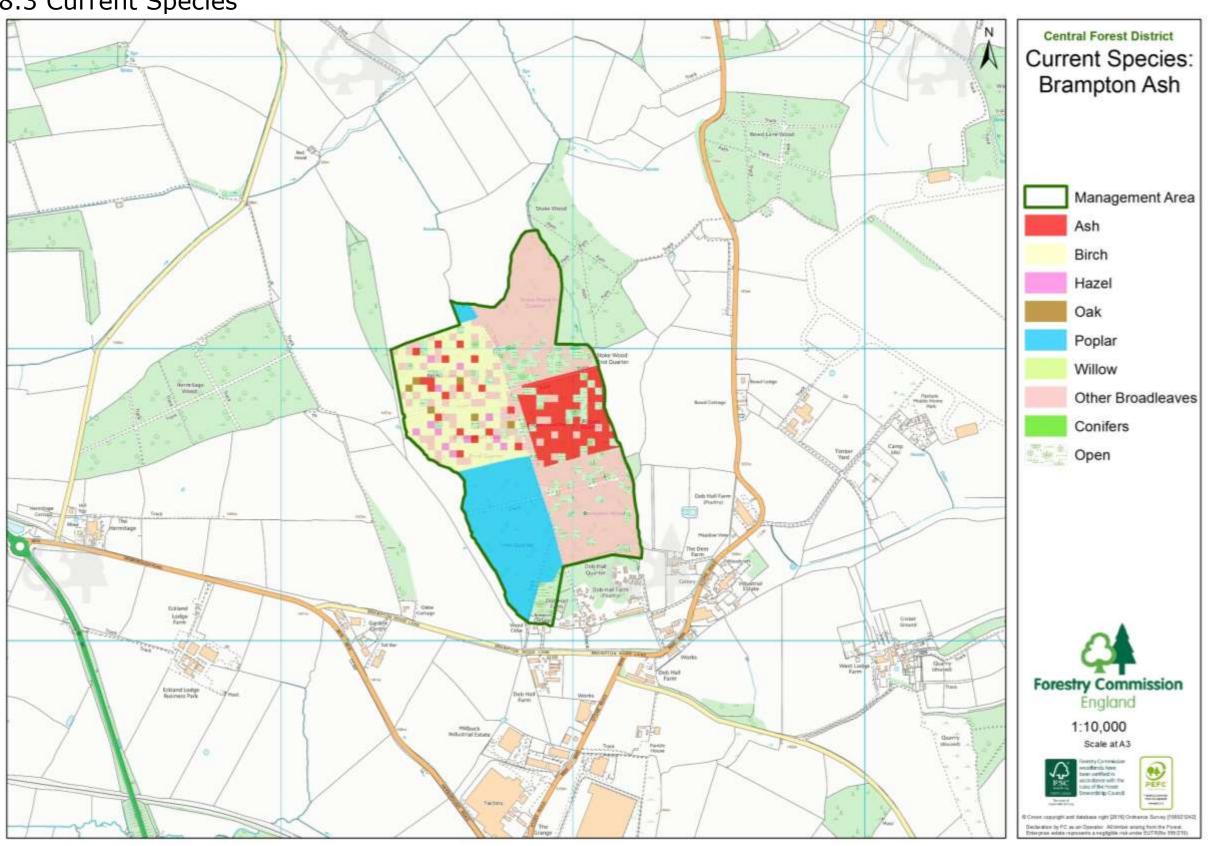


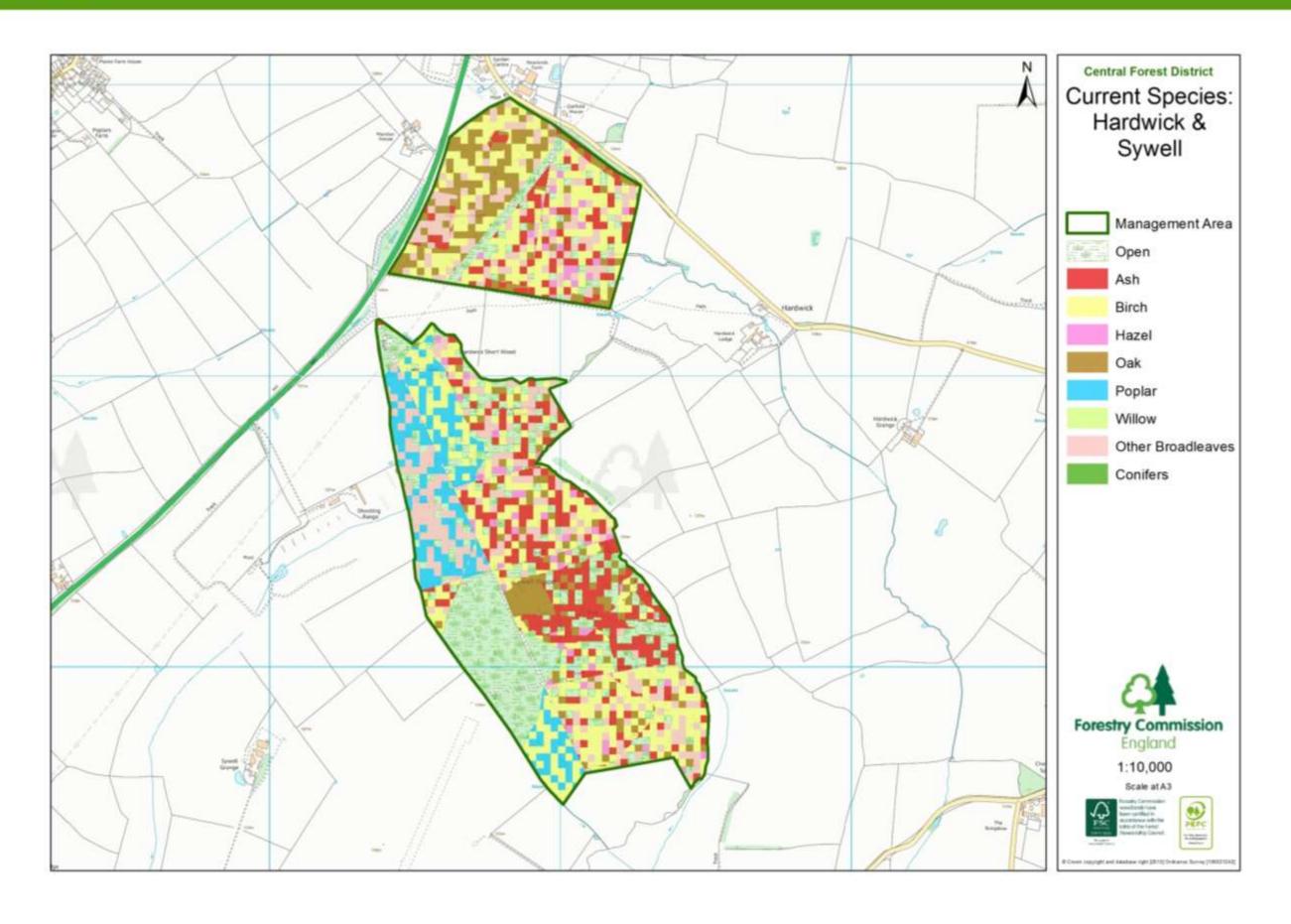




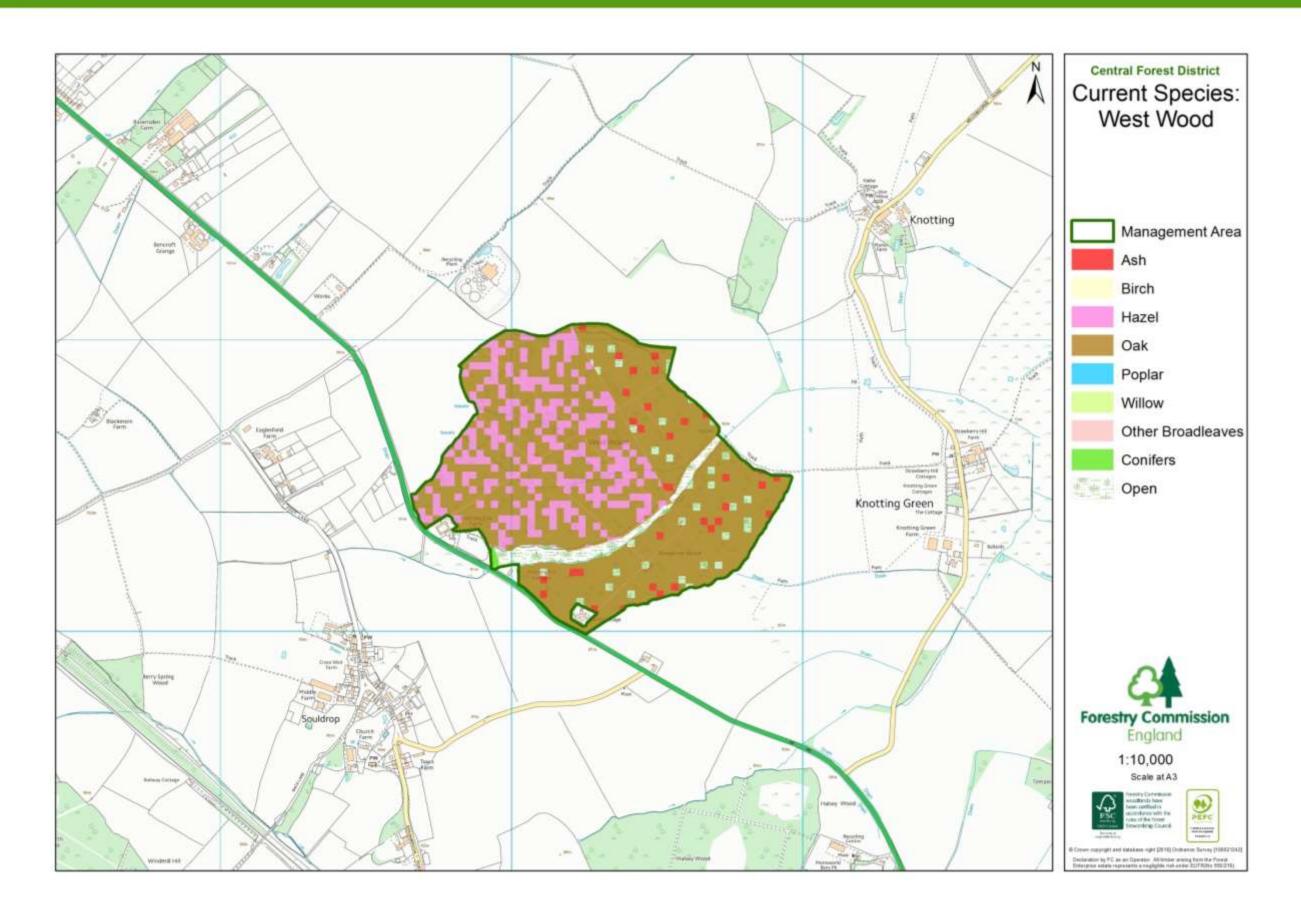


### 8.3 Current Species

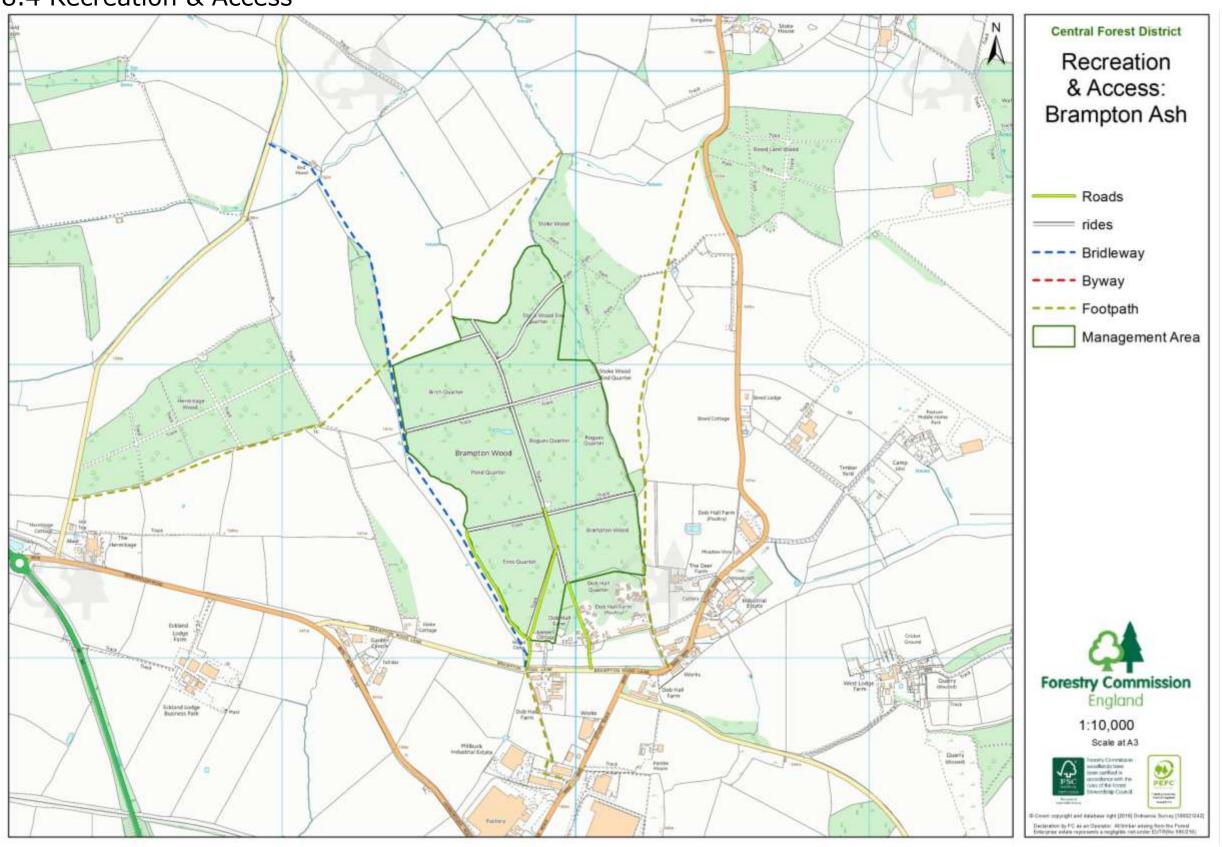


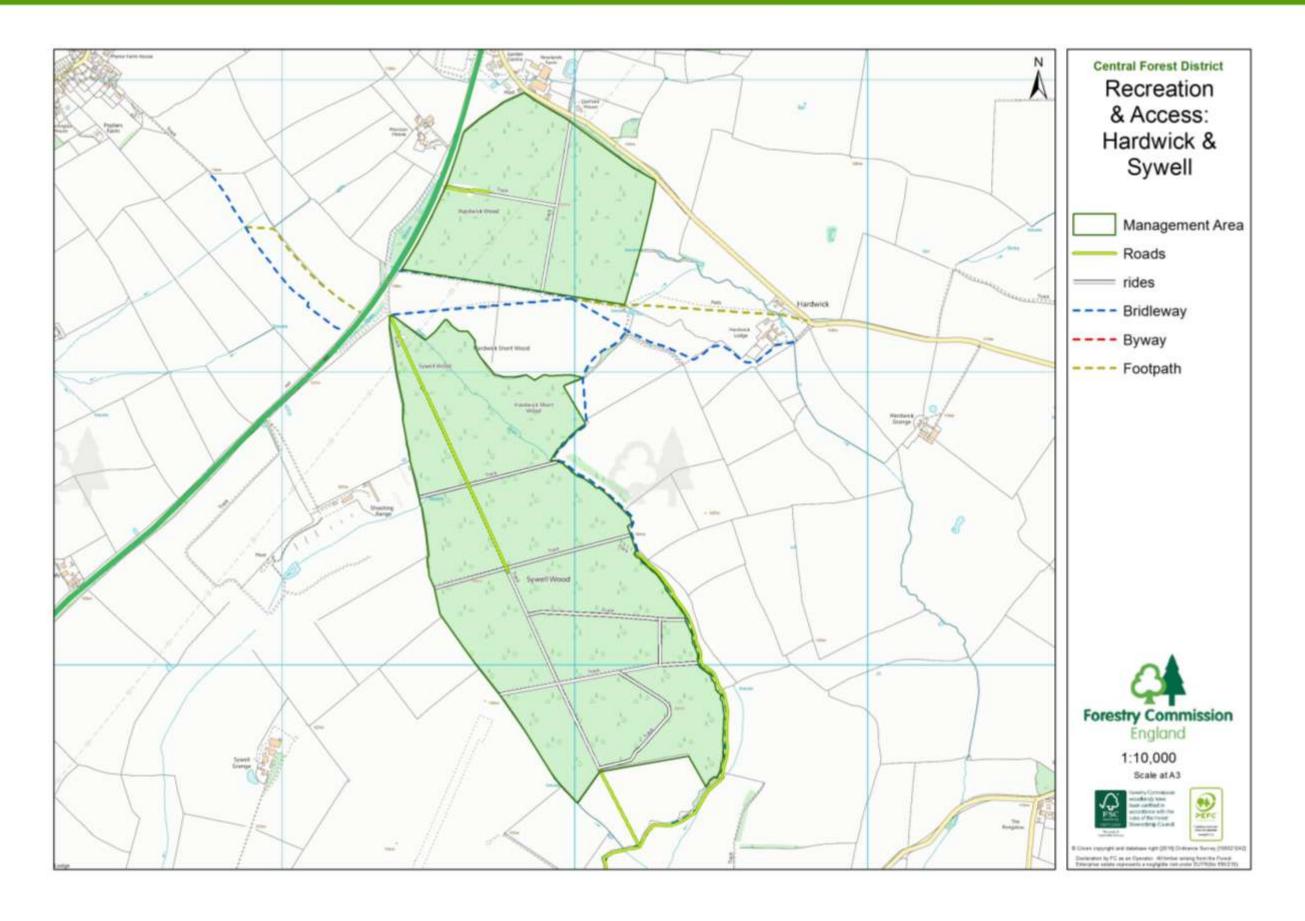


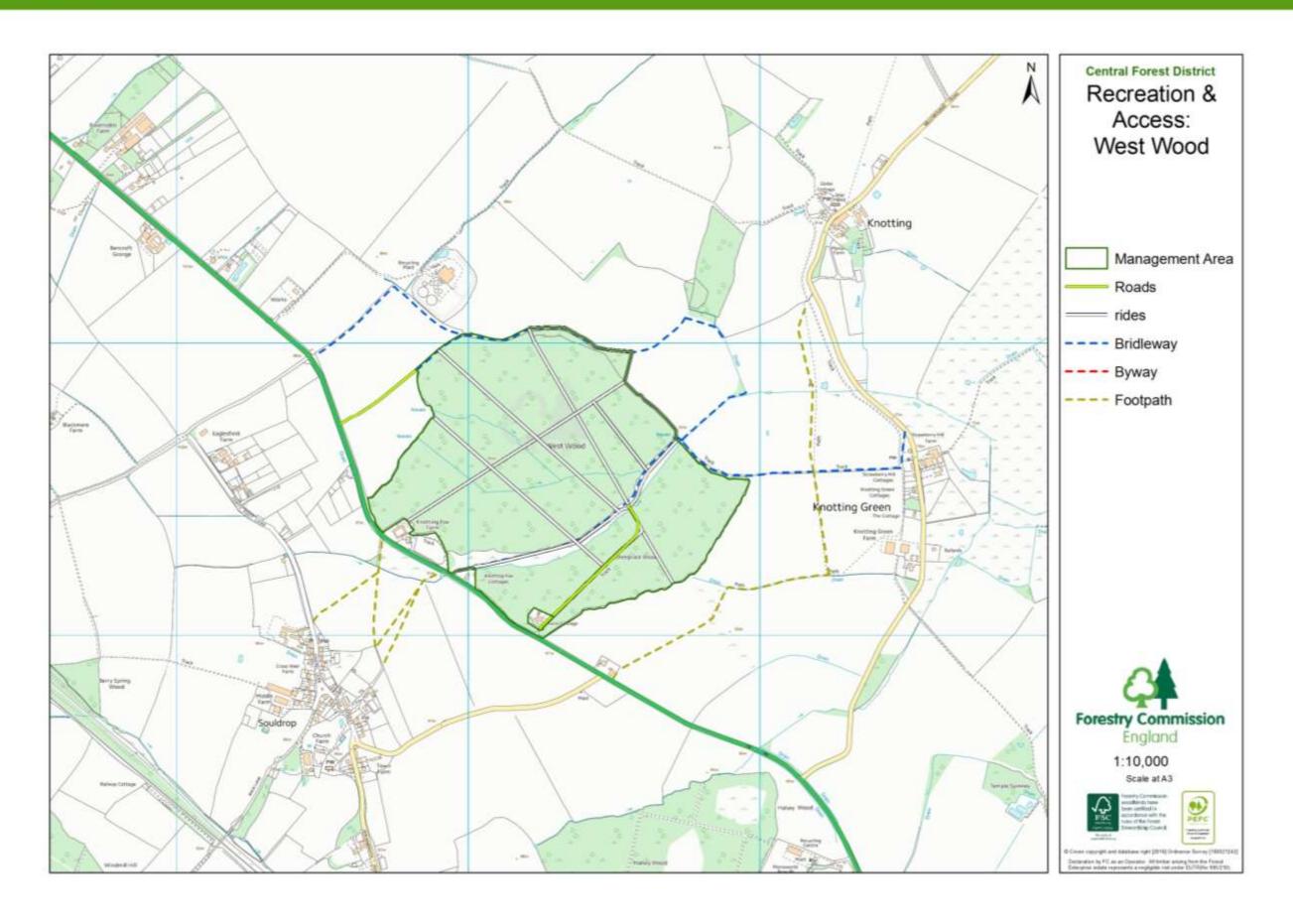




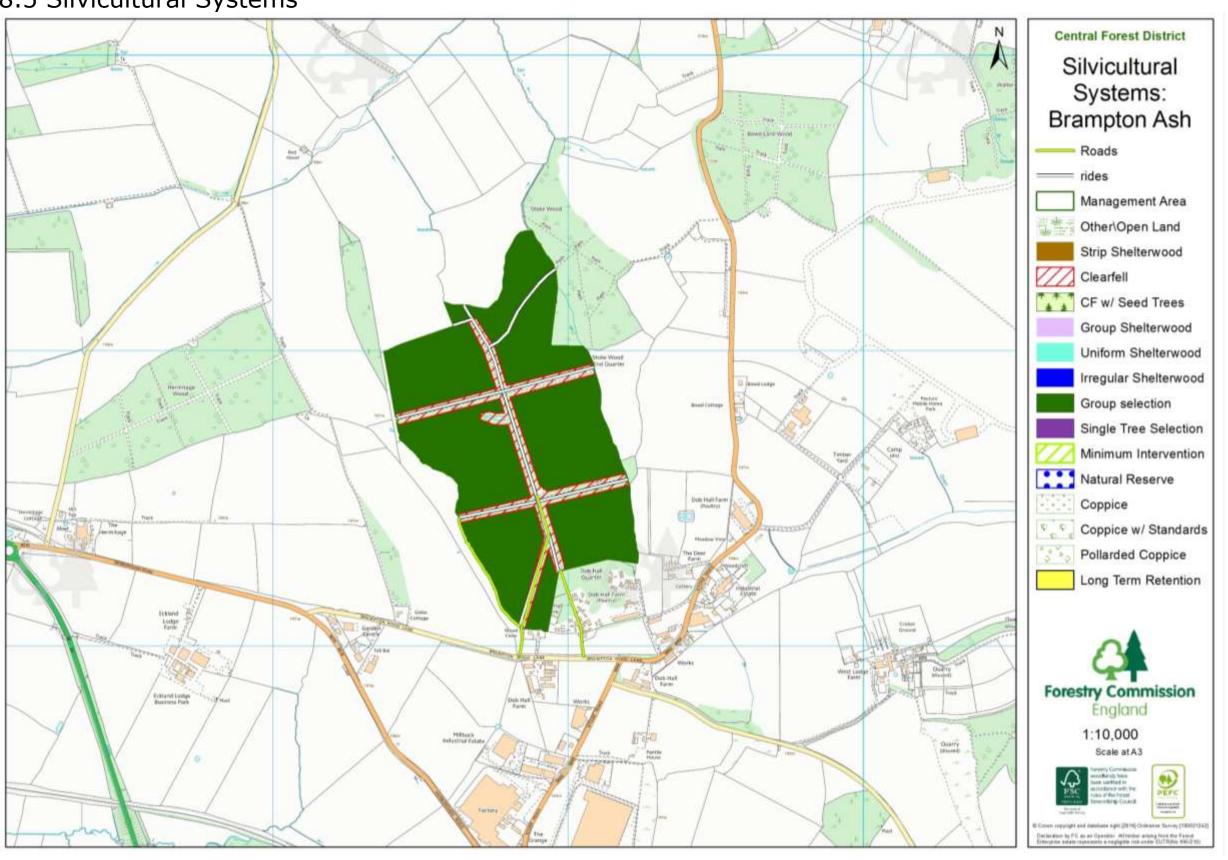
#### 8.4 Recreation & Access

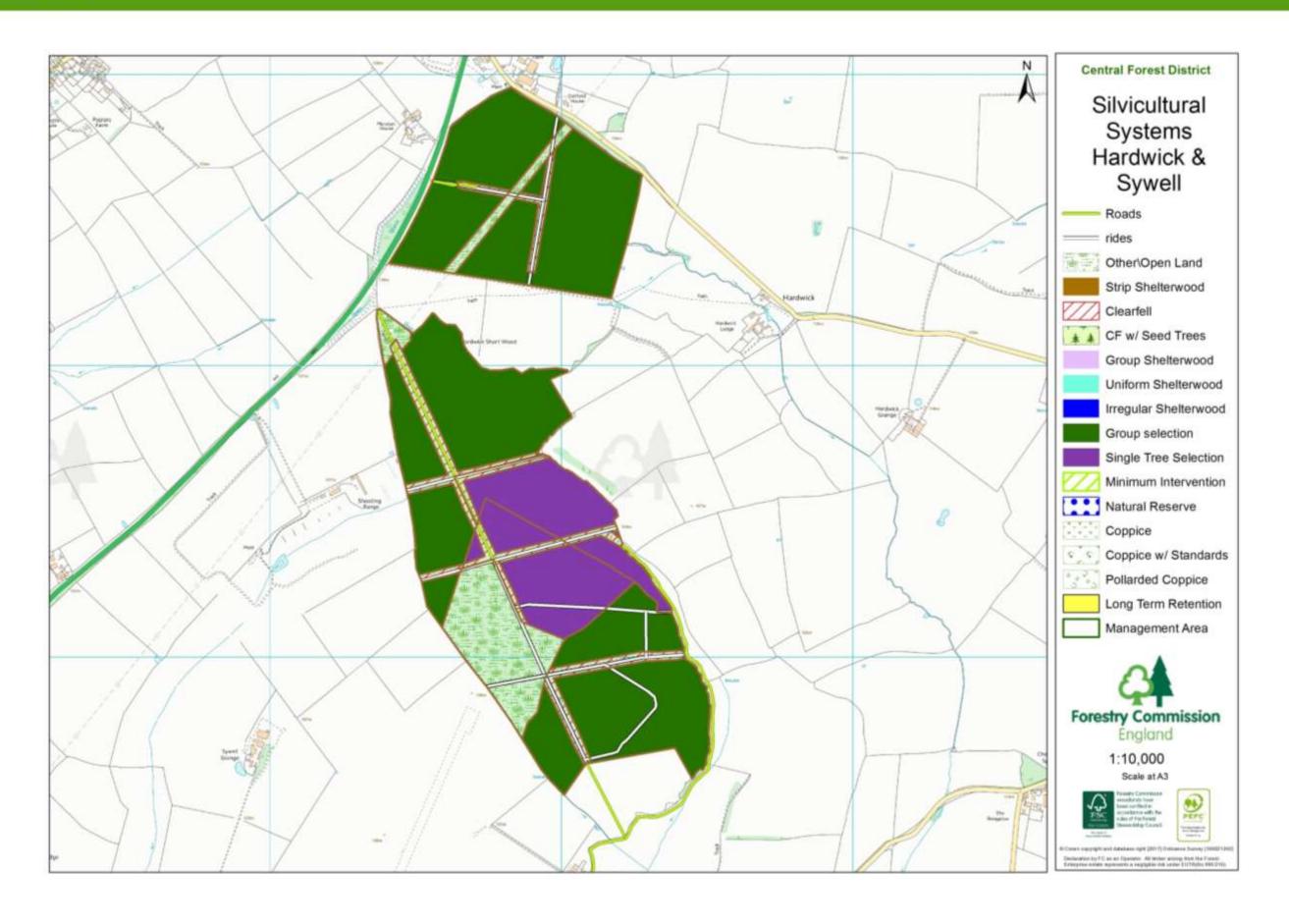


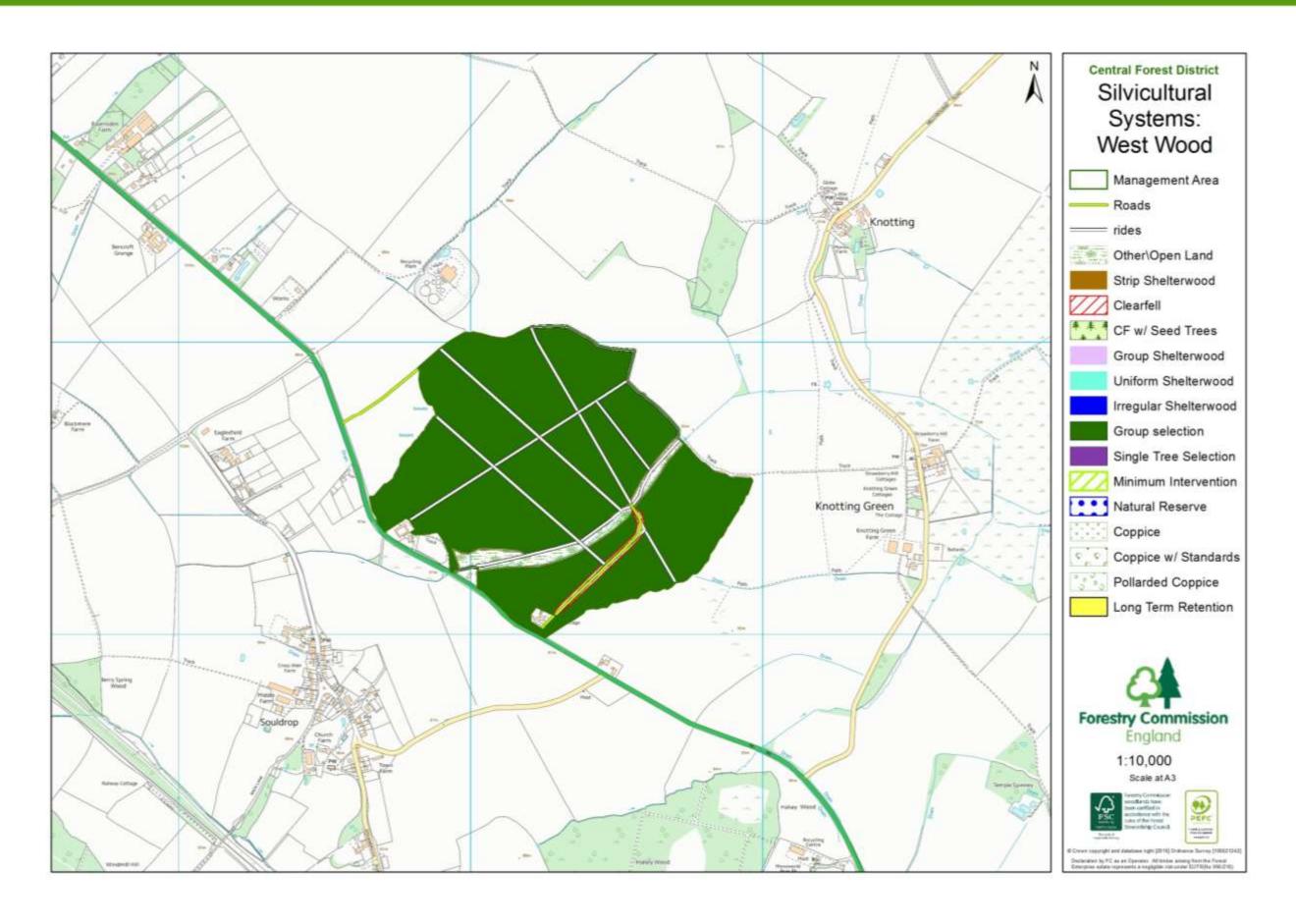




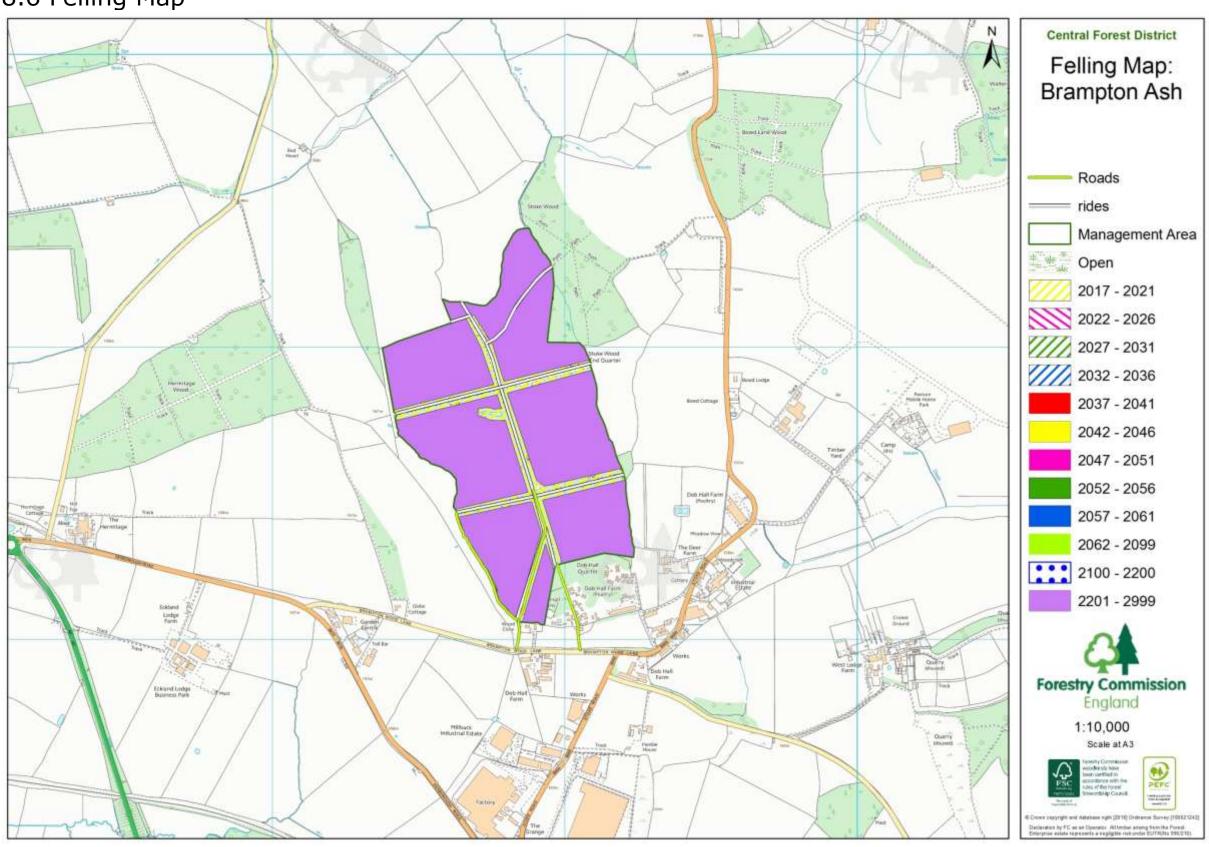
#### 8.5 Silvicultural Systems

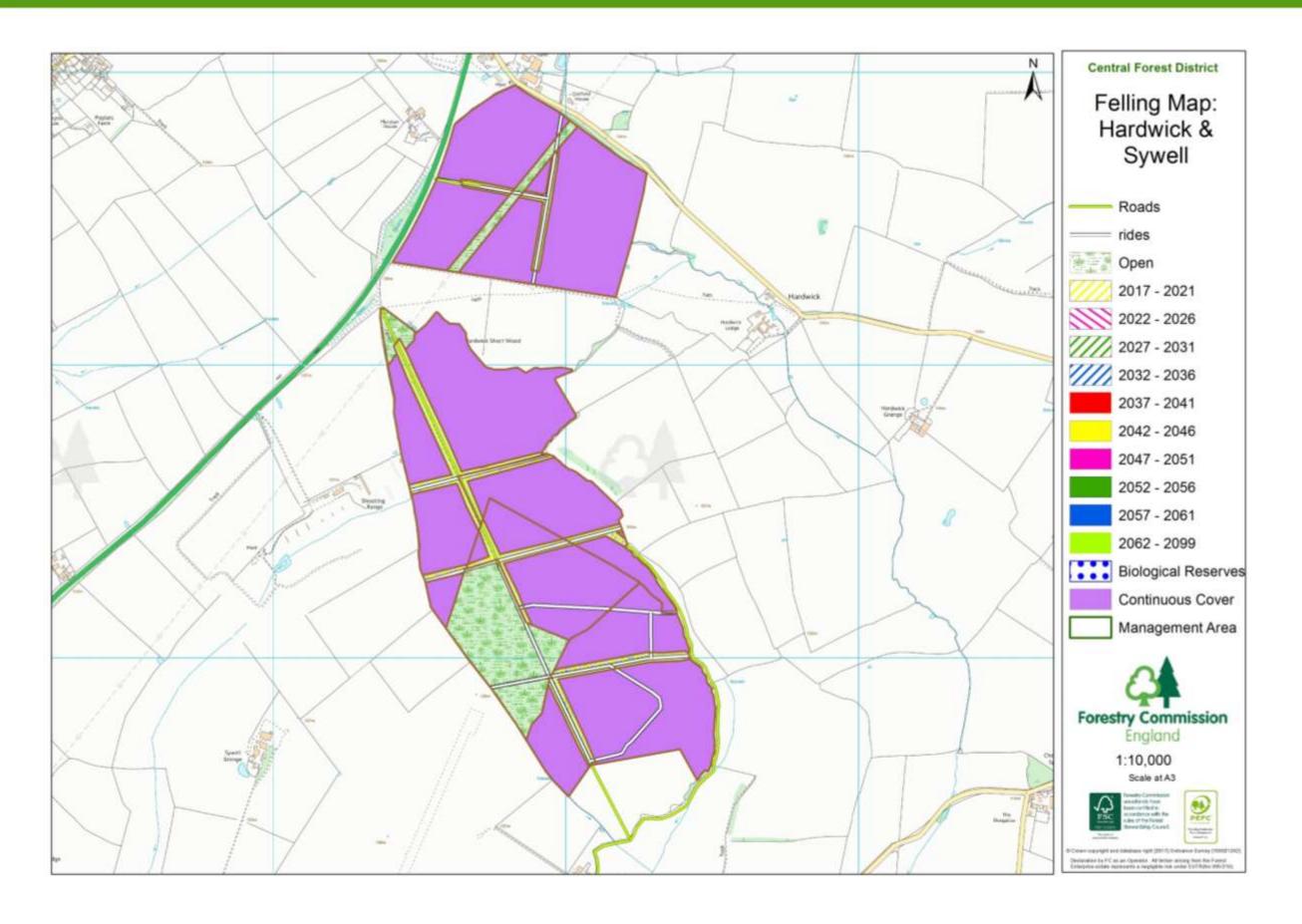


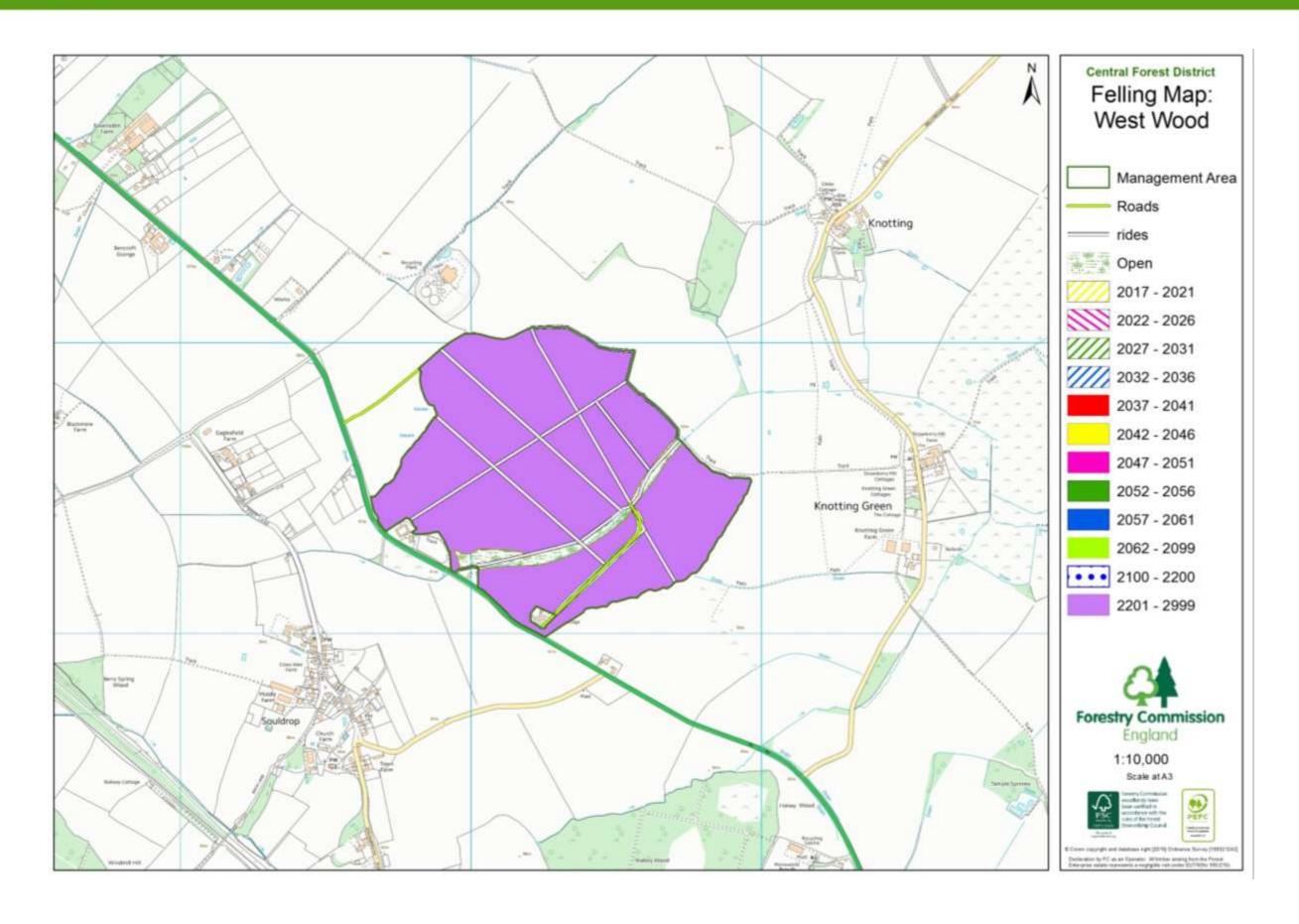




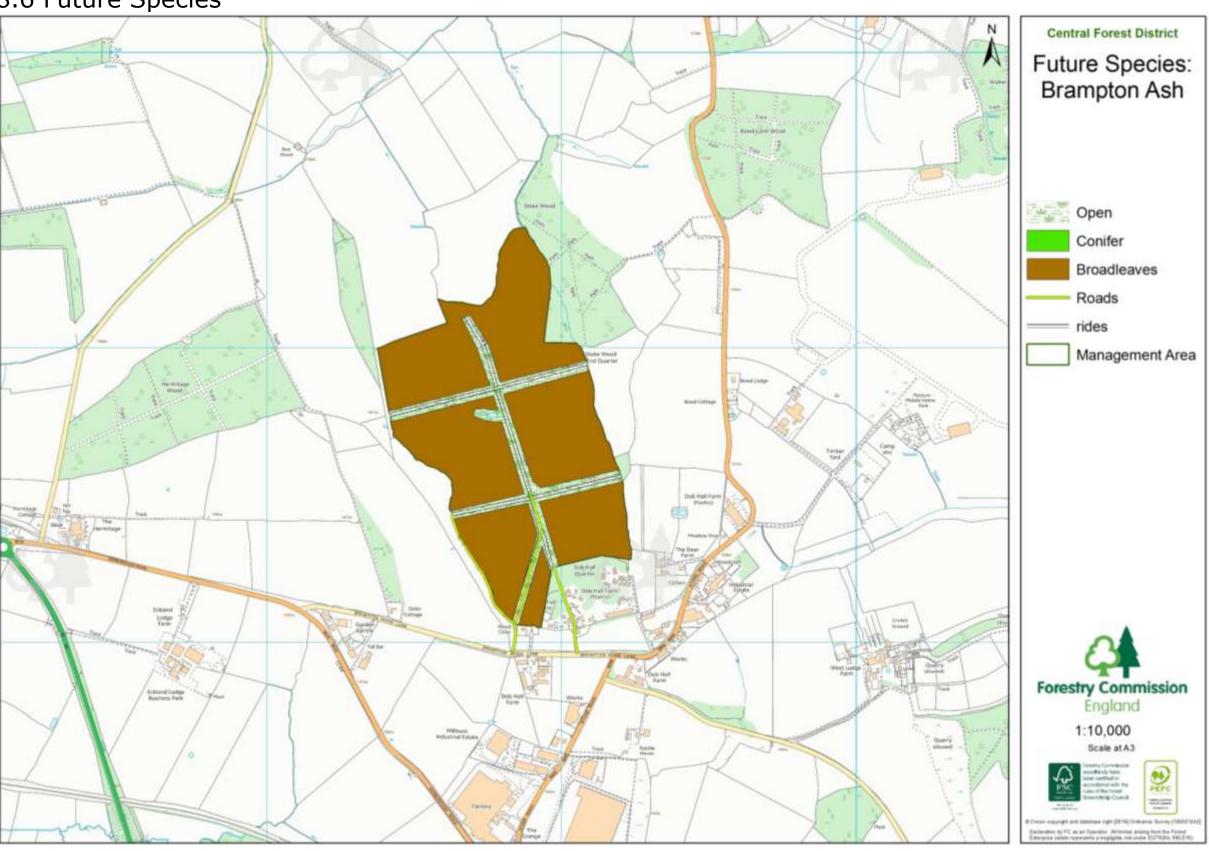
#### 8.6 Felling Map

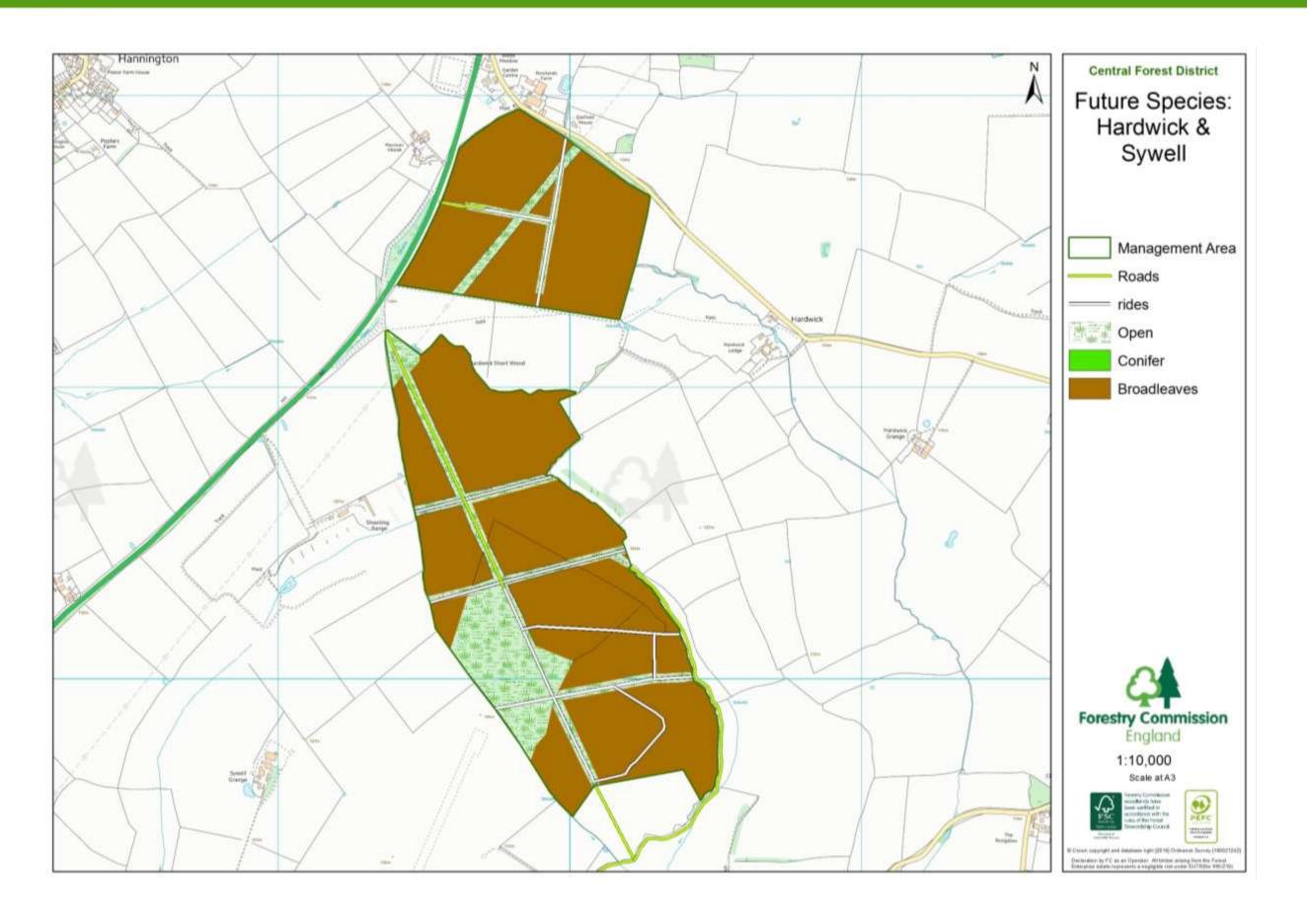


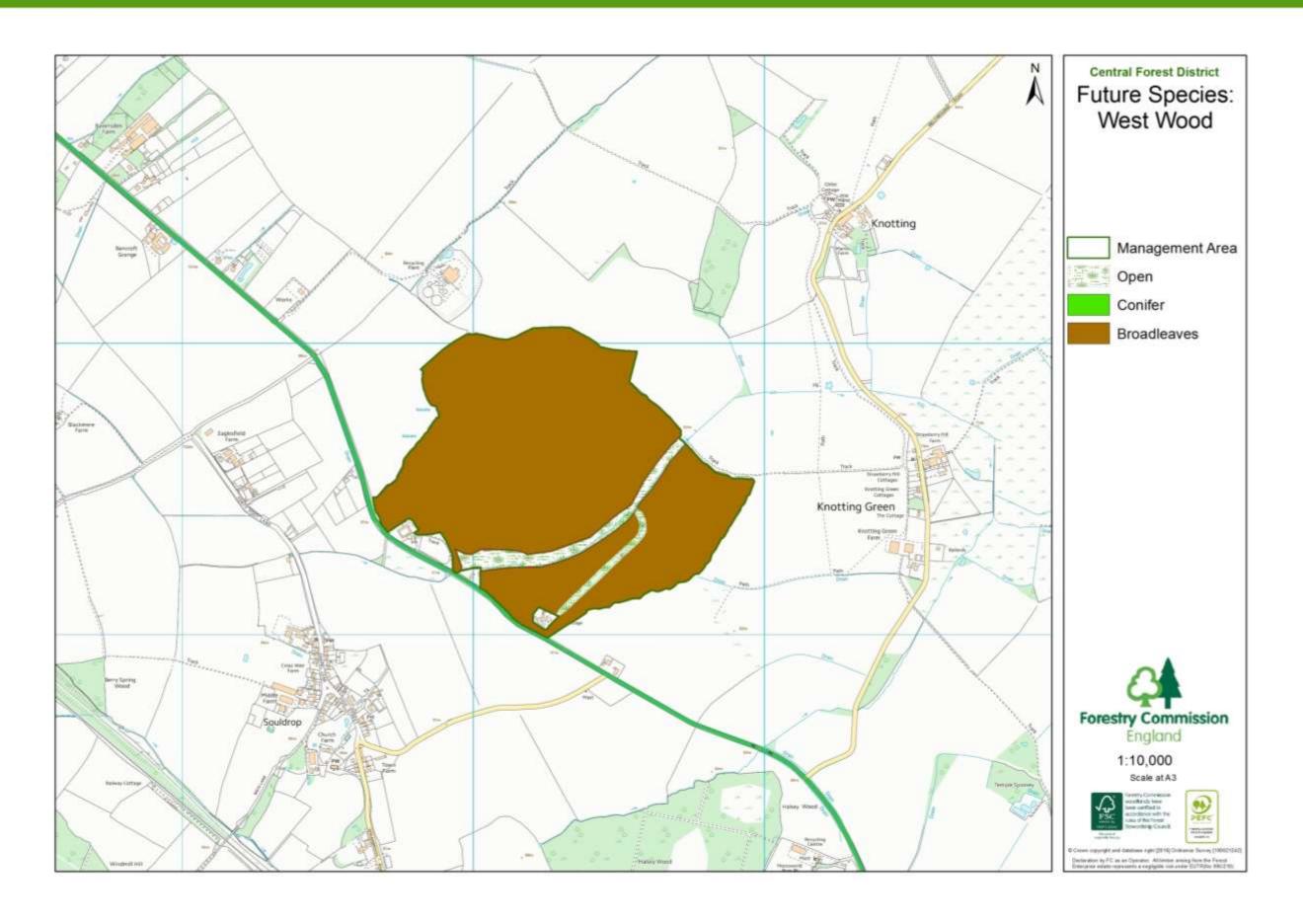




### 8.6 Future Species









# 9. Relevant Forestry Commission & Government Policies

- Natural England, 2013. "National Character Area profile: 91. Yardley Whittlewood Ridge" Available at: http://publications.naturalengland.org.uk/publication/6441192149483520?map=true&category=587130
- Natural England, 2014. "National Character Area profile: 89. Northamptonshire Vales" Available at: http://publications.naturalengland.org.uk/publication/4871120062775296?map =true&category=587130



## **End of Document**