


Woodland Management Plan

Woodland Property Name	North West		
Case Reference	00005		
Plan Period dd/mm/yyyy (ten years)	Approval Date: 08-04-2015	To: 08-04-2025	
Five Year Review Date	April 2020		

Revision No.	Date	Status (draft/final)	Reason for Revision
The landowner agrees this plan as a statement of intent for the woodland			<input checked="" type="checkbox"/>

User Support



To maximise the functionality available:

- Connect to the internet;
- Enable macros as prompted;
- Where the text is blue and underlined additional information is available, hover over the text with your mouse and double click to open;
- Where you see the  symbol, left click on either the symbol or the adjacent cell and press the F1 key for a further explanation of the detail required;
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UKFS Management Planning Criteria

Approval of this plan will be considered against the following UKFS criteria, prior to submission review your plan against the criteria using the check list below.

No.	UKFS Management Plan Criteria	Approval Criteria	Applicant Check
1	Forest management plans should state the objectives of management and set out how the appropriate balance between economic, environmental and social objectives will be achieved.	Have objectives of management been stated? Consideration given to economic, environmental and social factors (Section 2.2)	<input checked="" type="checkbox"/>
2	Forest management plans should address the forest context and the forest potential and demonstrate how the relevant interests and issues have been considered and addressed.	Does the management strategy (section 6) take into account the forest context and any special features identified within the woodland survey (section 4)	<input checked="" type="checkbox"/>
3	In designated areas, for example national parks, particular account should be taken of landscape and other sensitivities in the design of forests and forest infrastructure.	Have appropriate designations been identified (section 4.2) if so are these reflected through the work proposals in the management strategy (Section 6)	<input checked="" type="checkbox"/>
4	At the time of felling and restocking, the design of existing forests should be re-assessed and any necessary changes made so that they meet UKFS Requirements.	Felling and restocking are consistent with UKFS forest design principles (Section 5 of the UKFS)	<input checked="" type="checkbox"/>
5	Consultation on forest management plans and proposals should be carried out according to forestry authority procedures and, where required, the Environmental Impact Assessment Regulations.	Has consultation happened in line with current FC guidance and recorded as appropriate in section 7	<input checked="" type="checkbox"/>
6	Forests should be designed to achieve a diverse structure of habitat, species and ages of trees, appropriate to the scale and context.	Do the felling and restocking proposals create or improve structural diversity (refer to the plan of operations)	<input checked="" type="checkbox"/>
7	Forests characterised by a lack of diversity due to extensive areas of even-aged trees should be progressively restructured to achieve a range of age classes.	Do the felling and restocking proposals create or improve age class diversity (refer to the plan of operations)	<input checked="" type="checkbox"/>
8	Management of the forest should conform to the plan, and the plan should be updated to ensure it is current and relevant.	Has a 5 year review period been stated (1st page) and where relevant achievements recorded in section 3	<input type="checkbox"/>
9	New forests and woodlands should be located and designed to maintain or enhance the visual, cultural and ecological value and character of the landscape.	When new planting is being proposed under this plan is it consistent with UKFS and FC guidance on woodland creation	<input type="checkbox"/>

1. Property Details			
Woodland Property Name			
Name	Dave Woodlands	Owner <input checked="" type="checkbox"/>	Tenant <input type="checkbox"/>
Email		Contact Number	
Agent Name (if applicable)		Craig Forest	
Email	craig.forest@woodlands.uk	Contact Number	0808 888 888
County	North West	Local Authority	North West
Grid  Reference	SO 408669	Single Business Identifier 	000000005
Management Plan Area (Hectares)		33.13 ha	
Have you included a Plan of Operations with this management plan?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
List the maps associated with this management plan		Map 1 - Location Map 2 - Subcompartments Map 3 - Environmental features Map 4 - Hazard and Constraints Map 5 - 10 year thinning plan Map 6 - Restocking Map 7 – Species Composition 2015 Map 8 – Species composition 2025	
Do you intend to use the information within the management plan and associated plan of operations to apply for the following		Felling Licence	<input type="checkbox"/>
		Thinning Licence	<input checked="" type="checkbox"/>
		Woodland Regeneration Grant	<input checked="" type="checkbox"/>
Tick to declare management control and agreement to public availability of the plan		<input checked="" type="checkbox"/>	

2. Vision and Objectives

To develop your long term vision, you need to express as clearly as possible the overall direction of management for the woodland(s) and how you envisage it will be in the future. This covers the duration of the plan and beyond.

2.1 Vision

Describe your long term vision for the woodland(s).

The owner is keen for North West to remain productive with timber production as the main objective. To achieve this, the woodland infrastructure will be maintained. As the woodland is gradually opened to allow more light to reach the forest floor, it is intended that native woodland habitat will begin to develop and improve, increasing the biodiversity potential of the woodland. Therefore as the plan progresses, emphasis will move towards habitat establishment and the encouragement of natural regeneration alongside the management of the existing mixed conifer crop. The mixed broadleaved areas will be encouraged to produce good quality timber in the future and may be enriched with native species in areas of poor natural regeneration establishment.

2.2 Management Objectives

State the objectives of management demonstrating how sustainable forest management is to be achieved. Objectives are a set of specific, quantifiable statements that represent what needs to happen to achieve the long term vision.

No.	Objectives (include environmental, economic and social considerations) ¹
1	Maintain an active management regime
2	Timber Production
3	Increase the woodland biodiversity potential through the establishment of natural regeneration to enrich the woodland
4	Woodland Infrastructure maintenance
5	

3. Plan Review - Achievements

Use this section to identify achievements made against previous plan objectives. This section should be completed at the 5 year review and could be informed through monitoring activities undertaken.


Objectives	Achievement

¹ General Forestry Practice – Good forestry practice requirement: 9 - Forest management plans should state the objectives of management, and set out how the appropriate balance between economic, environmental and social objectives will be achieved.

4. Woodland Survey

This section is about collecting information relating to your woodland and its location, including any statutory constraints i.e. designations.


4.1 Description

Brief description of the woodland property 

North West sits on top of a hill to the south west of Clapton village. It occupies a prominent position and can be seen in part from an eastern direction. The landscape to the north, west and south is steeply undulating and often prevents long distance views of the woodland. Planted between the 1950s and mid-1970s, the woodland consists of a wide variety of mixed conifer including Douglas fir, Japanese larch and Norway spruce, Sitka spruce, Grand fir and Scots pine with areas of mixed broadleaves containing Oak, Beech, Sweet Chestnut, Sycamore and Hazel. There are some noteworthy old Oak trees towards the southern boundary of the plantation that appear to date back well over 100 years. A large proportion of the woodland sits on a south facing slope benefitting from this warm aspect, with enclosed views over the Widdle Valley to the south. The local terrain has rolling hills towards the Welsh border approx. 6 miles to the west. Planted between 160m to 261m above sea level, the area receives approx. 625mm to 750mm rainfall per annum. Distant and local views of the woodland are limited due to the rural lanes and hilly terrain, though some more open views are possible from the east.

4.2 Information

Use this section to identify features that are both present in your woodland(s) and where required, on land adjacent to your woodland. It may be useful to identify known features on an accompanying map. Woodland information for your property can be found on the [‘Magic’](#) website or the Forestry Commission [Land Information Search](#).

Feature	Within Woodland(s)		Cpts	Adjacent to Woodland(s)		Map No
Biodiversity - Designations						
Site of Special Scientific Interest	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Special Area of Conservation	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Tree Preservation Order	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Conservation Area	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Special Protection Area	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Ramsar Site 	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
National Nature Reserve	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Local Nature Reserve	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Other (please Specify):	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Notes						

Feature	Within	Cpts	Map	Notes
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		Woodland(s)			No	
Biodiversity - <u>European Protected Species</u>						
Bat	Species (if known)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	All		Presumed to be everywhere
Dormouse		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Great Crested Newt		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Otter		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Sand Lizard		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Smooth Snake		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Natterjack Toad		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Biodiversity – <u>Priority Species</u>						
<u>Schedule 1 Birds :</u> Red Kite, Goshawk, Hen Harrier, Honey Buzzard, Redstart		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	All		Redstart have been recorded on site in previous years in nest boxes
Mammals (Red Squirrel, Water Vole, Pine Marten etc)		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Reptiles (grass snake, adder, common lizard etc)		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Plants		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Fungi/Lichens		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Invertebrates (butterflies, moths, beetles etc)		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Amphibians (pool frog, common toad)		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Other (please Specify): Pied Flycatcher, Wood Warbler, Willow Warbler, Spotted Flycatcher and Tree Pipit		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	All		Recorded in previous years in nest boxes
<u>Historic Environment</u>						
Scheduled Monuments		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Unscheduled Monuments		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Registered Parks and Gardens		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Boundaries and Veteran Trees		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	6	3	Boundary oaks and internal lime on edge of green ride.
Listed Buildings		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Other (please Specify):		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
<u>Landscape</u>						
<u>National Character Area</u> (please Specify):						
National Park		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Area of Outstanding Natural Beauty		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Other (please Specify):		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
<u>People</u>						
CROW Access		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

Public Rights of Way (any)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Other Access Provision	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Public Involvement	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Visitor Information	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Public Recreation Facilities	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Provision of Learning Opportunities	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Anti-social Behaviour	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Other (please Specify):	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Water					
Watercourses	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			Small river/stream runs within 25m of western boundary
Lakes	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Ponds	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Other (please Specify):	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

4.3 Habitat Types

This section is to consider the habitat types within your woodland(s) that might impact/inform your management decisions. Larger non-wooded areas within your woodland should be classified according to broad habitat type where relevant this information should also help inform your management decisions. Woodlands should be designed to achieve a diverse structure of habitat, species and ages of trees, appropriate to the scale and context of the woodland.

Feature	Within Woodland(s)		Cpts	Map No	Notes
Woodland Habitat Types					
Ancient Semi-Natural Woodland	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	6	3	
Planted Ancient Woodland Site (PAWS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	1,2,3,4,5	3	
Semi-natural features in PAWS	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	1,6	3	Native woodland vegetation (sedge, woodspurge, wood sorrel)
Lowland beech and yew woodland	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Lowland mixed deciduous woodland	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	1a,b,4m,6		
Upland mixed ash woods	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Upland Oakwood	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wet woodland	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wood-pasture and parkland	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

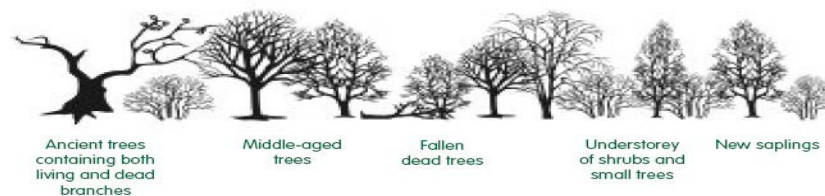
Other (please Specify):	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Non Woodland Habitat Types					
Blanket bog	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Fenland	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Lowland calcareous grassland	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Lowland dry acid grassland	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Lowland heath land	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Lowland meadows	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Lowland raised bog	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Rush pasture	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Reed bed	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wood pasture	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Upland hay meadows	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Upland heath land	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Unimproved grassland	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Peat lands	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland habitats	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Other (please Specify):	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

4.4 Structure

This section should provide a snapshot of the current structure of your woodland as a whole. A full inventory for your woodland(s) can be included in the separate Plan of Operations spreadsheet. Ensuring woodland has a varied structure in terms of age, species, origin and open space will provide a range of benefits for the biodiversity of the woodland and its resilience. The diagrams below show an example of both uneven and even aged woodland.

Woodland Type	Percentage of Mgt Plan Area	Age Structure	Notes (i.e. understory or natural regeneration present)
Coniferous	65%	Even Aged	DF/GF/JL/SP/NS/SS (Planted 1972)
Native Broadleaves	35%	Even Aged	OK/MBL (Planted 1900/1952)

Uneven-aged woodland – many wildlife habitats because of high diversity



Even-aged woodland – tidy but of low diversity



5. Woodland Protection





Woodlands in England face a range of threats; this section allows you to consider the potential threats that could be facing your woodland(s). Using the simple Risk Assessment process below woodland owners and managers can consider any potential threats to their woodland(s) and whether there is a need to take action to protect their woodlands.

5.1 Risk Matrix

The matrix below provides a system for scoring risk. The matrix also indicates the advised level of action to take to help manage the threat.

Impact	High	Plan for Action	Action	Action
	Medium	Monitor	Plan for Action	Action
	Low	Monitor	Monitor	Plan for Action
		Low	Medium	High
Likelihood of Presence				

5.2 [Plant Health](#)

Threat 	Acute Oak Decline
(Other Please Specify)	
Likelihood of presence 	Low
Impact 	Medium
Response (inc protection measures) 	Check trees for symptoms during regular site visits.

Threat	Phytophthora ramorum
(Other Please Specify)	
Likelihood of presence	Medium
Impact	Low
Response (inc protection measures)	Small proportion of wood comprised of European and Japanese larch. Check trees for symptoms and priorities their removal during thinning operations.

5.3 [Deer](#)

Likelihood of presence	High
Impact	Medium
Response (inc protection measures)	A deer stalking agreement is in place for North West using a local stalker. Transient herds of Roe and Fallow deer are culled during the open season for each species

and records are collated annually.

5.4 Grey Squirrels

Likelihood of presence	High
Impact	Medium
Response (inc protection measures)	Squirrels are not a significant threat to the crops at their current stage, however in the future years the oak and native broadleaved plantations will be particularly susceptible. Squirrel control by shooting is undertaken in conjunction with deer control.

5.5 Livestock and Other Mammals

Threat (Other Please Specify)	Sheep
Likelihood of presence	Low
Impact	Medium
Response (inc protection measures)	Inspect and work with neighbouring farmers to maintain a stock proof boundary fence.

5.6 Water & Soil

Threat (Other Please Specify)	Point Pollution
Likelihood of presence	Low
Impact	Medium
Response (inc protection measures)	All machinery working onsite will carry a spillage kit of the appropriate size.

5.7 Environmental

Threat (Other Please Specify)	Fire
Likelihood of presence	Low
Impact	High
Response (inc protection measures)	Annual ride swiping encourages early fresh grass growth throughout the woodland and brash on clear felled areas has now decayed significantly to avoid high risk combustion. In the case of fire the local fire brigade will be informed and requested to attend. Located at: Halton Fire Station, High Street, Southern SS8 3YB Telephone: 0141 556 7832

5.8 Climate Change Resilience

Threat	Uniform Structure
(Other Please Specify)	
Likelihood of presence	Low
Impact	Low
Response (inc protection measures)	Break up uniform age structure by thinning and conversion towards continuous cover style systems.

6. Management Strategy

This section requires a statement of intent, setting out how you intend to achieve your management objectives and manage important features identified within the previous sections of the plan. A detailed work programme by sub-compartment can be added to the Plan of Operations.

Management Obj/Feature	Management Intention
Harvesting	<p>Harvesting will continue in the mixed conifer areas with an overall aim of gradually shifting the focus from the current clearfell and restocking regime to one <u>more in line with a continuous cover system</u>². This may require the removal of some of the <u>remaining larger MC trees on top of the hill in order to avoid them reaching a terminal height that will also make them susceptible to windthrow</u>³. <u>Therefore thinning operations will aim to remove a proportion of these trees whilst retaining a proportion of smaller diameter, understorey trees to take their place</u>⁴. A harvester / forwarder combination will be capable of achieving this on the more level ground on top of the hill. The <u>steeper slopes</u>⁵ will be harvested using skidder and forwarder.</p> <p>The mixed broadleaved area will continue to be thinned under the current regime, <u>gradually opening the historically congested canopy and allowing light to the forest floor</u>⁶. Natural regeneration of oak and other native broadleaves will be encouraged to develop in these areas, creating a future crop as the over-storey of maturing oak is gradually removed.</p> <p>A large area of the mixed conifer, mixed broadleaved crop on top of the hill was affected by storms in January/February 2014, with approximately 2.99ha blown over. This area has now been cleared and will be restocked during the period of this plan.</p> <p>A <u>standing and fallen deadwood volume of approx. 3 m3/ha located in the most appropriate areas</u>⁷, will be maintained over the period of the plan in order to maintain the existing cycle. This will be achieved by retaining existing stand and fallen deadwood and if required creating standing deadwood by ring barking selected trees.</p>

² General Forestry Practice Guidelines: 13, Biodiversity Guidelines: 18 and Climate change Guidelines: 17 - Consider alternatives to clearfell systems, such as continuous cover forestry, where suitable sites and species combinations allow and management objectives are compatible.

<p>Phased felling and restructuring of plantations</p>	<p><u>This plan will see a move towards a more continuous cover regime for the woodland⁸</u>, however it is accepted that some of the <u>mixed conifer areas may suffer windthrow⁹</u> on the exposed edges leading to intermittent clearing of concentrated areas.</p> <p>Age class structure will be encouraged to diversify by accepting <u>natural regeneration of mixed broadleaves and conifer within the crop matrix¹⁰</u>.</p>
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³ General Forestry Practice Guidelines: 6 and Climate Change Guidelines: 16 – Plan for forest resilience using a variety of ages, species and stand structure; consider the risks to the forest from wind, fire, and pest and disease outbreaks.

⁴ Biodiversity Guidelines: 22 - Identify sites for long-term forest cover and thin them early.

⁵ General Forestry Practice Guidelines: 30, Soils Guidelines: 9 and Water Guidelines: 36 – Minimise compaction, rutting and erosion during forest operations by selecting the most appropriate working method for site conditions; monitor operations and modify, postpone or stop procedures if degradation starts to occur.

⁶ Biodiversity Guidelines: 25 - Plan open space in new and existing woodland to create and enhance networks of open-ground habitats.

⁷ General Forestry Practice Guidelines: 10, Biodiversity Guidelines: 23 and Climate Change Guidelines: 10 - leave a proportion of standing and fallen deadwood: concentrate it in areas of high ecological value, where there is existing deadwood and where linkages can be provided between deadwood habitats – avoid uniform distribution across the forest management unit.

⁸ General Forestry Practice Guidelines: 13, Biodiversity Guidelines: 18 and Climate change Guidelines: 17 - Consider alternatives to clearfell systems, such as continuous cover forestry, where suitable sites and species combinations allow and management objectives are compatible.

⁹ Biodiversity Guidelines: 21 - leave some patches of windthrow.

¹⁰ Biodiversity Guidelines: 9 - Consider using ecological processes as a way of delivering biodiversity objectives within a forest management plan – both in silvicultural systems and minimum intervention areas.

<p>Establishment, restocking and regeneration</p>	<p>Restocking will aim to establish mixed conifer and mixed broadleaved trees, in blocky mixtures of pure species. <u>Natural regeneration will continue to be encouraged throughout the woodland¹¹</u> and where it is noted that regeneration is slow or absent, under planting of appropriate species will be undertaken to ensure that the next generation of trees is established satisfactorily. Under planting is specifically proposed in scpt 4e where an area of conifer was windthrown and subsequently cleared in 2014.</p> <p>Planting densities for broadleaves will be 1600 stems/ha and conifers 2500 stems/ha. Species to be planted include: oak, sweet chestnut, hornbeam, birch, hazel, Douglas fir, sitka spruce, norway spruce and western red cedar. Fencing will be used to protect large areas of planting from browsing pressure and individual tubes and stakes used where trees are planted out with a fenced area.</p> <p><u>In accordance with the UKFS, it is not proposed to plant more than 70% of one species in any planting area¹².</u> Natural regeneration will be accepted where it occurs within the planting mixture.</p>
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<p>Measures to enhance biodiversity and other special features</p>	<p>Over the course of the plan period, thinning operations will encourage and <u>enlarge existing areas of natural regeneration within the woodland to assist with the enhancement of the woodland age class structure, canopy structure and increased biodiversity¹³</u>. Restocking will also be used to enrich the biodiversity alongside natural regeneration.</p> <p><u>Some areas of semi natural woodland ground flora and vegetation have been identified within the woodland during the site assessments, and it is proposed to develop these areas during the course of the management plan using thinning of the over-storey in</u></p>
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¹¹ Biodiversity Guidelines: 15 and Climate Change Guidelines: 28 - Encourage natural regeneration of native tree and shrub species to promote natural selection and climate change adaptation, and conserve distinctive genetic patterns – especially in and around semi-natural woodlands.

¹² General Forestry Practice Guidelines: 8, Biodiversity Guidelines: 11 and Climate Change Guidelines: 23 - Diversify forest composition so that no more than 75% of the forest management unit is allocated to a single species and a minimum of the following are incorporated:

- 10% open space;
- 10% of other species or ground managed for environmental objectives;
- 5% native broadleaved trees or shrubs.

¹³ Biodiversity Guidelines: 15 and Climate Change Guidelines 28 - encourage natural regeneration of native tree and shrub species to promote natural selection and climate change adaptation, and conserve distinctive genetic patterns – especially in and around semi-natural woodlands.

	<p><u>order to increase light levels and encourage stronger establishment of the native understorey</u>¹⁴. Native understorey species identified to date include bilberry, wood sorrel, sedge and wood spurge.</p> <p>In accordance with UK Forestry Standard it is proposed to manage 15% of the woodland with biodiversity enhancement as a major objective. A large proportion of this area will be open ground and areas of dappled shaded such as, rides, areas around veteran trees, long-term retention areas and deer glades etc. Mowing and control of invasive species in these areas will be undertaken as necessary, the remainder will be made up of a proportion of scpt 6d (Map 3 – Environmental Features).</p>
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<p>Special measures for ancient semi-natural woodland (ASNW) and semi-natural woodland (SNW)</p>	<p>Canopy thinning of semi natural woodland areas will be undertaken in order to develop and enhance these areas. <u>Thinning in ASNW areas will aim to mainly remove scattered mixed conifer species</u>¹⁵.</p>
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<p>Special measures for plantation on ancient woodland site (PAWS)</p>	<p>The swiping and maintenance of woodland tracks to allow better access to these areas will be continued. <u>Canopy thinning will be undertaken in order to develop and enhance these areas, increasing light levels and enhancing the tree species diversity by encouraging suppressed understorey stems of native broadleaves to establish more strongly. Thinning in these areas will mainly focus on the gradual removal of mixed non-native conifers from the current mixed woodland stocking</u>¹⁶.</p>
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<p>Measures to mitigate impacts on landscape and neighbouring land [UKWAS 3.1.2]</p>	<p>With the emphasis on thinning rather than clearfelling, it is expected that harvesting operations will have a limited impact on the local landscape and neighbouring land.</p>
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<p>Windthrow Area</p>	<p>Replant approximately 2.99ha of windthrow clearance</p>
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¹⁴ Biodiversity Guidelines 9: - Consider using ecological processes as a way of delivering biodiversity objectives within a forest management plan – both in silvicultural systems and minimum intervention areas.

¹⁵ Biodiversity Guidelines: 34 - Consider expanding native woodlands by creating new woods, restoring native woodland sites and converting non-native woodlands; concentrate on areas that will enhance existing ancient semi-natural woodlands and, where possible, include sites large enough to overcome edge effects.

¹⁶ Biodiversity Guidelines: 35 - on plantations on ancient woodland sites (PAWS), ensure that features of ancient woodland remnants are protected and consider progressive restoration to native woodland.

	on top of the hill to recreate forest cover which will be managed under a more continuous cover regime.
Boundaries and Fences	Fences will be repaired some sections of fencing will require replacement over the course of the plan, on the boundary of cpt 6. Replacement fencing will use stock fencing to ensure that the <u>woodland is sufficiently protected from stock trespass from neighbouring farmland</u> ¹⁷ .
Coppicing	South facing slopes of the woodland contain stored hazel coppice which will be re-coppiced during thinning operations in this area. This will rejuvenate the coppice resource for the benefit of the local wildlife.
Ride Maintenance	Ride swiping and flailing will continue on an annual basis, with some areas adjacent to the rides being <u>swiped/flailed on alternate years to develop a mixed age, species rich vegetation. Thinning will be undertaken to remove occasional rideside trees to assist with ride widening and create scalloped edges</u> ¹⁸ .
Track Maintenance	Track repair and maintenance will be undertaken throughout the plan period to ensure that the <u>access track is maintained in good order and suitable for haulage lorries to access and egress the site safely</u> ¹⁹ .

¹⁷ Biodiversity Guidelines: 42 - take action to control grazing levels that will have negative impacts on the woodland or its biodiversity.

¹⁸ Biodiversity Guidelines: 27 - Develop graded edge habitats; thin woodland edges to create a diverse and convoluted structure and a transitional zone between habitats.

¹⁹ General Forestry Practice: 29 - Consider how forest road networks can be exploited to minimise damage to public roads, and take advice from timber transport groups.

7. Stakeholder Engagement

There can be a requirement on both the FC and the owner to undertake consultation/engagement. Please refer to [Operations Note 35](#) for further information. Use this section to identify people or organisations with an interest in your woodland and also to record any engagement that you have undertaken, relative to activities identified within the plan²⁰.

Work Proposal	Individual/ Organisation	Date Contacted	Date feedback received	Response	Action
Harvesting Operations (verbal communication & written summary)	Neighbours	12/11/2014	12/11/2014 (verbally). Awaiting response regarding written summary	Interested to know timings of operations	Let neighbours know in advance of operations
Management Plan Summary	Midlands Group Parish Council	03/02/2015	None to date		

²⁰ General Forestry Practice – Good forestry practice requirement: 16 - Management of the forest should conform to the plan, and the plan should be updated to ensure it is current and relevant.

8. Monitoring

Indicators of progress/success should be defined for each management objective and then checked at regular intervals. Other management activities could also be considered within this monitoring section. The data collected will help to evaluate progress.

Management Objective/Activities	Indicator of Progress/Success	Method of Assessment	Frequency of Assessment	Responsibility	Assessment Results
Timber production	Evidence of timber removed through thinning operations	Basal area plots	Prior to and following thinning operations	Forest Manager	Inform decisions for future management plan revisions
Increase the woodland biodiversity potential through the establishment of natural regeneration to enrich the woodland	Evidence of increased natural regeneration in hotspots throughout the woodland	Visual and photographic assessment	At 5 year review	Forest Manager	Inform decisions for future management plan revisions
Pest Control	Level of fresh browsing damage from deer or bark stripping from squirrels.	Visual and photographic assessment	During regular site visits	Forest Manager	Inform decisions and enable proactive response if increased levels occur during the period of the plan
European protected species	Identification of protected species within the woodland boundary	National biodiversity records, local knowledge & site visits	At 5 year review	Forest Manager	Inform supervisors and operators of presence and assist decisions regarding forest operations
Disease Control	Disease symptoms in trees, in particular but not limited to: Phytophthora ramorum, Chalara fraxinea, Acute Oak Decline	Visual and photographic assessment	During regular site visits	Forest Manager	Inform decisions and enable proactive response if increased levels occur during the period of the plan

FC Approval – FC Office Use Only

UKFS Management Plan Criteria	Approval Criteria	Yes	No	Notes
Forest management plans should state the objectives of management, and set out how the appropriate balance between economic, environmental and social objectives will be achieved.	Have objectives of management been stated? Consideration given to economic, environmental and social factors (Section 2.2)	X	<input type="checkbox"/>	Yes
Forest management plans should address the forest context and the forest potential, and demonstrate how the relevant interests and issues have been considered and addressed.	Does the management strategy (section 6) take into account the forest context and any special features identified within the woodland survey (section 4)	X	<input type="checkbox"/>	Yes
In designated areas, for example national parks, particular account should be taken of landscape and other sensitivities in the design of forests and forest infrastructure.	Have appropriate designations been identified (section 4.2) if so are these reflected through the work proposals in the management strategy (Section 6)	X	<input type="checkbox"/>	No designations
At the time of felling and restocking, the design of existing forests should be re-assessed and any necessary changes made so that they meet UKFS Requirements.	Felling and restocking are consistent with UKFS forest design principles (Section 5 of the UKFS)	X	<input type="checkbox"/>	Windblow has played a main
Consultation on forest management plans and proposals should be carried out according to forestry authority procedures and, where required, the Environmental Impact Assessment Regulations.	Has consultation happened in line with current FC guidance and recorded as appropriate in section 7	X	<input type="checkbox"/>	Yes
Forests should be designed to achieve a diverse structure of habitat, species and ages of trees, appropriate to the scale and context.	Do the felling and restocking proposals create or improve structural diversity (refer to the plan of operations)	X	<input type="checkbox"/>	Yes
Forests characterised by a lack of diversity due to extensive areas of even-aged trees should be progressively restructured to achieve a range of age classes.	Do the felling and restocking proposals create or improve age class diversity (refer to the plan of operations)	X	<input type="checkbox"/>	Yes
Management of the forest should conform to the plan, and the plan should be updated to ensure it is current and relevant.	Has a 5 year review period been stated (1st page) and where relevant achievements recorded in section 3	<input type="checkbox"/>	<input type="checkbox"/>	N/A
New forests and woodlands should be located and designed to maintain or enhance the visual, cultural and ecological value and character of the landscape.	When new planting is being proposed under this plan is consistent with UKFS and FC guidance on woodland creation	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Approving Officer Name	Jamie Cannon	Plan approved		Yes