

<b>Woodland Property Name</b>	North Dean Wood - West					
Unique Reference						
Plan Period dd/mm/yyyy (ten years)	Approval Date:	То:				

## Approval Criteria – FC Office Use Only

The UKFS states that a management plan should:

UKFS	Approval Criteria	FC Approval & Notes
State the objectives of management, and how sustainable forest management is to be achieved	Have objectives of management been stated? Consideration given to economic, environmental and social factors (Section 2.2)	
Provide a means to communicate forest proposals and engage interested parties	Have work proposals been communicated in the management strategy (section 6) and felling & restock table (section 8) and potential interested parties identified in Section 7	
Serve as an agreed statement of intent against which implementation can be checked and monitored	Has a five year review period been stated below and achievements recorded in section 3	
Approving Officer Name	Plan approve	d 🗌

### 1. Property Details

Name	Neil Pa	terson	Owner 🖂		Tenant 🗌
Email	Neil.Pa	terson@calderdale.gov.uk	Contact Number		01422 882330
Address	Calder	dale Council			
Agent Name	(if applicable)		Matt Tay	ylor	
Contact No	umber	07814 571174	Email	forestandla	nd@gmail.com
County		West Yorkshire	Nearest	Town	Halifax
Grid Refer	Grid Reference SE075222			ıthority	Calderdale
Managemen	t Plan Area (He	ectares)	13.02		
List the maps associated with this management plan			<ul><li>1 - Compartments;</li><li>2- Species;</li><li>Activities;</li><li>4 - Designations;</li><li>5 -</li><li>Concept and Issues</li></ul>		•
-	end to appl nanagemen	y for a felling licence t plan?	,	Yes 🛚	No 🗌

### 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 and how you envisage it will be in the future.

### 2.1 Vision

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

The woodland will contain a resilient range of locally appropriate native tree species across a range of ages. A small component of sycamore and beech will be retained in the stand.

The woodland's contribution to biodiversity will be maximised through the development of good habitats for nesting birds, roosting bats, as well as an abundance of dead and dying wood, varied light levels, glades and thickets throughout the wood.

The woodland will be free of litter, tidy, and welcoming, and open to visitors, providing the sense that it is cared for while retaining its wild characteristics.

### 2.2 Management Objectives

State the objectives of management, and 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 (including environmental, economic and social considerations)
1	Create standing and fallen deadwood
2	Increase structural diversity and light levels
3	Reduce the proportion of non-native tree species
4	Increase habitat for native plants, fungi, invertebrates, birds, and bats
5	Maintain and improve path network to provide an accessible woodland experience.

### 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.

Objective	Achievement
Create standing and fallen	
deadwood	
Increase structural diversity and	
light levels	
Reduce the proportion of non-	
native tree species	
Increase habitat for native plants,	
fungi, invertebrates, birds, and bats	
Maintain and improve path network	
to provide an accessible woodland	
experience.	

### 4. Woodland Survey

Brief description of the woodland property





North Dean Wood–West, is an urban upland sessile oak woodland with birch and bilberry, a great example of an NVC W17 woodland. It is listed on the Ancient Woodland Inventory as ancient woodland although there is an area of beech PAWS which is addressed within this plan. The woodland is protected by two TPOs and has Local Wildlife Site status due to: its ancient status; its classification as a species rich acid woodland; and the fact that it offers good public access and high wildlife value. The wood is protected by woodland TPO 71/00024/C

The wood runs north to south sitting on an east facing slope at an elevation of 150-210m above sea level. The soils are shallow acidic loams over gritstone and mudstone. There are some small surface drains and water supplies watercourses within in the wood.

The woodland structure across most of the site is good (relative to other areas locally) with reasonable amounts of natural regeneration and some younger oak and native shrub species in the understory. Most of the natural regeneration is however non-native in origin, namely beech. The beech is regenerating from trees planted in the wood in the 1800s, when mill owners were clearing sections of their oak woods and replacing it with beech in the hope that they would be useful for loom parts and bobbin manufacture in the future, these trees were never harvested. The sycamore is likely to be self-seeded.

The wood is well used by the public for walking and recreation and some of the paths are falling in to disrepair due to lack of maintenance and drainage issues. The access issues will have a negative impact on the woodlands biodiversity with walkers straying from the path, fraying routes and disturbing regenerating trees and ground flora.

The woodland has a boundary fence which protecting it from stock encroachment. This is in poor repair and should be renewed.

Sub-compartment summaries (see map 1)

1a - 4.23ha



Ecological Estates Condition Assessment: Fairly Good Target Condition: Good

This is an area of ancient W17 oak/birch woodland with bilberry understory, it is in good condition. The wood contains many old characterful oaks and it would benefit from a gentle thinning with arisings being used to increase the standing and fallen deadwood component within the wood. The process of converting living trees to standing deadwood should also include the creation of cavities and cracks in the trees to increase habitat for bats and invertebrates and increase foraging opportunities for woodland birds.

#### 1b -1.4ha



Ecological Estates Condition Assessment: Poor Target Condition: Good

In this area, the oaks were cleared in the 1800s and beech were planted in their place, this is an important part of the story behind the area's industrial past with the trees being planted by mill owners to manufacture bobbins and loom parts. The trees were never harvested and now the ground beneath them is bare and eroding. Some of the beech should be turned into standing deadwood to provide valuable habitat and to allow light to the forest floor.

The regenerating beech should be controlled to ensure they do not dominate the successional regeneration.

#### 1c -1.8ha



Ecological Estates Condition Assessment: Moderate Target Condition: Good

In this area there are mature sessile oak and birch with occasional beech and sycamore, this area is an example of a native W17 woodland with some elements of degradation.

Beech and sycamore appear among the regeneration - these should be removed but replanting with alternative species such as hazel should be encouraged to retain species diversity to provide long term resilience in the woodland.

There is a patch of Himalayan balsam in this compartment which should be removed. There are issues with the path in this compartment which should be addressed.

#### 1d 3.4ha



Ecological Estates Condition Assessment: Fairly Good Target Condition: Good

This area is very similar to compartment 1a and the same prescriptions apply. In addition, the access path here has become badly eroded leading to walkers straying from the path increasing the erosion and preventing vegetative growth.

Drainage, revetment, and resurfacing works are required to prevent further damage.

1e -2.2ha



Ecological Estates Condition Assessment: Poor/Fairly Poor Target Condition: Good

This is an open area of heath with regenerating birch, oak and blackthorn. The ground cover is dominated by heather and bilberry but bracken is encroaching from the west.

Tree regeneration adds to the habitat value here but should not be allowed to advance further than its current range.

The bracken should be controlled though rolling or trampling in the first instance, followed by a grazing programme in the longer term. Sensitive long term grazing would also prevent the advancement of the birch and oak without damaging its current status. This would require an internal fence to be installed for stock control.

### 5. Woodland Protection

This section allows you to consider the potential threats facing your woodland(s). Where relevant, under the following headings, describe any potential threats and as informed by both the likelihood of presence and potential impact, communicate any required management response. This could, for example, be providing information in relation to putting in place a plan, monitoring or direct action.

#### **Plant Health**

Acute oak decline has the greatest potential to cause plant health issues in this wood. At the moment the trees appear healthy and woodland management will promote the growth of a range of native tree and shrub species as well as beech and sycamore where it does not dominate. This will increase the overall woodland ecosystem and carbon sink resilience in the face of increased pests and diseases and climate change.

### Deer

The level of recreational pressure in this woodland means that it has benefitted from low deer numbers relative to other woodlands locally, restocking can therefore be done without the use of plastic guards.

### **Grey Squirrels**

Grey squirrels are on site but their impact is negligible. Control of the squirrels in this small woodland would be ineffective without a landscape scale approach.

#### **Livestock and Other Mammals**

The current boundary fence is in a poor state of repair. Replacement and maintenance of a new fence would prevent damage from stock ingress. An internal fence around compartment 1e would allow for the use of grazing management towards the maintenance the scrubby heath qualities of this compartment

#### Water & Soil (soil erosion, acidification of water, pollution etc)

Bare soil beneath the beech trees in compartment 1b is vulnerable to erosion during storm events, the management prescriptions in this compartment will address this issue. A public right of way in compartment 1c is badly eroded and poor drainage is exacerbating this issue. There is also significant footpath erosion in compartment 1e.

#### **Environmental (flooding, wind damage, fire, invasive species etc)**

Rhododendron occurs in low numbers in compartment 1a and will be relatively easy to control, more significant is a patch of Himalayan balsam growing in compartment 1c. Bracken should also be controlled in compartment 1e.

#### **<u>Climate Change</u>** Resilience (provenance, lack of diversity, uniform structure)

The management approach within this plan aims to increase the woodland habitat's resilience to a changing climate through increasing both species and structural diversity. Also by making the woodland more attractive, local people will become more attached to it and will act as stewards of the woodland in the coming years.

## 6. Strategy

This section requires a statement of intent, setting out how you intend to achieve your management objectives and manage important features and issues identified within the previous sections of the plan. The information provided should be succinct.

Mgt Objective/Feature	Outline Work Prescriptions/Operations	Year
Create standing and fallen deadwood	Crown reduction and ringbarking individual trees using tree surgeons. Use coronet cuts and create stem cavities using boring cuts with the chainsaw. Fallen deadwood will be left in-situ where it is of greater than 9 inches in diameter. Smaller diameter deadwood should be staked in dead hedges away from public rights of way.	1
Increase structural diversity and light levels	Thinning, coppicing and selective felling throughout much of the woodland	1
Reduce the proportion of non-native tree species	Select non-native trees for thinning and deadwood creation. Re-plant with native trees	1
Increase habitat for native plants, fungi, invertebrates, birds, and bats	Create deadwood, increase habitat diversity, clear litter, and allow more light to the forest floor. Bat habitat will be created in the standing deadwood using multiple boring chainsaw cuts. Repair and maintain footpaths to ensure 'braiding' does not occur and to reduce recreation pressure on the woodland floor. Install an internal fence to contain compartment 1e to allow grazing management to take place.	1
Maintain and improve path network to provide an accessible woodland experience.	Renewal of steps where required on the RoW network, and path edge revetments where necessary.  Appropriate waymarking to steer usage onto rights of way network and help reduce visitor disturbance elsewhere.  Re-surfacing/boardwalk and water management where wet flushes create poor path conditions.	1



## 7. Stakeholder Engagement

There can be a requirement on both the FC and the owner to undertake consultation/engagement. Please refer to <a href="Operations Note 35">Operations Note 35</a> for further information.

Work Proposal	Individual/ Organisation	Date Contacted	Date feedback received	Response	Action
Thinning and tree surgery	CMBC officers	26/9/20	1/10/20- 12/11/20	Various	All comments fully incorporated into the plan
Invasive species control	CMBC officers	26/9/20	1/10/20- 12/11/20	Various	All comments fully incorporated into the plan
Fencing	CMBC officers	26/9/20	1/10/20- 12/11/20	Various	All comments fully incorporated into the plan
Footpath works	CMBC officers	26/9/20	1/10/20- 12/11/20	Various	All comments fully incorporated into the plan
Conservation grazing	CMBC officers	26/9/20	1/10/20- 12/11/20	Various	All comments fully incorporated into the plan



### 8. Felling & Restocking

Should you wish to associate a felling licence with your management plan please complete the table below. Set out your felling intentions by identifying individual species where they comprise more than 20% of the volume to be felled. Individual species at or below 20% need to be grouped as MB (mixed broadleaf) and/or MC (mixed conifer).

Cpt(s)	Sub Cpt	Fell- ing Type	Species	Area of Felling (ha)	Est Volume M <sup>3</sup> (Bdlv/Con)	Pref Fell Year	Restock Species	Restock Area (ha)	% of Total Restock Area	Map No	ТРО	Designation
1	А	Т	SOK BI HO	4.23	100	21/22	N/A	0	N/A	2,3	Yes	LWS
1	В	RF	BE	0.85	160	21/22	SOK BI ROW HAZ	0.85	100	2,3	Yes	LWS
1	С	Т	SOK SYC BI HO BE	1.8	0	21/22	N/A	0	N/A	2,3	Yes	LWS
1	D	Т	SOK BI HO	3.4	150	21/22	N/A	0	N/A	2,3	Yes	LWS
1	Е	None	SOK BI PSP	0	0	N/A	N/A	0	N/A	2,3	Yes	LWS

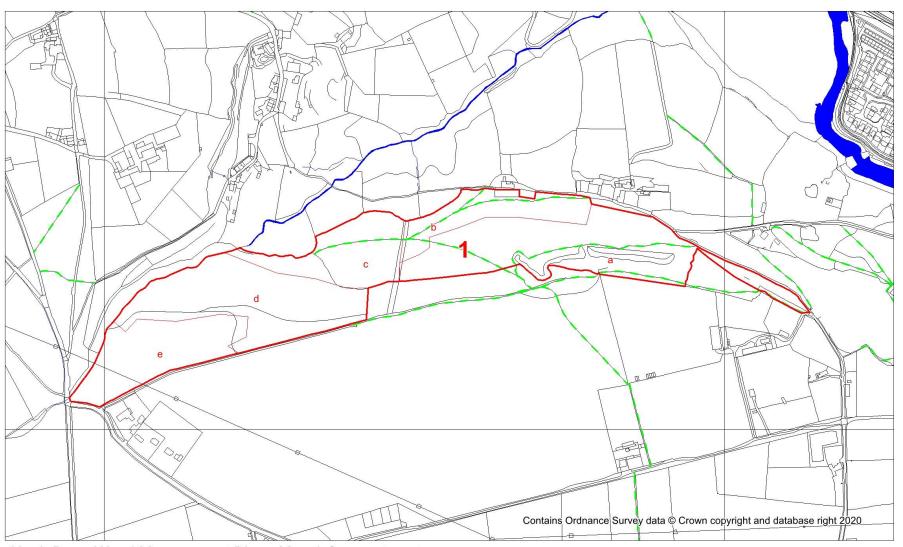


### 9. Monitoring

Indicators of success should be defined for each management objective and then checked at regular intervals. Use the below section to identify when and how monitoring is to be carried out. The data collected will help to evaluate progress.

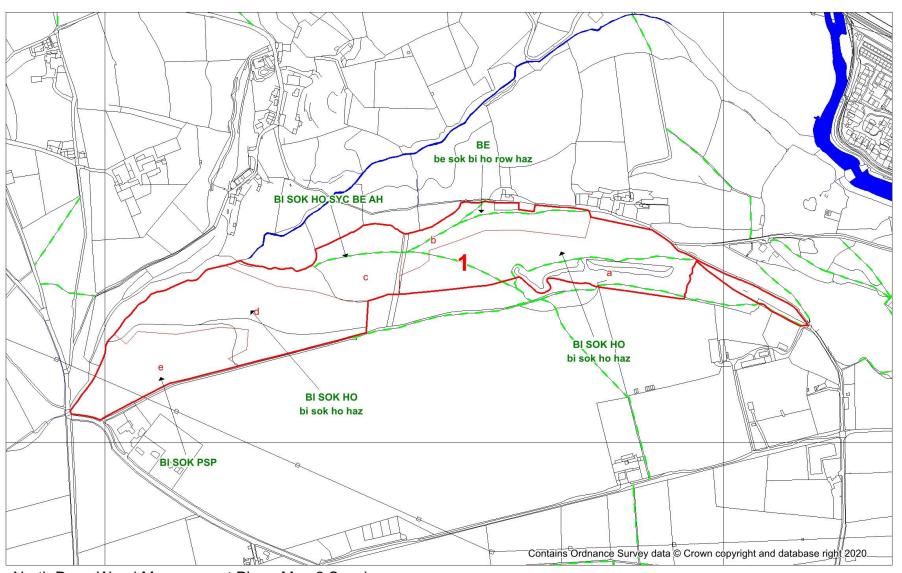
Management Objective	Indicator of Success	Method of Assessment	Frequency of Assessment	Responsibility	Assessment Results
Create standing and fallen deadwood	Minimum of 50 deadwood stems created across the site	Visual survey recorded on a map	After operations	СМВС	
Increase structural diversity and light levels	Vegetation and native tree regeneration increased	Baseline fixed quadrats	Baseline then 5 yearly	СМВС	
Reduce the proportion of non-native tree species	Ratio of native to non-native tree species	Baseline fixed quadrats	Baseline then 5 yearly	СМВС	
Increase habitat for native plants, fungi, invertebrates, birds, and bats	All of the above indicators are achieved	As above	As above	СМВС	
Maintain and improve path network to provide an accessible woodland experience.	Improvements in path resilience and waymarking	Visual survey and geo- referenced photos/map.	After operations and annually.	СМВС	





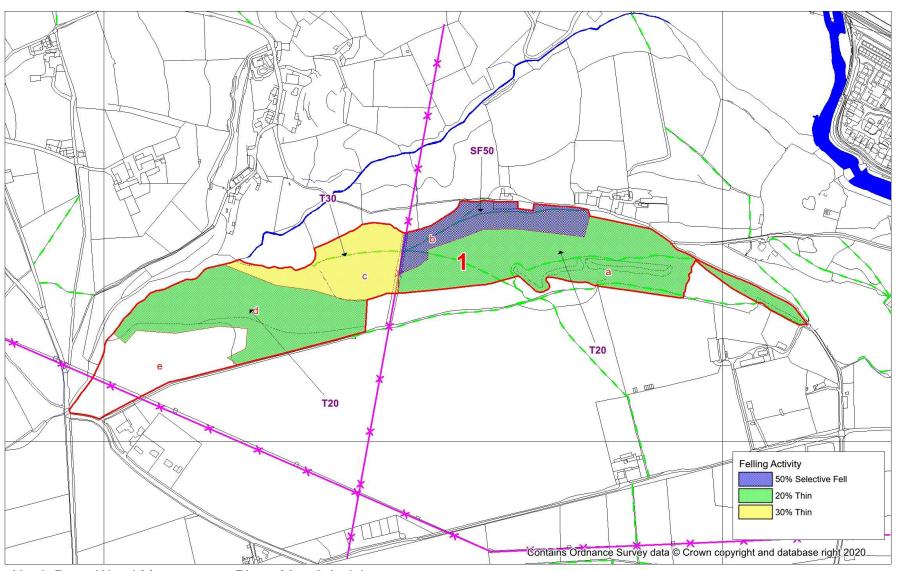
North Dean Wood Management Plan - Map 1 Compartments Scale 1:5000 at A4 Map Centre SE075 222





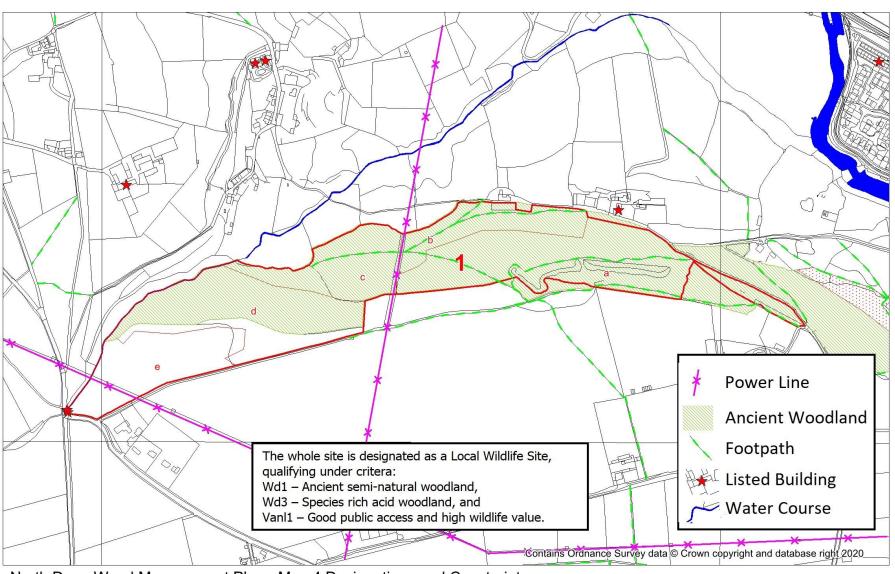
North Dean Wood Management Plan - Map 2 Species Scale 1:5000 at A4 Map Centre SE075 222





North Dean Wood Management Plan - Map 3 Activity Scale 1:5000 at A4 Map Centre SE075 222

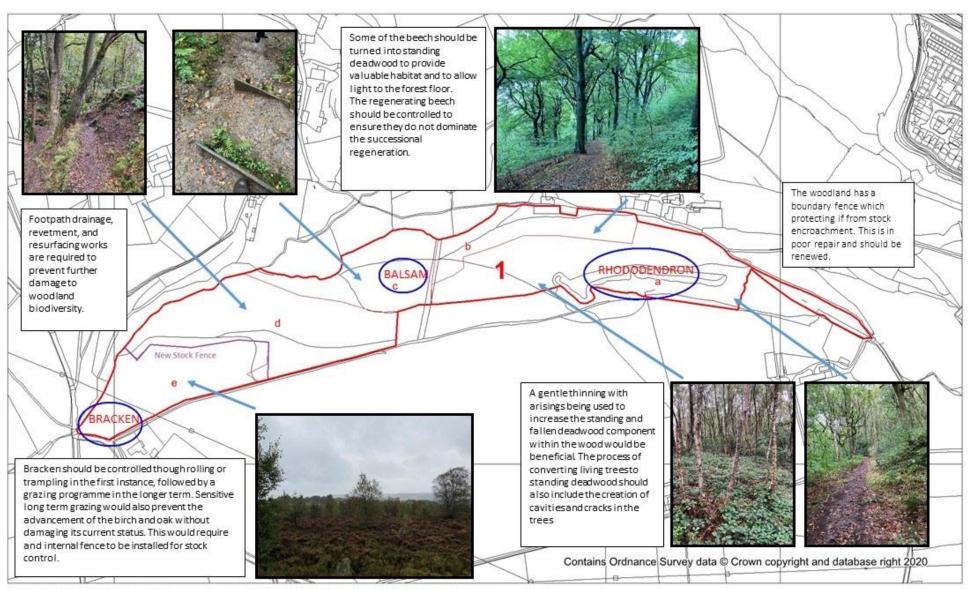




North Dean Wood Management Plan - Map 4 Designations and Constraints Scale 1:5000 at A4

Map Centre SE075 222





North Dean Wood Management Plan - Map 5 Concept and Issues Scale 1:5000 at A4