

Johnston's Coppice Woodland Management Plan 2013

Maps attached with the Management Plan

Map/no./Title	Description
1	Position of woodland in the surrounding area, schools, SINC.
2	Boundary trees, boundary bank, great oaks, notable deadwood
3	Car park, gates, fence line, footpath, permissive paths, bridges and ducts, ditch beside path, Gas line, water course, pond and weir, marsh, mini glade, site of clearings. Rhododendron, new permissive path.
4	Previous management areas and dates
5	Hampshire Biodiversity Information Centre- woodland biodiversity survey areas. Bird sightings.
6	2013 Woodland Management Compartments
7	Old map of woodland prior to building of A3M

HAVANT BOROUGH
COUNCIL

28 OCT 2013

RECEIVED



Johnston's Coppice

Date (from/to)	2013 - 2019
Date of last review [UKWAS 2.1.3]	2005/6 :WGS ref 019000990
Owner/tenant	Hampshire County Council / Terena Plowright
Agent/contact	Terena Plowright – Agent
Signed declaration of tenure rights and agreements to public availability of the plan [UKWAS 1.1.3/1.1.5/2.1.2]	

1. Background information

1.1 Location

Nearest town, village or feature	Havant 2 miles to east
Grid reference	SU690 079
Total area (ha)	8 (19.77 acres)

1.2 Description of the woodland(s) in the landscape

The site is a woodland located between Crookhorn and Havant, close to the A3, within an area known as the Havant Gap. It is adjacent to SINC woodland and grassland. The woodland is ancient and is a mix of dry and wet woodland stands. There is a good variety of woodland habitats and structures present. The overall species diversity is good and an excellent 38 ancient woodland indicators were noted.

The woodland is bordered on the north and west by a school, a college and a housing estate, the east is bordered by the A(3M) motorway and the south by a 'B' road Purbrook Way. This means the site has a tremendous opportunity for links into formal education and also has the opportunity to link with local residents (see map 1).

More widely the site is also set near the South Downs College, which again offers a

splendid opportunity for educational links and it is about a mile away from the Leigh Park estate which may allow for children from challenging backgrounds to be integrated within the woodland. Finally and not insignificantly the woodland is only about 5 miles from the border of the South Downs National Park.

The Havant Gap is an important natural area set aside to divide the settlements of Havant and Waterlooville. It is also part of a natural stretch of woodland and grassland that runs from the South Downs down to Portsdown Hill, giving wildlife a wide corridor of differing habitats between the various developments and linking the two important stretches of chalk grassland.

The Woodland was once part of the Forest of Bere and it holds some of the oldest Oak and Beech boundary trees in the area.

The site has a range of significant types of woodland ranging from wetlands in the southern most area with remnants of alder and birch coppice, coppice of both hazel and chestnut in the central area, and high forest with splendid Oak standards in the north. Within the northern section there is also a pond area which would make a fantastic feature with the marsh area behind providing valuable habitat.

The site is crossed by one main public footpath which also runs along the entirety of the western boundary of the woods. This is regularly used by local residents and dog walkers. There are also a series of permissive walking routes which run across the woodland which have more limited use but which would be very useful for extraction routes during management activity. It is hoped to make the smaller paths more accessible to the general public. The main cross-path and some of the smaller paths follow largely the same route shown on some of the much older maps prior to the building of the A3M and Purbrook Way (see map 3)

The soil to the western half of the woodland is Bagshot Sands with London clay in the eastern half. The valley bottom at the north of the site and areas of the southern section are deep rich loam.

With the difficulty in finding funding for basic woodland management, it is hoped that this site will act as a shop window for County Council partnership working. With local business involved the project will ensure that the maintenance of the woodland is brought back in to active management and that the public access is further developed.

1.3 History of Management

Historically Johnston's Coppice was part of Bere Forest but in more recent times it received its own name of 'Johnston's Coppice' and seems to have been a chestnut and hazel coppice that blended into Gundymoor Wood in the South (the boundary bank runs between the two woods and we have used this line for the boundary of Sections 2 and 3). In the north it was separated from Stakes Wood only by a field belonging to a Convent (now the school), thus creating an almost seamless blanket of woodland across the area. Stakes wood and it seems Johnston's Coppice were known as an excellent butterfly site at the beginning of the century, with a sizable population of high-brown fritillary – unfortunately the lack of management has seen this and other species severely decline (see map 7)

The ward boundary runs through the valley in the north of the site, west –east, with fantastic boundary marker trees in evidence (which may benefit from a TPO) (see map 2).

Johnston's Coppice was purchased by Hampshire County Council in 1972.

There is little management information prior to 1986 but an organisation called 'Greenspace' were managing it for HCC at this stage and planting plans and maps show their work – see map 4.

In October 1986 the Leader of Hampshire County Council opened the Main Gravel foot-path running diagonally north-east across the site from halfway up the western boundary. At the same time the Leader also opened the Causeway which was to dam the valley in the north of the woodland to create a wetland and pond. The pond is 1.3 meters deep and sits on the northern-western side of the causeway and the spillways run to the south-eastern side of the Causeway. The Lunge pool and the weir are now dried up and need attention – see map 3.

The huge gale of October 1987 blew over, snapped and uprooted 200 trees across Johnston's Coppice alone (however, the southern section (Section 3) of wetland was largely untouched). The losses equated to 25% loss of the trees in parts of the woodland and huge safety plans and planting plans were drawn up and are still in the record files, randomly joined by records of breeding sites of many species of birds – see map 5.

After this there are fairly accurate records of work carried out – see below.

(MP = Management Plan so it is not record of work actually carried out but 'intended' to be carried out and there is no mapped evidence of this works actual site although the work appears to have been claimed for so we need to presume it was complete)

All known sites of previous work are collated on to map 4.

Section 1

Plans show mapping for High Forest and protection of the Oaks and maple and hazel understory.

1994-99 = Small blocks of coppice cut on a yearly basis.

2001/02 MP = Treated sycamore stumps to control regrowth.

2002/03 MP = Treated sycamore stumps to control regrowth

2003/04 MP = Treated sycamore stumps to control regrowth

2004/05 MP = Treated sycamore stumps to control regrowth

2005/06 MP = Treated sycamore stumps to control regrowth

2001-2006 MP = Thin out sycamore and sweet chestnut, pollarding goat willow around the pond. NBL - oak and ash over hazel with field maple, birch and holly in the understory. Common alder in the valley bottom

Section 2

Planting shows hazel and chestnut coppice with various standards with the Oak as a strong variant.

1993-98 = Various coups cut in the western part

1998/99 = small area cut in the eastern part

2001/02 MP = 0.10 hectares of derelict coppice cut and treated sycamore stumps to control regrowth.

2002/03 MP = 0.10 hectares of derelict coppice cut and treated sycamore stumps to control regrowth

2003/04 MP = 0.10 hectares of derelict coppice cut and treated sycamore stumps to control regrowth

2004/05 MP = 0.10 hectares of derelict coppice cut and treated sycamore stumps to control regrowth

2005/06 MP = 0.10 hectares of derelict coppice cut and treated sycamore stumps to control regrowth

2001-2006 MP = Continued to coppice hazel and sweet chestnut. Thin out sycamore. Standards include Oak and Birch

Section 3

This area was designed as a sound barrier and only the middle block of hazel with Alder and Birch standards was to be coppiced as the plans show, the rest was to remain as wetland habitat.

1987/88 = Three block coppiced

1988/89 = Two blocks between previous cut were coppiced

2001/02 MP = Treated sycamore stumps to control regrowth.

2002/03 MP = Treated sycamore stumps to control regrowth

2003/04 MP = Treated sycamore stumps to control regrowth

2004/05 MP = Treated sycamore stumps to control regrowth

2005/06 MP = Treated sycamore stumps to control regrowth

2001-2006 MP = Standards are Ash and Oak over hazel with common Alder and Birch in the damp areas. Cut out the sycamore except on the southern boundary where it was

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retained to screen traffic noise from Purbrook Way – Allow this compartment to go to High Forest.

Main Gravel footpath

The vegetation beside the main footpath was to be cut in alternate side glades every 2 years alternating each time. It seems the only cut that took place was in 1988/89.

Please see the map showing the historical management areas and dates (not all with written records) – map 4.

This woodland has largely been unmanaged for the last 6 years which has left paths and ponds in an unfavourable condition along with the management of the coppice which is becoming over-stood.

It is planned to introduce a Natural Pet Cemetery into the woodland to help support the financial aspect of the woodland management and so to increase the productivity and biodiversity of the woodland itself.

2. Woodland Information

2.1 Areas and features

Designated Areas	Map No.	In Woodland	Adjacent to woodland
Special areas for conservation (SACs)		n/a	
Special Protection Areas (SPAs)		n/a	
Ramsar Sites (see note on Guidance)		n/a	
National Nature Reserves (NNRs)		n/a	
Sites of Special Scientific Interest (SSSIs)		n/a	
Other designations (e.g. National Park (NP) / World Heritage Site)		n/a	
Areas of Outstanding Natural Beauty (AONBs)		n/a	
Local Nature Reserves (LNRs)		n/a	
TPO / Conservation Area (CA)		On boundary TPO 1063	TPO 815 TPO955 TPO1063
Details Details Havant Borough Council Tree Preservation Orders as detailed above. TPO 815 T1 Oak In adjacent land south of Simonds Hill. TPO 955 T1 Oak, T42 Oak and T43 Ash on boundary in adjacent land along eastern boundary. TPO 1063 A1 Alder, Ash, Birch, Oak, Sweet Chestnut and Willow. See map 2			

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If there are not TPO's on the Oaks and boundary trees in Section 1 running on the southern bank of the valley there may be a strong case for instating them.

Rare and important species	Map No.	In Woodland	Adjacent to woodland
Red Data Book or BAP species		Bluebell/Butchers Broom	
Rare, threatened, EPS or SAP species		n/a	
Details			
Habitats	Map No.	In Woodland	Adjacent to woodland
Ancient semi-natural woodland (ASNW)		Yes	
Other semi-natural woodland			
Plantations on ancient woodland sites (PAWS)			
Semi-natural features in PAWS			
Woodland margins and hedges			Woodland edge is just on the other side of the boundary fence in the next field
Veteran and other notable trees		Oak, S. Chestnut and Birch Some very old examples of each. Boundary markers in northern section. Map 2	
Breeding sites			
Habitats of notable species			
Unimproved grasslands			yes
Rides and open ground		There are 2 glades to be reinstated and widening of the ride-sides will create 5% of open ground (does not need to qualify for UKWAS 3.3.2 due to small size) Map 3	
Valuable wildlife communities			
Feeding area		Song thrush 3 pairs Magpie 2 pairs Chaffinch 3 pairs Coal tit 1 pair Buzzard Nut hatch 1 pair Tree Creeper 2 pairs Great tit 6 pairs Marsh tit 1 pair Blue tit 15 pairs Green woodpecker	

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		Robin 15 pairs Greenfinch Wood pigeon 9 pairs Mistle Thrush 2 pairs Dunnock 4 pairs Great spot 1 pair Blackcap 6 pairs Long tailed tit 1 pair Blackbird 6 pairs Willow Warbler 2 pairs Starling 8 pairs Chiff chaff 6 pairs Wren 35 pairs Map 5	
Lowland heath		n/a	
Peatlands		n/a	
Others			
Details			

Water	Map No.	In Woodland	Adjacent to woodland
Watercourses		Valley running through top of woodland with small stream. Other small water courses run north south down the site and two drainage ditches run east west in the lower section Map 3	
Lakes		n/a	
Ponds		Pond in the north section and a large water pool in the southern section Map 3	
Wetland habitats		Lower section (Section 3) is waterlogged (Map 6). A marsh area is artificially created west of the pond in the northern section (Map 3).	
Details			

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Landscape	Map No.	In Woodland	Adjacent to woodland
Landscape designated areas		n/a	It is adjacent to SINC woodland and grassland
Landscape features		Boundary bank – Map 2 See map 2 for all veteran trees	Boundary bank
Rock exposures		n/a	n/a
Historic landscapes		n/a	n/a
Areas of the woodland prominent from roads		The southern section is visible from Purbrook Way. The western edge is visible from the A3M in parts Map 1	
Areas of the woodland prominent from settlements		A school and a college are adjacent to the site Map 1	
Details			
Cultural features	Map No.	In Woodland	Adjacent to woodland
Public rights of way		Yes through the woodland from south west to north-east – Map 3	Yes adjacent along lower part of west boundary. Map 3
Prominent viewing points		n/a	n/a
Existing permissive footpaths		Yes - Small permissive paths across the site – map 3	n/a
Proposed permissive footpaths		Section 1 – Map 3	n/a
Areas managed with traditional management systems		Section 2 Predominately Hazel coppice. Hazel coppice also within Section 1 and 3. Chestnut coppice on eastern boundary Section 2. Map 6	n/a
Details			
Archaeological Features	Map No.	In Woodland	Adjacent to woodland
Scheduled monument		n/a	n/a
Historical feature (Inc. designed landscapes, registered parks and gardens)		Boundary trees Boundary bank running north/south on the eastern edge and also between area	n/a

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		3 and 2 running east/west Map 2	
Other			
Details			

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For management compartments see Map 6

Across the woodland the species proportions meet with UKWAS 3.3.2

The primary species vary across the woodland and are all native. They range from:

Section 1 - Oak, Alder and Sweet Chestnut dominating the standards, with hazel as the main understory. No species is more than 65% dominant in the canopy.

Section 2 - Alder, Birch, Oak dominating the standards which are more widely spaced and again hazel and sweet chestnut as the understory. No species is more than 65% dominant in the canopy

Section 3 - Alder, Birch, Ash, Oak standards with sparse hazel understory. No species is more than 65% dominant in the canopy.

Verification of the above information comes from the Hampshire Biodiversity Information Centre Survey.

All the dominant species and all planned planting are native broadleaf which meets UKWAS 3.3.2.

At least 10% of the site will be managed with biodiversity as the focus and a non-intervention management system UKWAS 3.3.2. See map 6.

The open space needs to be re-established and it will equate to about 5% of the woodland (the woodland is too small need to have 10% under the UKWAS 3.3.2). This will be made up from ride sides, 2 glades and widening grass areas beside the footpaths. There are also areas of open space beneath the Great Oaks.

Section 1

This section has veteran trees which need protecting and examples of the oldest boundary trees in the area – see map 2. The focus for wood products will be the coppice and this covers approximately half the ground area. The remaining area is marsh, pond and a third of this section marked for biodiversity/non-intervention. Only the occasional standard will be removed and taken as product and this will **never** be any of the Great Oaks or boundary trees.

The second resource for this area is education and volunteering which will be focused largely on the pond and marsh area.

Section 2

Most of this section has large areas of pure coppice both of hazel and sweet chestnut which will provide product. The hazel stools are quite well stocked and due to being over stood the first year use for the wood will be largely firewood and beanpoles although some smaller product is within the woodland. The hazel will produce more valuable product in 7 years time when it is back in rotation. The sweet chestnut is over stood and this part of the coppice needs to be re-established by planting more sweet chestnut to bring the number of stools back to a productive concentration. Much of the cut timber will only be useful for fence posts or firewood, the value coming back in the next rotational cut.

2.2 Woodland resource characteristics

A second resource for this area is the Pet Cemetery which will provide income to pay for the woodland management – More information regarding this in the following sections.

A third resource for this area is again volunteering and education which will focus largely on species observation and encouragement.

Finally, selective felling may occasionally produce some timber as product but as the canopy is already sparse in places, this will need to take place carefully.

There is a lot of deadwood both standing and on the floor in this area which has been historically placed for habitat in 1987. This should not be taken for product as the value is not in the wood but in the additional biodiversity for the woodland. There are also some lifted root plates which should also be left for habitat.

Section 3

This area is being managed largely as a sound barrier and so the trees need to be encouraged to grow quite densely to protect from the noise of the elevated road nearby – Purbrook Way (see map 1). Two areas are being managed as non-intervention, and there is a central area of coppice which will provide product on 7 year rotation.

Again there is a lot of deadwood both standing and on the floor in this area which has fallen naturally and this should be left in the areas outside the coppice compartments. This should not be taken for product as the value is not in the wood but in the additional biodiversity for the woodland.

Harvesting and Yield

In line with UKWAS 2.2.3 all harvesting will not reduce the long term productivity of the woodland. The level of harvest appropriate was discussed with representatives from the Forestry Commission, local ranger and the owners.

The level of harvest will not be more than:

Section 1 – 1 acre of coppice per year on a 7 year rotation (product is only available for 5 of those years as there are only 5 areas of productive coppice of about an acre (or under) each. Areas – a,b,c,d,e. Map 6.

Standards – minimal selective felling only to ensure long term woodland cover in the canopy.

Section 2 – 1 acre of coppice per year on a 7 year rotation

Areas – a,b,c,d,e,f,g – Map 6

Minimal selective felling of standards only to ensure long term woodland cover in the canopy.

Section 3 – 1 acre of coppice per year on a 7 year rotation (product is only available for 3 of the 7 years).

Areas a,b,c,d,e,f – see map 6

Minimal selective felling of standards only to ensure long term woodland cover in the canopy.

2.3 Site description

Public Footpath to west of site running diagonally across the site allows some extraction by 4x4 vehicle and trailer not currently suitable for heavy vehicles. Ground condition currently good but requires minor enhancements at wet points and drainage improved. Access to South Boundary of site via old road (car park area) tarmac surface fair condition may need minor work, suitable for heavy vehicles. Access via annual rides very limited for any vehicular access due to ground conditions and ditches, especially in Section 3. Annual ride to be established for Section 2. Section 2 and 3 width of paths limiting factor

Moderate slope on site running from North to South. Significant valley in North East section of the woodland – no established access but permissive path to be installed.

Minimal wind exposure on site.

Woodland currently predominantly used for public access. Planned uses: Pet Cemetery; woodland management and products; enhancement of biodiversity; longer term educational and volunteering opportunities.

The three surveys looking at the biodiversity of the site have been included (Appendix 1-3) and show a good range of habitat.

Section 1 is High Forest with some coppice areas

Section 2 is predominantly hazel coppice with some chestnut coppice

Section 3 is wetland with some small areas of hazel coppice

2.3 Significant hazards, constraints and threats

Hazards

Gas pipe in Section 3 – Map 3

Overhead power lines in Section 3 – Map 3

Steep ground in Section 1 on the valley around the marsh area – Map 3

Constraints

Adjacent highways to the East, A3(M) and B road 'Purbrook Way' to the South, this has the impact of noise, it reduces the movement of animals, and also causes accumulation of litter. – map 1

BAP species

Ancient semi natural woodland means historical management practice needs to be

referenced and enhanced where possible and the flora and fauna need protecting.

Veteran trees and boundary trees which will need protecting – map 2

Pond in Section 1 which will need managing with no financial return – map 3

Drainage ditches which need to be kept clear but not deepened which would alter the soil water retention and may affect species reliant on the water stability – map 3

Quality and placement of extraction routes / annual rides (Access infrastructure) – map - 3

Threats

Chalara Fraxinea (potential risk of infection to Ash)

Unchecked growth of Bramble and Ivy sub-communities

Potentially deer and squirrel will need monitoring

Fire (deliberate) evidence of fire starting practice (likely children)

Fly tipping and accumulation of litter (especially on southern boundary).

Rhododendron present in eastern part of Section 2 – removal required - map 3

3. Long term vision, management objectives and strategy

3.1 Long term vision

1. Bring the woodland back into sustainable management
2. Establish the site as a working woodland, to allow sustainable production of timber and wood products
3. Establish pet burial business within the woodland to generate income
4. Manage the woodland using local people
5. Improve and encourage more public access and public use
6. Enhance biodiversity
7. Ensure long term survival of site by providing continuity of tree cover.
8. Integrate local residents from the urban catchment area and further afield by means of volunteer opportunities, educational courses, workshops and events.
9. Create specific habitat to encourage the return of woodland butterfly population.

3.2 Management Objectives

1. A pet cemetery that is well managed and blends into the woodland rather than becoming the focus of the woodland.
2. A popular volunteer programme
3. Training courses teaching traditional skills and understanding of the woodland and its history
4. Maintained and improved extraction routes and footpath. Improve access for walkers.

5. Manage existing flora and fauna and enhance biodiversity across the entire woodland with 15% of the woodland managed with biodiversity in mind as the sole purpose UKWAS 6.2.1
6. Commitment to manage woodland in accordance with UKWAS
7. All planting shall reflect the existing nature and character of the woodland and no exotic species will be introduced.
8. Enhance and restore the ancient woodland in accordance with the 'Managing ancient and native woodland practice guide', as well as the Forestry Commission 'Forest Practice Guides for Semi-natural Woodland' no. 1-8.
9. Ensure diversity of tree ages and habitats across the woodland – UKWAS 3.2.3.
10. Control access to woodland by motorbikes.
11. Restore the parking area.
12. Create two small glades within the woodland
13. Improve woodland infrastructure, enhance and increase drainage, bridges across streams, placement of information boards to increase public understanding of management process.
14. Restore the pond for habitat and human visual enjoyment, as well as the weir and outlets channels.
15. Habitat specific to woodland butterflies and observation records
16. A good sound barrier to reduce noise from traffic from Purbrook Way
17. Good example of well managed coppice and woodland throughout the site with sustainable timber extraction
18. Continued high levels of deadwood available for habitat

3.3 Strategy

Overall

Johnston's Coppice is an interesting range of habitat that deserves protecting and enhancing, but whilst planning the strategy we need to remember that it sits between two large settlements as part of the important Havant Gap, and is also near schools. This offers an ideal opportunity to involve the general public in the woodland and use it as an educational facility in places so people learn the value of the wilder places near where they live and go to school. However, with it being an important stretch for wildlife and placed next to a SINC, the field to the east we need to be careful how the public and the woodland are introduced so that neither suffers damage. Map 1

Johnston's Coppice has a fantastic range of biodiversity, different woodland features, different woodland types, a broad range of woodland classifications and some ancient woodland indicators. This however, needs to interlock with the enjoyment of the general public, visiting dogs, education and of course financing the management with the Pet Cemetery. Strangely, the very diversity that makes this woodland special, also allows the mix of uses to sit beside each other relatively comfortably.

There are basically three different zones or Sections (which we have also used to divide the Management Sections) – see map 6.

1. Section 1 – High Forest.

This area has High Forest with veteran Oak trees, the pond for both public interest and biodiversity, a large area of coppice and a large area for non-intervention/wildlife. So long as adequate barriers are put in place to stop the general public 'wandering' into sensitive parts, the different uses should sit beside each other without concern.

2. Section 2 – Coppice

An area of pure coppice, consisting of hazel and sweet chestnut. This is the area where the pet cemetery will be initiated and also an area where the general public like to walk dogs and sit on fallen trees. The public seem to largely stay on the track, although litter is a big problem in this area. By defining seating areas on the edge of glades, under the oak and in area 2.e off the path edge it should concentrate the litter and hopefully the litter will be easier to clear.

3. Section 3 – Gundymoor Wood

This area will be managed as a sound barrier with some coppicing coups running through the central part and also two areas for non-intervention/wildlife. The rest will encourage high canopy to keep the vegetation at the height of the road to block sound. The wetland area needs monitoring. This area has the path running through it from the car park to the central path. Barriers to protect the areas of non-intervention will need to be put in place such as brambles or dead hedging.

Overall management

1. The Pet Cemetery will be managed to blend with the woodland and details on how this will be achieved are in section 4.4.5
2. A volunteer programme will be introduced with some of the funding and time for management generated by the Pet Cemetery. This will focus on the pond and wetland areas and also on recording species at the woodland. The volunteers can also help with clearing the drainage ditches and building small walkways across the springs that cross the footpath. This will be developed in the first year.
3. Training courses will be introduced in year 2 and will cover a variety of subjects such as woodland management, use of woodland product, survival, and understanding the working woodland in the landscape. There may also be some days where positive discrimination is introduced to encourage more women to try learning the woodland skills and understanding woodland. Corporate training days will also be explored. The impact of the added footfall on the woodland will need to be carefully monitored so that the woodland species do not suffer. The best way of protecting the biodiversity within the woodland will be to keep the training days in a specific location.
4. The extraction routes are very narrow and need to be widened both for the public to walk through and also to enable the safe removal of product from the coppice areas. This will involve some brush cutting and may need to add woodchip to the woodland floor on the permissive paths as the dog walkers churn the paths when wet. This would be a way of returning the food and carbon value of the lop and top to the woodland floor.
5. The site has a good range of flora and fauna and this will be enhanced and protected. In the lower part of the site (Section 3) some brush cutting will take place to remove some of the bramble to encourage the bluebells (Area 3.i.i). Also where there are areas of specific good ground flora and the canopy is sparse, tree planting will not be increased to allow the flora to flourish (eg Area 3.j.ii). There are also three areas on the site designated for non-intervention and for the sole focus of biodiversity (Area 3.j.ii the whole of Area 3g, and the whole of area 1.g)
6. All planting shall be native broadleaf and reflect the existing nature of the site. The area of existing but depleted sweet chestnut coppice (2c.ii, 2g.i, 2b.ii) shall be reinstated using layering where possible or taking cuttings. All trees shall be sourced on site or from nearby sources to protect the genetic concentration on the site. All hazel shall be layered or from cuttings.
7. The fence around the woodland will be reinstated to control the access of motorbikes and a 3 meter barrier round the edge of the woodland will be left as non-intervention to act as a motorbike

deterrent. Map 3. This will also be useful for visual reasons for nearby schools and college. We will keep the understory scrubby and leave all Brambles to discourage motorbikes and walkers from breaking through the fence.

8. The parking area (map 3) is situated on the old road and by clearing the mud and debris from the surface and reinstating the drainage the tarmac will be salvageable. The trees along the border are mostly coppice standards and so these can be brought back into rotation. Some of the standards are very closely grouped and these will need to be selectively felled to give the stronger trees space. The protection against dumping and other misuse of the area will mean that at night the gates will need to be locked but when events or pet burials are taking place or work in the woodland, the gates can be opened for access.
9. Butterflies and glades (map 3) - There are two area off the main path that lend themselves to be small glades. The areas need brush cutting and blending with different height scrub to the woodland edge but they should help encourage the reintroduction of butterflies to the woodland. A record of visiting butterflies can be added online so that volunteers and visitors can add to it (password protected). Honeysuckle attracted many woodland butterflies to the woodland in the 1900's and there are remnants of this remaining which will be encouraged in certain areas and monitored. Guidance will be sought from the 'Butterfly Conservation Trust' which is based locally.
10. Many of the upturned root plates, large fallen trees and standing deadwood were deliberately left after the 1987 storm for habitat. These features should not be disturbed but should also be recorded and enhanced – map 2.

Details of management from specific areas across the woodland

The information below refers to a survey HBLC – Hampshire Biodiversity Information Centre – who carried out an on-site survey, it is believed this was done at the turn of the century Appendix 1 / Map 5.

Section 1 – High Forest

Overview

Overall this area will be maintained as High Forest. A large part of the section has the potential to be put back into coppice rotation and a large swathe down the centre of the section has recently been managed (Area 1a, 1e).

The area north of the pond and the valley (Area 1g) will be managed as an area of non-intervention because it is not easily accessible to the general public and has not undergone recent management. Dead hedging along the boundary using material from nearby coppice work and selective felling will create a barrier to the public and also create habitat. This will provide part of the 15% for UKWAS 6.2.1

The general public will be encouraged to stay on the main footpath although seating areas may be created under the great Oak Trees. A new permissive path will be created to the west of the Great Oaks so people can see the old boundary trees. A small seating area will be created at the end of the permissive path – map 3.

The pond (Area 1f) is the only area where use conflicts as it will be managed as habitat and yet as the pond matures it will create a beautiful place to sit and reflect. In the recent past fishermen have tried to utilize the pond but this has since been stopped. By creating barriers to the swamp area using brambles and other such deterrents the two uses of habitat and public enjoyment should be able to comfortably co-exist. The pond and surrounding herb area will be the main focus for the volunteer group.

The Oak standards that create the spectacular central High Forest will be protected and a wind barrier will be

maintained at all times around them – Map 2.

Overall management requirements

- Drainage beside footpath to be dug and track levelled – Map 3
- Fencing to be reinstated and maintained to reduce access for motorbikes – Map 3
- Interpretation beside the pond for educational purposes.

Management Area 1a – Coppice with standards

This area was coppiced in two coupes in 2002/03 and 2003/04 and this has left the canopy fairly open. The canopy consists of Oak standards which are frequent and some sycamore, holly and hawthorn. The understory is coppiced hazel. The ground flora is not diverse and has much bracken, bramble and greases, foxglove and stinging nettle. (HBIC Area 10 W10c)

Management – Coppice the hazel, assess the standards although unlikely need for removal as fairly open. Make sure there is a diversity of age across the standards to maintain the same level of cover long term. Where new hazel is required layering should be used. Reduce number of sycamore saplings.

Management Area 1b - Standards with coppice

i) Southern sub compartment - Alder with hazel coppice

There are no records of work being carried out in this area recently and the coppice is over stood in places. The canopy is tall and densely spaced in places and much of it has re-grown from coppice. Alder is the main tree in the canopy. There is also some ash, birch and oak. The under storey has much coppiced hazel and some ash, sycamore and holly. The ground flora is fairly diverse in species, though much of it is dominated by ivy and bramble. There is frequent honeysuckle, ash seedlings, ferns, enchanter's nightshade, cleavers and stinging-nettle. Other species noted include bluebell, yellow archangel, pendulous sedge, remote sedge, redcurrant, yellow pimpernel, and narrow buckler fern. (Long term aim is to restore the coppice area). (HBIC Area 2 W6d)

Management – Reduced disturbance to the ground to protect the flora. Coppice the hazel and ash and check spread of the sycamore. Assess canopy and make sure there is a diversity of age across the standards and replant where necessary. Selective felling of trees to increase even spread 30%. Where new understory is required layering should be the preferred method.

ii) Northern sub compartment - Oak standards with hazel coppice

There are no recent records of any management work being carried out in this area. The canopy is formed of oak standards and secondary ash and birch. The understory is prominent in coppiced hazel and some holly and hawthorn. The ground flora is rich in species. There is much ivy, bramble, ash seedlings, honeysuckle, ferns and bluebell. There is also some wood anemone, grasses, wood sedge, wood speedwell, wood melick, yellow pimpernel, giant fescue and yellow archangel (HBIC Area 7 W10a)

Management – Coppice the hazel whilst being sensitive to the rich flora (damage to the woodland floor will encourage bramble growth). Monitor the Oak standards for damage and disease and check the diversity of age. Keep canopy cover level constant and do not increase 20%. Where new planting is required use local seed and for the understory use layering to create new trees. Reduce sycamore saplings.

Management Area 1c – Oak standards with hazel coppice

There are no recent records of any management work being carried out in this area. The canopy is formed of oak standards and secondary ash and birch. The understory is prominent in coppiced hazel and some holly and hawthorn. The ground flora is rich in species. There is much ivy, bramble, ash seedlings, honeysuckle, ferns and bluebell. There is also some wood anemone, grasses, wood sedge, wood speedwell, wood melick, yellow pimpernel, giant fescue and yellow archangel (HBIC Area 7 W10a)

Management – Coppice the hazel whilst being sensitive to the rich flora (damage to the woodland floor will encourage bramble growth). Monitor the Oak standards for damage and disease and check the diversity of

age. Keep level of canopy cover constant. Where new planting is required use local seed and for the understory use layering to create new trees. Spread of standards should not require intervention at this stage.

Management Area 1d – Alder with sparse hazel and holly

A very small part of the northern section of this area was coppiced in 2005/06 but the rest of the Area has no records of recent management activity. The canopy is rather open in parts. Alder is the dominant tree with locally frequent willow. The under storey is sparse in places. There is locally frequent hazel and some holly and ash. The ground is rich in species. Pendulous sedge and ivy are locally abundant and there is much remote sedge, bare mud, enchanter's nightshade, stinging nettle, bramble, soft rush and creeping buttercup. There is also some yellow archangel, redcurrant, opposite-leaved golden-saxifrage, floating sweet-grass and greater tussock sedge. (HBLC Area 1 W6a)

Management – Cut and layer the coppice to give maximum understory cover, coppice the ash where it appears. Manage the holly by keeping it localized. Assess the canopy and plant Alder and willow but keep to 20% cover max to give good canopy cover of a varied age. Little or no felling of standards required.

Management Area 1e – Sweet chestnut standards with hazel coppice

This area was coppiced and managed in 2004/05 and 2005/06. Planted sweet chestnut is abundant in the canopy. There is also some secondary birch, oak and sycamore. The under storey has some coppiced hazel and occasional sycamore and holly. The ground flora is dominated by bramble, bracken, grasses and honeysuckle. Bluebell is locally frequent. Other species noted include wood sedge, dog violet, wood sorrel, ferns, ash seedlings and yellow archangel. (HBLC – Area 11 W10c)

Management – Monitor the condition and age of the standards – sweet chestnut, birch and oak. Control the spread of the sycamore. Coppice the hazel and increase number of stools where required, and manage the holly by keeping it localized. Cut back the bramble on the floor to allow the other species of flora more opportunity – do not dig the bramble as this will give it strength. Standards max 30% cover

Management Area 1f – Tall herb and scrub / marsh area.

This area was extensively managed in 1986 when the Causeway was installed. Since then it has had little attention apart from removal of fish brought by fishermen. The margin of the man-made pond supports a tall-herb community. Stinging-nettle, bramble and great willowherb are prominent along with alder and willow scrub. (HBLC Area 12 OV26)

The western area of the pond has abundant planted reed mace and bog bean. There is also some lesser pond sedge, white water-lily, willow and pendulous sedge. (HBLC Area 13 S12)

Management – This area will be the focus for the volunteers. It will have a seated area for walkers to stop and watch life on the pond but brambles and other barricade will reduce human opportunity of getting to the marsh area. Herb area to be cut back along with the stinging nettle and bramble to give the willowherb a better chance. Small areas of nettle are to be left. Seek expert advice about management of the pond and the plants in it and also the marsh area.

Management Area 1g – Wet area at the valley bottom with steep bank/ Ash with hazel coppice/Marsh.

i) **Western sub-compartment - wet area at valley bottom.** A small strip of wet woodland runs along a stream on the western side of this area. The area has no records of recent management. The Canopy is formed from Alder and ash. The under storey is hazel and holly. The ground flora has abundant ivy, but also bramble, ferns, enchanter's nightshade, redcurrant, yellow archangel and opposite-leaved golden-saxifrage. (HBLC – Area 4 W7c)

Management – Non intervention

ii) **Northern sub-compartment – Ash with hazel.** The most northern part of the site is very difficult for the public to access off the footpath due to the steep slope. The canopy is dominated by ash; there is occasional

oak and birch. The under storey has frequent coppiced hazel and holly. The ground flora is rich in species. Ivy and bluebell are abundant and there is frequent yellow archangel, honeysuckle, ferns, enchanter's nightshade and wood anemone. Other species noted include false brome, wood speedwell, pignut, butcher's broom, dog's mercury, herb robert, cleavers, dog-violet, wood sedge and wood melick.

Management – Non intervention is perfect for this area because it is largely away from the footpath and also is on a steep slope making access inconvenient and troublesome for the public. Any management needed will mimic the natural state of this area. Trees along the footpath will need monitoring for safety. A survey should be carried out in this area to discover what is there, so the effects of non-intervention can be discovered.

iii) Southern sub-compartment – Oak with hazel

The canopy is formed of oak standards and secondary ash and birch. The understory is prominent in coppiced hazel and some holly and hawthorn. The ground flora is rich in species. There is much ivy, bramble, ash seedlings, honeysuckle, ferns and bluebell. There is also some wood anemone, grasses, wood sedge, wood speedwell, wood melick, yellow pimpernel, giant fescue and yellow archangel (HBLC Area 7 W10a)

Management – Non-intervention as above

Section 2 - Coppice

Overview

This area is mainly hazel and sweet chestnut coppice with standards. It will be maintained as a coppice rotated on a 7 year cycle, allowing coupes to recover height of 2 meters before the area next to it is cut. Permissive paths move through this area on historical routes but it seems to be mostly dog walkers and local residents cutting across to opposite settlements using the paths and they are not often straying into the coppiced areas.

This section is where the pet burials will initially take place following the coppice rotation into different parts of the woodland.

Aim is to re-establish the sweet chestnut coppice and bring the hazel coppice back into rotation.

Buzzards seen feeding and hunting in this area.

Overall management requirements

- Drainage beside footpath to be dug and track levelled
- Fencing to be reinstated and maintained to reduce access for motorbikes
- Main footpath needs widening
- Glades beside footpath need reinstating
- Where streams cross path create a duct and a wooden crossing.
- Standing deadwood in this area was left after the storm of 1987 and should be treated sensitively for habitat
- Large fallen trees in this area were left after the storm of 1987 and should be treated sensitively for habitat
- Tipped root plates in this area were deliberately left after the storm of 1987 and should be treated sensitively for habitat

Management Area 2a – Alder, birch and oak standards with hazel coppice

i) Main sub-compartment – Alder, birch with hazel coppice

The southern part of this area was last coppiced in 1997/98. The area also has two grass patches off the footpath for grassland habitat which need maintenance. – The canopy is tall and densely spaced in places and

much of it has re-grown from coppice. Alder is the main tree in the canopy. There is also some ash, birch and oak. The under storey has much coppiced hazel and some ash, sycamore and holly. The ground flora is fairly diverse in species, though much of it is dominated by ivy and bramble. There is frequent honeysuckle, ash seedlings, ferns, enchanter's nightshade, cleavers and stinging-nettle. Other species noted include bluebell, yellow archangel, pendulous sedge, remote sedge, redcurrant, yellow pimpernel, and narrow buckler fern. (Long term aim is to restore the coppice area). (HBLC - Area 2 W6d)

Management – Removal of some overcrowded standards through selective felling 30% cover. Restocking of hazel using a layering method. Cut coppice. Monitor health of the standards. Do not go within 2 meters of the ditch and banks that run to the far south of this Area. Cut back bramble to give bluebells space.

ii) Lower half of south west quarter of area – Alder and willow with sparse hazel coppice

Last coppiced in 1996/97. The canopy is rather open in parts. Alder is the dominant tree with locally frequent willow. The under storey is sparse in places. There is locally frequent hazel and some holly and ash. The ground is rich in species. Pendulous sedge and ivy are locally abundant and there is much more sedge, baremud, enchanter's nightshade, stinging nettle, bramble, soft rush and creeping buttercup. There is also some yellow archangel, redcurrant, opposite-leaved golden-saxifrage, floating sweet-grass and greater tussock sedge. (HBLC Area 1 W6a)

Management – Coppice Hazel and layer to create new stools where necessary. Assess standards and keep to 20% cover, selectively thin groups to give the strongest the better space. Do not go within 2 meters of the ditch and banks that run to the far south of this Area. Leave all deadwood on the floor.

iii) Upper half of the south west quarter of the area - Pure coppice with very few standards

A small area in the south of this sub-compartment was managed in 1993/94. No other management activity has been recorded. The coppice is densely spaced and dominated by hazel. A few wetter areas have some coppiced alder and there is also some holly, ash and aspen. The ground flora has locally prominent bluebell and much bramble, ivy, ferns, honeysuckle and yellow archangel. (HBLC Area 8 – W10a)

Management – Coppice the hazel. Do not increase number of standards to encourage ground flora. Cut back bramble – do not disturb ground cover where possible. Retain all deadwood in this area and leave upturned root plates for habitat. No felling of standards unless due to damage or disease as sparse canopy.

Management Area 2b – Hazel and sweet chestnut coppice

i) Western sub-compartment – Pure coppice with very few standards

A small area in the south of this sub-compartment was managed in 1993/94. No other management activity has been recorded. The coppice is densely spaced and dominated by hazel. A few wetter areas have some coppiced alder and there is also some holly, ash and aspen. The ground flora has locally prominent bluebell and much bramble, ivy, ferns, honeysuckle and yellow archangel. (HBLC Area 8 – W10a)

Management – Coppice the hazel and SF some of the standards if too densely spaced to 30%. Do not increase number of standards to encourage ground flora. Cut back bramble – do not disturb ground cover where possible. Retain all deadwood in this area and leave upturned root plates for habitat.

ii) Eastern sub-compartment – Sweet Chestnut Coppice

This area was actively managed in 1997/98 and 1998/99 when it was coppice. Planted sweet chestnut is abundant in the canopy. There is also some secondary birch, oak and sycamore. The under storey has some coppiced hazel and occasional sycamore and holly. The ground flora is dominated by bramble, bracken, grasses and honeysuckle. Bluebell is locally frequent. Other species noted include wood sedge, dog violet, wood sorrel, ferns, ash seedlings and yellow archangel. (HBLC Area 11 – W10c)

Management – Restore to Sweet chestnut coppice, layering where possible and taking cuttings from existing stools if needed. Monitor the standards coppicing any that can be returned for coppice rotation. Retain all deadwood in this area and leave upturned root plates for habitat. Kill back sycamore

Management Area 2c – Hazel and Sweet chestnut coppice

i) Southern sub compartment – Oak with hazel coppice

There are no records of this area being recently managed. The canopy is formed of oak standards and secondary ash and birch. The under storey is prominent in coppiced hazel and some holly and hawthorn. The ground flora is rich in species. There is much ivy, bramble, ash seedlings, honeysuckle, ferns and bluebell. There is also some wood anemone, grasses, wood sedge, wood speedwell, wood melick, yellow pimpernel, giant fescue and yellow archangel. (HBLC Area 7 – W10a)

Management – Maintain and record health of the Oaks replanting to create a diverse age range. Coppice the hazel layering where new stools need to be created. Retain all deadwood in this area and leave upturned root plates for habitat.

ii) Western sub-compartment – Pure coppice with very few standards

A small area in the south of this sub-compartment was managed in 1993/94. No other management activity has been recorded. The coppice is densely spaced and dominated by hazel. A few wetter areas have some coppiced alder and there is also some holly, ash and aspen. The ground flora has locally prominent bluebell and much bramble, ivy, ferns, honeysuckle and yellow archangel. (Area to continue to be managed as coppice and High Forest. (HBLC Area 8 – W10a)

Management – Coppice the hazel. Do not increase number of standards to encourage ground flora. Cut back bramble – do not disturb ground cover where possible. Retain all deadwood in this area and leave upturned root plates for habitat.

iii) Eastern sub-compartment – Sweet Chestnut Coppice

There is no record of recent active management. Planted sweet chestnut is abundant in the canopy. There is also some secondary birch, oak and sycamore. The under storey has some coppiced hazel and occasional sycamore and holly. The ground flora is dominated by bramble, bracken, grasses and honeysuckle. Bluebell is locally frequent. Other species noted include wood sedge, dog violet, wood sorrel, ferns, ash seedlings and yellow archangel. (HBLC Area 11 – W10c)

Management – Restore to Sweet chestnut coppice, layering where possible and taking cuttings from existing stools if needed. Monitor the standards and stock to 30%. Retain all deadwood in this area and leave upturned root plates for habitat. Kill back sycamore.

Management Area 2d -- Oak with hazel coppice

A small part of the southern part was coppiced in 2001/02 and the northern part was coppiced in 200/01. The canopy is formed of oak standards and secondary ash and birch. The under storey is prominent in coppiced hazel and some holly and hawthorn. The ground flora is rich in species. There is much ivy, bramble, ash seedlings, honeysuckle, ferns and bluebell. There is also some wood anemone, grasses, wood sedge, wood speedwell, wood melick, yellow pimpernel, giant fescue and yellow archangel. (HBLC Area 7 – W10a)

Management – Maintain and record health of the Oaks replanting to create a diverse age range with 30% cover. Coppice the hazel using layering where new stools need to be created. Retain all deadwood in this area where possible leave upturned root plates for habitat. Cut back Bramble in places to give Bluebells a chance.

Management Area 2e

i) Southern quarter sub-compartment.- Alder and willow with sparse hazel coppice

This area was last managed in 1995/96 when it was coppiced. The canopy is rather open in parts. Alder is the dominant tree with locally frequent willow. The under storey is sparse in places. There is locally frequent hazel and some holly and ash. The ground is rich in species. Pendulous sedge and ivy are locally abundant and there is much more sedge, baremud, enchanter's nightshade, stinging nettle, bramble, soft rush and creeping buttercup. There is also some yellow archangel, redcurrant, opposite-leaved golden-saxifrage, floating sweet-grass and greater tussock sedge. (HBLC Area 1 W6a)

Management – Coppice Hazel and layer to create new stools where necessary. Assess standards and plant more where needed, selectively thin groups to give the strongest the better space. Do not go within 2 meters

of the ditch and banks that run to the far south of this Area. Leave all deadwood on the floor.

ii) Larger sub-compartment – Pure coppice with few standards

Two small samples (one in the north and one in the very south were coppiced in 1997/98; the rest has no record of recent management). This is an area of pure coppice with very few standards present. The coppice is densely spaced and dominated by hazel. A few wetter areas have some coppiced alder and there is also some holly, ash and aspen. The ground flora has locally prominent bluebell and much bramble, ivy, ferns, honeysuckle and yellow archangel. (HBLC Area 8 W10a)

Management – Manage as pure coppice with 20% canopy cover. Retain a diverse age range of standards to create sparse shading across the area. Cut back bramble but leave in specific areas as bush for habitat. Leave all deadwood on the floor.

Management Area 2f – Three sub-compartment

i) Southern sub-compartment – Pure hazel coppice

Most of this area was coppiced in 200/01. This is an area of pure coppice with very few standards present. The coppice is densely spaced and dominated by hazel. A few wetter areas have some coppiced alder and there is also some holly, ash and aspen. The ground flora has locally prominent bluebell and much bramble, ivy, ferns, honeysuckle and yellow archangel. (HBLC Area 8 W10a)

Management – Manage as pure coppice. Retain a diverse age range of standards to create sparse shading across the area 20% cover. Cut back bramble but leave in specific areas as bush for habitat. Leave all deadwood on the floor, especially lifted root plates. Kill back sycamore.

ii) Small north western sub-compartment - Alder and willow with sparse hazel coppice

A small part of the southern part was coppiced in 2001/02 and the northern part was coppiced in 200/01. This area has no record of management. The canopy is rather open in parts. Alder is the dominant tree with locally frequent willow. The under storey is sparse in places. There is locally frequent hazel and some holly and ash. The ground is rich in species. Pendulous sedge and ivy are locally abundant and there is much more sedge, baremud, enchanter's nightshade, stinging nettle, bramble, and soft rush and creeping buttercup. There is also some yellow archangel, redcurrant, opposite-leaved golden-saxifrage, floating sweet-grass and greater tussock sedge. (HBLC Area 1 W6a)

Management – Coppice Hazel and layer to create new stools where necessary. Assess standards and plant more where needed to 20%, selectively thin groups to give the strongest the better space. Leave some large deadwood on the floor.

iii) Small north western sub-compartment – Oak with hazel coppice

A small part of the southern part was coppiced in 2001/02 and the northern part was coppiced in 200/01. The canopy is formed of oak standards and secondary ash and birch. The under storey is prominent in coppiced hazel and some holly and hawthorn. The ground flora is rich in species. There is much ivy, bramble, ash seedlings, honeysuckle, ferns and bluebell. There is also some wood anemone, grasses, wood sedge, wood speedwell, wood melick, yellow pimpernel, giant fescue and yellow archangel. (HBLC Area 7 – W10a)

Management – Maintain and record health of the Oaks replanting to create a diverse age range. Coppice the hazel using layering where new stools need to be created. Retain all deadwood in this area where possible leave upturned root plates for habitat.

Management Area 2g – Sweet chestnut and hazel coppice

i) Eastern sub-compartment – Sweet Chestnut Coppice

There is no record of recent active management. Planted sweet chestnut is abundant in the canopy. There is also some secondary birch, oak and sycamore. The under storey has some coppiced hazel and occasional sycamore and holly. The ground flora is dominated by bramble, bracken, grasses and honeysuckle. Bluebell is locally frequent. Other species noted include wood sedge, dog violet, wood sorrel, ferns, ash seedlings and yellow archangel. (HBLC Area 11 – W10c)

Management – Restore to Sweet chestnut coppice, layering where possible and taking cuttings from existing stools if needed. Monitor the standards and pollard if necessary. Retain all deadwood in this area and leave upturned root plates for habitat.

ii) Western sub-compartment – Pure hazel coppice

A small part in the south of this area was coppiced in 1993/94 but no other records of management are available. This is an area of pure coppice with very few standards present. The coppice is densely spaced and dominated by hazel. A few wetter areas have some coppiced alder and there is also some holly, ash and aspen. The ground flora has locally prominent bluebell and much bramble, ivy, ferns, honeysuckle and yellow archangel. (HBLC Area 8 W10a)

Management – Manage as pure coppice. Retain a diverse age range of standards to create sparse shading across the area. Cut back bramble but leave in specific areas as bush for habitat. Leave all deadwood on the floor, especially lifted root plates. Kill back sycamore.

Section 3 – Gundy Moor Wood

This area is wetland and it is also being managed primarily as a barrier to noise from Purbrook Way.

The central part of the section is to be coppiced in two operational activities and will act as a sound barrier at a lower level with dense leaf and whips at a shrub layer.

The rest of the area is to try and create a denser canopy which sits at a level with the raised road and should stop the sound lifting over the top of the wood into freshly coppiced areas.

The far eastern area along with part of the northern area to be managed by non-intervention to create biodiversity and natural habitat – the eastern area also contains the gas line and the electricity pylon.

There is permissive path that runs north from the car park through this section but there seems to be little or no diversion by the general public from the path itself.

Overall management requirements

- Three small bridges are needed to cross the streams
- The boundary bank needs protecting where the track from the car park crosses it
- Fencing to be reinstated and maintained to reduce access for motorbikes
- Standing deadwood in this area was left after the storm of 1987 and should be treated sensitively for habitat
- Large fallen trees in this area were left after the storm of 1987 and should be treated sensitively for habitat
- Tipped root plates in this area were deliberately left after the storm of 1987 and should be treated sensitively for habitat
- The water pooling in sub-compartment 3i needs investigating
- The car park needs clearing of litter and the mud and debris needs clearing from the tarmac.

Management Area 3a – Alder with hazel coppice

i) Northern Sub-compartment – Alder and willow with sparse understory

This area was last managed in 1987/88 when it was coppiced. The canopy is rather open in parts. Alder is the dominant tree with locally frequent willow. The under storey is sparse in places. There is locally frequent

hazel and some holly and ash. The ground is rich in species. Pendulous sedge and ivy are locally abundant and there is much mote sedge, baremud, enchanter's nightshade, stinging nettle, bramble, soft rush and creeping buttercup. There is also some yellow archangel, redcurrant, opposite-leaved golden-saxifrage, floating sweet-grass and greater tussock sedge. (HBLC Area 1 W6a)

Management – Coppice Hazel and layer to create new stools where necessary. Assess standards and selectively thin groups to give the strongest the better space. No planting of standards or coppice until after 2nd cut. Do not go within 2 meters of the ditch and banks that run to the far south of this Area. Leave all deadwood on the floor.

ii) Southern Sub-compartment – Alder, birch with hazel coppice

The southern part of this area was last coppiced in 1997/98. The canopy is tall and densely spaced in places and much of it has re-grown from coppice. Alder is the main tree in the canopy. There is also some ash, birch and oak. The under storey has much coppiced hazel and some ash, sycamore and holly. The ground flora is fairly diverse in species, though much of it is dominated by ivy and bramble. There is frequent honeysuckle, ash seedlings, ferns, enchanter's nightshade, cleavers and stinging-nettle. Other species noted include bluebell, yellow archangel, pendulous sedge, remote sedge, redcurrant, yellow pimpernel, and narrow buckler fern. (Long term aim is to restore the coppice area). (HBLC - Area 2 W6d)

Management – Removal of some overcrowded standards through selective felling. No planting of standards or coppice until after 2nd cut. Cut coppice. Monitor health of the standards and bring back to 30%

Management Area 3b – Alder and Birch with sparse mixed understory

Last managed in 1987/88 when it was coppiced. Creeping into this area is a tiny part of the same habitat as the Northern section of 3a. The rest of the compartment is has Alder as the main tree, with quite a large amount of birch present in these stands. There is also some ash and oak in the canopy. The under storey is sparse, with only rare alder buckthorn, holly, rowan, hazel and sycamore. The ground flora has a fair species diversity. There is frequent bramble, ivy, ferns and honeysuckle. There is also much yellow archangel, bracken, Yorkshire fog, ferns, and greater stitchwort. Other species noted include wood-sorrel, bluebell, greater tussock, sedge, narrow buckler fern and remote sedge (HBLC – Area 3 W6e)

Management – Coppice the hazel. Cut back and destroy the sycamore. Protect and encourage the rare alder buckthorn and rowan, and contain the holly. Cut back the bramble to encourage the other flora and maintain the honeysuckle in attempt to encourage back the butterflies that live on it. No planting of standards or coppice until after 2nd cut.

Management Area 3c – Alder and Birch with a sparse understory

Last managed in 1987/88 when it was coppiced. The canopy has Alder as the main tree, with quite a large amount of birch present in these stands. There is also some ash and oak in the canopy. The under storey is sparse, with only rare alder buckthorn, holly, rowan, hazel and sycamore. The ground flora has a fair species diversity. There is frequent bramble, ivy, ferns and honeysuckle. There is also much yellow archangel, bracken, Yorkshire fog, ferns, and greater stitchwort. Other species noted include wood-sorrel, bluebell, greater tussock, sedge, narrow buckler fern and remote sedge (HBLC – Area 3 W6e)

Management – Coppice the hazel. Cut back and destroy the sycamore. Protect and encourage the rare alder buckthorn and rowan, and contain the holly. Cut back the bramble to encourage the other flora and maintain the honeysuckle in attempt to encourage back the butterflies that live on it. No planting of standards or coppice until after 2nd cut.

Management Area 3d – Ash with hazel coppice

To be managed at the same time as area 2 d.

This area was last managed in 1994/95 and 1995/96 when it was coppiced. The canopy is a tall secondary canopy. Ash is very prominent. The under storey is composed of ash, hazel and guelder-rose. The ground flora is less rich in woodland species. There is frequent ivy, bramble, ferns, false brome and other grasses. (HBLC

Woodland Management Plan

Area 6 W8d)

Management – Allow the standards to mature and space using selective felling at 30%. Coppice the understorey and layer to encourage the hazel and ash. Identify and protect the guelder-rose and false brome.

Management Area 3e - Alder, birch with hazel coppice

i)Western sub-compartment – Alder, Birch with Hazel coppice

This area was last coppiced in 1988/89. The canopy is tall and densely spaced in places and much of it has re-grown from coppice. Alder is the main tree in the canopy. There is also some ash, birch and oak. The under storey has much coppiced hazel and some ash, sycamore and holly. The ground flora is fairly diverse in species, though much of it is dominated by ivy and bramble. There is frequent honeysuckle, ash seedlings, ferns, échanter's nightshade, cleavers and stinging-nettle. Other species noted include bluebell, yellow archangel, pendulous sedge, remote sedge, redcurrant, yellow pimpernel, and narrow buckler fern. (Long term aim is to restore the coppice area). (HBLC - Area 2 W6d)

Management – Removal of some overcrowded standards through selective felling. Minimal restocking of hazel using a layering method. Cut coppice. Monitor health of the standards. No planting of standards or coppice until after 2nd cut

ii)Eastern sub-compartment –Oak standards with hazel

Closed canopy with mature Oak standards and there is some ash, alder and sweet chestnut. The under storey is abundant coppiced hazel and some sycamore, holly and hawthorn. The ground flora is not diverse but has abundant ivy and frequent bramble, honeysuckle, ferns, false brome and cleavers. (HBLC Area 10 W10c)

Management – Coppice hazel and monitor Oak standards. No planting of standards or coppice until after 2nd cut. This is the only community like this on the site so care should be taken.

Management Area 3f – Alder, rare Oak and Birch with hazel

i)Western sub-compartment – Alder and Birch with sparse understorey

Last managed in 198/8 when it was coppiced. The canopy has Alder as the main tree, with quite a large amount of birch present in these stands. There is also some ash and oak in the canopy. The under storey is sparse, with only rare alder buckthorn, holly, rowan, hazel and sycamore. The ground flora has a fair species diversity. There is frequent bramble, ivy, ferns and honeysuckle. There is also much yellow archangel, bracken, Yorkshire fog, ferns, and greater stitchwort. Other species noted include wood-sorrel, bluebell, greater tussock, sedge, narrow buckler fern and remote sedge (HBLC – Area 3 W6e)

Management – Coppice the hazel and layer where possible. Cut back and destroy the sycamore. Protect and encourage the rare alder buckthorn and rowan, and contain the holly. Cut back the bramble to encourage the other flora and maintain the honeysuckle in attempt to encourage back the butterflies that live on it. No planting of standards or coppice until after 2nd cut

ii)Eastern sub-compartment – Birch, rare Oak and Alder with hazel

The canopy is secondary and formed of birch with rare oak and alder. The under storey has some holly and hazel. The ground flora is not rich in species and there is some bare ground present. Ivy, bramble, bracken, ferns and honeysuckle are frequent and there are scant ancient woodland indicators (HBLC Area 9 W10c)

Management – Coppice the Hazel and assess the condition of the rare Oak and Alder. Encourage the honeysuckle for butterflies and protect the ancient woodland indicator flora. No planting of standards or coppice until after 2nd cut

Management Area 3g – three sub-compartment – Non-intervention

i)Western sub-compartment – Alder with sparse understorey

No record of previous management. The canopy has Alder as the main tree, with quite a large amount of birch present in these stands. There is also some ash and oak in the canopy. The under storey is sparse, with only rare alder buckthorn, holly, rowan, hazel and sycamore. The ground flora has fair species diversity. There is

frequent bramble, ivy, ferns and honeysuckle. There is also much yellow archangel, bracken, Yorkshire fog, ferns, and greater stitchwort. Other species noted include wood-sorrel, bluebell, greater tussock, sedge, narrow buckler fern and remote sedge (HBLC – Area 3 W6e)

Management – non-intervention but monitor safety of trees next to the car park. This will provide part of the 15% for UKWAS 6.2.1

ii) Middle sub-compartment - Alder and willow with sparse understory

No record of previous management. The canopy is rather open in parts. Alder is the dominant tree with locally frequent willow. The under storey is sparse in places. There is locally frequent hazel and some holly and ash. The ground is rich in species. Pendulous sedge and ivy are locally abundant and there is much more sedge, baremud, enchanter's nightshade, stinging nettle, bramble, soft rush and creeping buttercup. There is also some yellow archangel, redcurrant, opposite-leaved golden-saxifrage, floating sweet-grass and greater tussock sedge. (HBLC Area 1 W6a)

Management – non-intervention but monitor safety of trees next to the car park

iii) Eastern Sub-compartment - Oak standards with hazel coppice

There are no recent records of any management work being carried out in this area. The canopy is formed of oak standards and secondary ash and birch. The understory is prominent in coppiced hazel and some holly and hawthorn. The ground flora is rich in species. There is much ivy, bramble, ash seedlings, honeysuckle, ferns and bluebell. There is also some wood anemone, grasses, wood sedge, wood speedwell, wood melick, yellow pimpernel, giant fescue and yellow archangel (HBLC Area 7 W10a)

Management – Non-intervention – manage for biodiversity

Management area 3h – Scrubby Ash with ash and hazel coppice.

The canopy is short and scrubby with Ash very prominent. The under storey is composed of ash, hazel and guilder-rose. The ground flora is less rich in woodland species. There is frequent ivy, bramble, ferns, false brome and other grasses. (HBLC Area 6 W8d)

Management – Pollard and coppice taller specimens to bring into a rotation for wood fuel. Selectively fell trees that are in groups to allow stronger room to mature. Coppice the understory and layer to encourage the hazel and ash. Identify and protect the guilder-rose and false brome.

Management Area 3i – manage for sound barrier

i) Eastern sub-compartment - Alder and Birch with sparse understory

Historically this area has been managed as a sound barrier. Alder as the main tree, with quite a large amount of birch present in these stands. There is also some ash and oak in the canopy. The under storey is sparse, with only rare alder buckthorn, holly, rowan, hazel and sycamore. The ground flora has fair species diversity. There is frequent bramble, ivy, ferns and honeysuckle. There is also much yellow archangel, bracken, Yorkshire fog, ferns, and greater stitchwort. Other species noted include wood-sorrel, bluebell, greater tussock, sedge, narrow buckler fern and remote sedge (HBLC – Area 3 W6e)

Management – Manage this area as a sound barrier maintaining the standards to give height to Section 3 when the coppice in the centre of the section is cut. Monitor the rare alder buckthorn but keep the understory sparse to encourage the ground flora. No planting of standards or coppice until after 2nd cut.

ii) Middle sub-compartment - Oak standards with hazel

Closed canopy with mature Oak standards and there is some ash, alder and sweet chestnut. The under storey is abundant coppiced hazel and some sycamore, holly and hawthorn. The ground flora is not diverse but has abundant ivy and frequent bramble, honeysuckle, ferns, false brome and cleavers.

Management – manage as a sound barrier. Coppice hazel and monitor Oak standards and hawthorn.

iii) Western sub-compartment – Alder with bluebell

The canopy is tall and densely spaced in places and much of it has re-grown from coppice. Alder is the main tree in the canopy. There is also some ash, birch and oak. The under storey has much coppiced hazel and some ash, sycamore and holly. The ground flora is fairly diverse in species, though much of it is dominated by

ivy and bramble. There is frequent honeysuckle, ash seedlings, ferns, enchanter's nightshade, cleavers and stinging-nettle. Other species noted include bluebell, yellow archangel, pendulous sedge, remote sedge, redcurrant, yellow pimpernel, and narrow buckler fern. (Long term aim is to restore the coppice area). (HBLC - Area 2 W6d)

Management – Manage as a sound barrier. Coppice hazel for firewood every 12 years. Manage to encourage the bluebell.

Management Area 3j – Manage as non-intervention

i) Western sub-compartment – High forest

This area is closed and mature. Oak standards are frequent and there is some ash, alder and sweet chestnut. The under storey is abundant coppiced hazel and some sycamore, holly and hawthorn. The ground flora is not diverse but has abundant ivy and frequent bramble, honeysuckle, ferns, false brome and cleavers (HBLC 10 W10c)

Management – manage as a sound barrier and encourage mature closed standards. Coppice.

ii) Eastern sub-compartment – Alder with sparse understory

Area has no records of recent management activity. The canopy is rather open in parts. Alder is the dominant tree with locally frequent willow. The under storey is sparse in places. There is locally frequent hazel and some holly and ash. The ground is rich in species. Pendulous sedge and ivy are locally abundant and there is much remote sedge, bare mud, enchanter's nightshade, stinging nettle, bramble, soft rush and creeping buttercup. There is also some yellow archangel, redcurrant, opposite-leaved golden-saxifrage, floating sweet-grass and greater tussock sedge. (HBLC Area 1 W6a)

Management – non-intervention. This will provide part of the 15% for UKWAS 6.2.1

3.4 Woodfuel Initiative

Would you be interested in receiving information on funding opportunities for the purchase of harvesting machinery or wood fuel boilers, or for grants that support timber production from your woodlands?

This would be to help develop extraction routes

Yes (delete as appropriate)

4 Management prescriptions/operations

4.1 Silvicultural systems

4.1.1 Harvesting

All harvesting will be carried out using either hand tools or chainsaws – no large machinery will be used for harvesting due to the sensitivity of the woodland floor. The standards are of mixed species and all harvesting will include a replanting programme to make sure the mix and age of the upper canopy is upheld. All veteran trees will be protected from wind damage by leaving a barrier of woodland around them.

- The understory of Hazel, S Chestnut and Alder will be coppiced as detailed on a seven year rotation so that the stem size is useful for coppice crafts. The S. Chestnut and Alder may be left longer to allow for wood fuel source which would need a larger diameter of tree or if being used for fencing posts.

- Selective removal of standards using a single tree selection process will be followed across the woodland, this will ensure the diversity of species and age of trees
- The coppicing will be carried out on a rotation and this will enhance the habitat for wildlife because it will increase the age variation of the trees. The high forest area will follow a programme to imitate natural selection and growth again to make sure of species diversity and age ranges.
- All root plates from fallen trees will be left where possible for habitat.
- Coppice will not be felled in adjoining coups unless the height of the new growth has reached 2 meters.
- There is limited standing deadwood in Section 2 and this will not need to be increased because there are large amounts of deadwood in both Section 1 and 3.
- Historical Management practices will be researched closely and where possible followed.
- Burning of lop and top is only done in rare circumstances. Lop and top and Brash to be used to protect stools from deer, chipped for paths and left as deadwood on the woodland floor.
- Tree inspection programme to be implemented
- Whole tree harvesting will not be taking place.
- Non-intervention / specific management within small areas of woodland including inaccessible areas, around veteran trees, and specific compartments to enhance biodiversity

In Section 2 the standards will be selectively felled where there are groups of larger trees to leave the strongest tree, where there are no standards due to specimen having died another will be replanted. In Section 1, the trees will be managed to maintain a high forest with rare and selective felling only where absolutely necessary of established oaks and chestnut, and certainly not of mature veteran trees but management will also to allow a range of tree ages to be accomplished so that the future of the high forest is secured. Section 3 will be managed to create a small coppice area as was traditionally the role of Gundymoor but the main role of this area will be High Forest with selective felling to create a robust sound barrier. This area will be studied further before any trees are felled.

4.1.2 Phased felling and restructuring of plantations

n/a

4.1.3 Establishment, restocking and regeneration

All restocking and new planting will be NBL and all species are present already within the woodland. Density will be 1000 – 1200 per ha. Restocking method will be primarily layering or using seeds from the genetic pool but occasionally a new tree will need to be brought into the woodland and this will be sourced as locally as possible and hopefully

from a woodland nearby with a similar gene pool. The FC publication 'Managing Ancient and Native Woodland Practice Guide' will be referred to at all times.

4.2 New planting

Proposed additions to guidance to clarify consideration of design impacts etc. [UKWAS 3.2.1/3.2.2], to add reference to local native seed zones and FRM regulations [UKWAS 6.3.3].

New planting will only take place when absolutely necessary and this will where possible from a seed source or cutting from within the woodland. Wherever possible layering will be the preferred method of creating new trees.

New planting will not take place in blocks but will be single trees planted to increase the canopy, increase the number of stools in an area, or as with the sweet chestnut coppice to re-instate an old planting plan.

4.3 Other operations

Proposed additions to guidance to clarify consideration of design impacts etc. [UKWAS 3.2.1/3.2.2], to add reference to local native seed zones and FRM regulations [UKWAS 6.3.3].

All operations are referred to above

4.4 Protection and maintenance

4.4.1 Pest and disease management

Ash – monitor selected trees for signs of resistance and as appropriate develop strategy of replanting with hazel and chestnut.

Rhododendron removal – stem injection or manual removal to be considered, possible treatment of stumps (chemical guidelines will be followed)

No current evidence of problems from deer, squirrels or rabbits, however this situation will be monitored particularly in coppice re-growth areas and new plantings. If necessary a management plan to combat problems will be created.

4.4.2 Fire plan

The site carries a minimal fire risk

Alert the fire brigade

Alert Tim Speller at HCC – 07841 493315 (HCC 023 92 595040)

Evacuation plan to be in risk assessment for volunteers and site users

All woodland workers and volunteers will be informed of the fire procedure and fire meeting point (which is the bus stop near the car park).

4.4.3 Waste disposal and pollution

Any surplus chemicals, chemical containers, plastic waste, and excess fuel and lubricants to be removed from the site and disposed of in appropriate bins at QE Country Park.
Biodegradable chain lubricants to be used where practicable

4.4.4 Protection from unauthorised activities

Fencing to be upgraded to reduce the use of motorbike access which is a hazard to all walkers, volunteers and management team, as well as destroying the flora.
Liaison with highways/HBC re litter from road users and college students, possible barrier to be constructed to reduce windblown litter onto the site.
Fly tipping – barriers will be locked when site is not attended by staff to minimise risk.

4.4.5 Protection of other identified services and values

Relevant permissions from HCC regarding access, and product extraction will be gained prior to any activities being undertaken.

BAP species will protected during forestry operations

Natural Pet Cemetery

The purpose of the natural pet cemetery is to provide an environmentally friendly way of disposing of the body of a pet, and at the same time provide some income for the woodland so that the management and the improvement can be maintained, and so that a volunteer programme can be set up with tools etc.

There are several points that need to be addressed so that the cemetery does not impact on the biodiversity or the appearance of the woodland. Advice has been sought from the Forestry Commission and they have discussed the plan and gained comments from their national lead on Woodland Biodiversity – Although approval has been supported from the lead on Biodiversity there were several comments relating to restrictions on disturbance of the existing tree roots systems, disturbance of top soil, appearance of the burial mounds, ashes and memorials – each of these shall be covered below.

Overview

- All formal planning and environmental consents shall be in place before any burial takes place
- The size of animal to be buried shall not be larger than a large dog and no animal shall be buried that contravenes the law such as goats, sheep, etc as identified via the DEFRA restrictions.
- The burials will take place in Area 2 on the map and will follow the pattern of the 7 year coppice rotation (if it becomes highly active, coppice blocks in Area 1 could also be used if agreed by Tim Speller Manager)
- The burials will take place beside coppice stools that have recently been cut. This

is because the tree will have less upper storey to depend on the root system during this time and therefore will cause little or no damage

- The burials will take place on the south of the stools on the first 7 years rotation, then the following 7 years etc the burials will take place to the north (or a other side etc), creating a star around the stool or standard.
- Full information for all pet owners shall explain the working purpose of the woodland and also the need for all items buried to be fully biodegradable
- A hand cart shall be used to transport the dead pet from the car park
- No pet shall be buried closer than 1 meter to a standard
- Records shall be kept as to the position, date, species and breed of each animal buried

Burials

- All soil to be removed from the grave shall be placed onto a board to protect the surrounding surface of the woodland
- All top soil shall be removed and placed separately (in sods of 15cm deep if possible) to retain any seeds or mini-beasts that may be below the surface and to reduce the possibility of sub-soil mixing with top soil.
- Top soil shall be carefully replaced after the grave has been backfilled
- The grave shall be dug to a depth of at least .75 meters for smaller pets such as guinea pigs and rabbits, to a depth of at least 1 meter for cats and small dogs, and 1.2 meters for larger dogs.
- All coffins and liners shall be fully biodegradable (metal and brass is biodegradable if fitted as handles / name plates etc)
- All toys or rugs buried with the pet shall be fully biodegradable
- All nylon collars etc shall be removed
- The grave shall sit proud to the surface allowing for settlement back to the previous soil level

Memorials

- Headstones - There shall be no crosses or headstones within the woodland
- Bird boxes - Families can purchase bird boxes, bat boxes or similar and have a message engraved and these placed within the woodland – these will be limited to a maximum of 50 per acre Note we are going for only 12 standards per acre in section 2 not even aged so some will be too small for bird boxes. I assume this means across the whole woodland including other sections?
- Benches – there will be a limited number of benches (10) within the woodland. There will be the opportunity for each bench to have 8 pet names engraved onto it which will pay for the bench to be made. Benches will be sited as necessary over the next 7 years.
- Flowers – only natural flowers can be left on the grave and these will be removed by staff after 7 days to stop seeds infecting the woodland. No plastic wrapping, oasis, or any other synthetic material may be left at the woodland.
- Markings around graves – all markings will be removed including stones and sticks
- Web-site – a memorial page will be constructed on the website so families can have their chance to leave a few words and photo of their pet

Planting

- Flowers – only wildflowers purchased via the company running the cemetery may be planted on the graves. All plants will be bought from 'Naturescape' as they provide quality native species. A relevant list will be drawn up from which people can choose. Any other plants will be removed immediately and destroyed.
- Trees – occasionally there will be the opportunity to have a pet buried beside a newly planted tree. Only those within the planting plan and organised via the management team will be acceptable – all other trees will be removed.

Ashes

- Ashes are a possible method of disposing of a pet but several restrictions apply
- Ashes will be scattered on already improved areas of the woodland such as grassland or buried beneath the surface.
- No more than 250 per acre per year. This would equate to 1 set of ashes per 15 square meters per year. Over 6 acres that would equate to 1,500 sets of ashes per year and this is a very high and unlikely number to be required.
- Ashes will not be scattered within 5 meters of a watercourse or drainage ditch.
- Ashes will not be scattered in Area 2 because that is used for coppicing and also for pet burial
- Ashes will not be scattered in Area 3 because there are many water courses running through that area
- Records shall be kept as to the number of ashes scattered and the approximate position within each acre.

4.5 Game management

n/a

4.6 Protecting and enhancing landscape, biodiversity and special features

4.6.1 Management of designated areas

No national or local designated areas within woodland

4.6.2 Measures to enhance biodiversity and other special features [UKWAS 2.1.1/6.1.1]

Areas retained specifically for biodiversity

1. Northern third Section 1 Marked on the map as Management Compartment Area 1.g (comprised National Vegetation Classification W6a, W7c, W8a) and in Section

- 3 Management Compartment 3.g (National Vegetation Classification W6a, W6e, W10a) and management Compartment 3.j.ii (National Vegetation Classification W6a) will be managed with biodiversity as the sole key priority. This equates to over 15% of the total woodland area. These areas will have non-intervention only safety issues will be addressed due to the proximity of footpaths and car park.
2. These areas are spread across the site but linked via the boundary of non-intervention on the woodland border. The areas were chosen because they are a) the most difficult for the public to access, and b) they already exhibit good flora and fauna that can be enhanced and enabled to expand.
 3. Management Area 3.i has strong flora such as bluebells and brush cutting the bramble should encourage this to strengthen and spread.
 4. The edges of the rides will be managed for biodiversity and will have periodic cutting in glades on alternating sides with maintenance to prevent the encroachment of scrub.
 5. The pond and marsh area will be maintained for biodiversity and this will require the regular cutting back of the area specifically around the pond, and clearance of excessive or evasive pond plants. Species in and around the pond will be monitored and any rare species will be recorded and habitat enhanced.

Veteran trees and retentions

There are quite a wide range of veteran trees across the site and these will be maintained and enhanced. Felling will be kept at a safe distance from the trees so that a wind break is secured. The more important veteran trees are identified on the map. There are also groups of specific trees which will be maintained and enhanced for biodiversity and environmental value – see map. These trees will be protected from wind blow and will be thinned if needed to increase their strength and resilience. The trees will also have younger examples growing nearby of different ages to ensure the longevity of this feature. The long term retention will take place mostly in Section 1 and some in Section 3.

Deadwood

There is a significant amount of deadwood (ground and standing) across the woodland and this level will be maintained and protected for biodiversity. The age and range of deadwood will be explored so that this can be maximised and it will equate to about 5% of the average stand volume. The most significant amount of deadwood is in Sections 2 which was left after the 1987 storm but there is also some good habitat from deadwood in Section 3.

4.6.3 Special measures for ancient semi-natural woodland (ASNW) and semi-natural woodland (SNW)

Woodland Structure

The structure of the woodland is such that it is clearly ancient semi-natural woodland. It shows both characteristics of being a woodland that is long established and the trees forming the canopy seem to have grown naturally rather than being planted and are of a diverse range. There is also a rich 'mosaic' across the woodland with different age

ranges, there is a range of components making up the canopy from coppice to standards, and the canopy also has very young trees as well as old standards over 50 years of age.

Management – The characteristics of the woodland will be both enhanced and in parts restored so that the age and diversity of the trees is upheld.

Carbon – Although the carbon content of the woodland may decrease whilst management takes place, the revitalisation of the woodland will increase the carbon capacity of the woodland and the use of wood fuels decrease the collective impact of climate change from fossil fuels. The standards will be maintained across the woodland and new growth will be facilitated whenever possible to increase the carbon sink of the site.

Habitats – All habitats will be conserved and enhanced through sensitive management and we will get specialist advice to discover any particularly sensitive parts of the woodland and develop a specific plan for them.

Rate of change – the management of the woodland will make sure that the rate of structural change of the woodland maintains or enhances the environmental value of the woodland. We will do this by only cutting a maximum of 1 acre of coppice a year, which will improve the biodiversity of the site and enhance the age range of the woodland. A maximum of 10% of the woodland across the rest of the site will be cut in any year and this will be sensitively carried out in a manner similar to that which would occur naturally and they will be low impact, continuous cover systems.

Historic structure – the woodland in Section 2 and 3 is historically coppice and so this would be maintained or enhanced as appropriate. Section 1 is High Forest and this would be enhanced by planting new trees to increase the age range of the woodland. The Oaks and mature standards in this section will be protected by ensuring a wind barrier is maintained around them.

Vertical structure – the management of the woodland will encourage the diversity of the vertical structure by planting new young standards, cutting the coppice and selecting standards to enhance the canopy across the woodland.

Woodland edge – the woodland edge and rides within the woodland will have a layered structure to allow the passage of butterflies and insects and to encourage biodiversity within the woodland.

Veteran trees and deadwood – Veteran trees have been identified and are being protected (particularly the oaks in section 1 – high forest). There is a large amount of deadwood already in the woodland and this will cause some problems for replanting the coppice. Some of the existing deadwood will be removed but a large amount will be maintained and the amount of deadwood will be kept at a relatively high level – both standing and fallen. A selection of lifted root plates will also be left in situ to provide habitat.

Felling plan – the felling plan takes into account the history of the site and will enhance the historical features and management approach. The coppice will be gradually brought back into rotation in Sections 2 and 3 and the high forest will be maintained in Section 1. There are several water ditches running through the site and these will be monitored over the next year. In year 1 we will leave a 3 meter protection zone on

either side of the drainage ditches so we can monitor the situation and develop a sensitive response.

Reinstatement of coppice – Section 2 has the potential to become outstanding coppice and to attract a wide range of insects and wildlife. Section 3 will have a small area of coppice within the High Forest to protect the noise from the road so that wildlife is less disturbed. However this area has large amounts of drainage running through it and there is also large amounts of standing water. This could be due to road building cutting through the natural drainage route and this needs investigation and research. Once the investigation has taken place a plan will be discussed for this area in more detail.

Conserving the understory – Section 2 is largely hazel coppice and the understory will be placed back into rotation. The stools will be cut taking care not to cause damage to them. In parts if the standards are causing a too heavy canopy this may need to be thinned so that the light can reach the understory. This will be assessed year on year.

Old growth and natural reserves – Two areas of the woodland have been laid aside for old growth and natural reserves The northern part of Section 1 and the Eastern part of Section 3.

Harvesting – All felling will be carried out sensitively without large machinery. It will either be hand tools or chainsaws. The extraction routes are marked on the map and vehicles will be used on the middle track as little as possible to maintain the woodland floor. All bio security will be followed as laid down by the Forest Research website. Harvesting will be carried out in Autumn whenever possible although winter may be used as the next option. Harvesting will stop on 1st April. To reduce damage to the woodland floor and woodland soil some heavier timber extraction may take place in the summer (leaving the timber to part season within the woodland).

Broadleaf lop and top – This is a great store for carbon, it acts as habitat and it returns nutrients to the woodland floor. Because of these factors, unless there are special circumstances, the lop and top will not be burnt. The lop and top will be used for various support within the woodland 1. To cover coppice stools to prevent deer damage 2. Chipped and used for the paths. 3. Left in deliberate piles within the woodland to act as habitat. 4. In some instances it may be used for dead hedging.

Tree species composition

The management plan is specifically looking to conserve the historical species that have traditionally been worked or are of interest on this site, however we do need to take into account the future threats to this woodland which include disease (specifically to Ash) and also climate change. At the moment about 90% of the canopy is of native species and we will maintain that percentage and where possible enhance it. The canopy is also a good mix of varied species and this will also be maintained or enhanced to increase durability of the woodland against threats, this will include us making sure that no one species occupies more than one third of the top canopy. The understory in Section 2 is hazel with an area of Chestnut in the eastern section and this will be restored and enhanced with the mixed standards being maintained adding varying age differences. Section 3 used to be coppice and was likely to have been chestnut – this will be replenished and conserved with mixed standards overhead. Section 1 is high forest and

the Oaks are of specific interest in this area and they will be managed with care and as little intervention as possible.

The non- native species that has started to appear in section 2 Area 11 is the rhododendron which will be removed.

All species with historical significance will be conserved, specifically this is the hazel and chestnut coppice and the large Oak standards.

Restocking

When restocking the woodland, several considerations will be taken into account. 1. The ability of the trees to sustain the woodland. 2. Timber production. 3. Recreation. 4. Carbon sequestration. 5. Habitat. 6. Historical management. 7. Disease resistance.

Method of regeneration

Suckering or using cuttings from existing coppice stools will be the predominant way forward in both Section 2 for the hazel and Section 3 for the chestnut. Direct seeding will be used in Section 1 if necessary although many species likely to have self seeded. These methods will retain the quality of the genetic stock.

Time periods

The time period over which restocking will take place will be different for each of the sections. Section 1 will be following a natural and varied planting plan to reflect the more mixed woodland that already sits there. We will be supporting the development of the woodland rather than leading it, and the progress will encourage the development and enhancement of the high forest with emphasis on the large Oaks and other specific standards. Section 2 will be hazel coppice with some chestnut on the eastern section. This will follow a yearly 1 acre coppice rotation. Section 3 is has huge value as habitat and much of the borders of this area will remain as High Forest so as to protect from the noise – therefore restocking will take into account the need to diversify the age range of the trees. . Much of the deadwood will remain on the woodland floor in this section.

Protection from herbivores

There is very little evidence to suggest that there are many herbivores visiting the site. The concern is that if coppicing begins it will encourage browsing by deer, rabbits and others. This will be counteracted by using the lop and top to cover coppice stools as was traditionally practiced in this area. If deer are still found to be visiting the site a further traditional deterrent will be used such as the dead hedge. It is very unlikely that a deer fence will be effective because of the recreational value of the site and also because it is being used as a pet cemetery and this would restrict access.

The number of trees

The number of trees will reflect the historic stocking densities of the site namely 1000-1200 per ha in Sections 2 and 3 and the stocking density in Section 1 will reflect the current situation which varies across the section from coppice to groups of Oaks and other specific well spaced standards, natural regeneration will be encouraged. The identification of the next generation of veteran trees will mean that in some instances new trees will need to be installed.

Overall

When restocking, great care will be taken of the woodland floor and no manure or

chemicals will be used. The woodland floor will be covered when digging takes place and the spoil laid carefully to one side so as not to disturb the seed bank.

Open Areas

The open areas within the woodland are: 1. Ride edges. 2. Area around the pond. 3. Glades.

All these areas will be actively maintained and enhanced for their habitat value. All areas will be periodically cut back to stop shrubs invading and also to make sure that where the woodland meets the open area there is not a hard sharp edge but rather that the transition is gradual to encourage biodiversity. Soil compaction if using machinery will be fully considered when doing this work and the time of year for this activity may affect this consideration.

4.6.4 Special measures for plantation on ancient woodland site (PAWS).

n/a

4.6.5 Measures to mitigate impacts on landscape and neighbouring land [UKWAS 3:1-2].

The woodland is located on an urban fringe area adjacent to two educational establishments and two main roads. There is a small area of housing to the north of the area. To the south of the highway is another area of woodland. The woodland is significant within the locals and management will ensure that the impact of forest operations will not significantly alter the amenity contribution the woodland makes from these public view points. This will be achieved by leaving a 3 meter border around the site to create screening and it will have several other uses too.

4.7 Management of social and cultural values

4.7.1 Archaeology and sites of cultural interest

Boundary banks in area 11 and 7. These are to be protected when extracting product and all footpaths crossing the bank will be appropriately constructed to maintain and protect the bank.

4.7.2 Public access and impacts on local people

There is a public footpath running up the western boundary of the site and then continues diagonally through the woodland from western edge to the north east corner.

The woodland used to be accessed by a wide range of individuals and groups but the main path has now become rather overgrown and the pond has become unmanaged – thus the volunteering group have disbanded and the individuals are now mainly dog walkers.

It is intended to enhance this by digging the drainage ditches on either side of the path to increase water runoff so the surface of the path is not damaged any further. It is then intended to repair the water damaged path by filling in the ruts and making good. This path also needs a small bridge or under-drain to stop the water flow at the point in Section 2b. This would then allow wheelchair access as far as the pond.

It is also intended to increase the width of the path on the western boundary of the woodland and also to repair the water damage to this path by resurfacing. This would again allow wheelchair access.

There are several smaller paths (none of these are public footpaths and OS map does not show any permissive access) within the woodland and the one running from the car park to Section 2a is expected to be surfaced to enable it to be used as an extraction route but this would also allow wheelchair access.

Increased interpretation and signage will support local understanding of the woodland and hopefully engage residents in the volunteer programme.

A volunteer programme is to be set up to encourage local involvement in the woodland. It is also hoped that some events will be organised to encourage understanding and use of the woodland. This will be for people of all ages but all children (under 16 yrs old) will need to be accompanied by a responsible adult.

Pond – the pond is a feature within the woodland and once it has been restored it is hoped that this will be a place where people can sit and relax or contemplate.

Benches – Benches will be placed throughout the main accessible section of the woodland to encourage older or less fit people to walk through the site. Two benches will be placed at the edge of the pond, one at the base of the great oak trees, several along the main path and one near the car park. All benches will be made of wood and firmly fixed into the ground.

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5 Consultation

Organisation/individual	Date received	Comment	Response/action
HBC	On going	List of TPO's Planning	Seeking planning
Forestry Commission Matthew Woodcock Mike Pittock	Ongoing	Advice on management and funding applications	Application for a Woodland Management Grant. Write a WMP
Residents		They want a volunteer group	We have set one up
Environment Agency	Ongoing	Water	
Dan Hoare Butterfly Conservation	1.6.13	Support plans for management	See email but 7 yr coppice rotation and keep dense understory in places – record butterfly sightings

6 Monitoring plan summary

Objective number, issue or UKWAS Requirement	Indicator	Method of assessment	Monitoring period	Responsibility	How will information be used
1	No complaints and FC and HCC happy	Visual	1 year	Terena Plowright/Tim Speller	To decide if the pet cemetery is detrimental to the woodland or an asset
2	6 volunteer days a year	6 days of volunteering undertaken	1 year	Terena Plowright	To decide if further investment in volunteering is of value to local people
3	2 training days in first year	2 days completed	1 year	Terena Plowright	To decide how training days are impacting on the woodland and what (if any) alterations to organisation needs to be made
4	Footpath	Work	Every year	Terena	To check that the

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	3 ft wide. Permissive tracks clear of brambles	complete		Plowright/Tim Speller	path management programme is sufficient.
5	Bluebells visible area 3i.i. Number of flora constant in 3j.ii with past HBLC survey	Visual Survey in summer	2 years	Terena Plowright/Tim Speller	To see if management effective and if not to alter to create a better result
6	Managed in accordance	Check list of points relevant to the woodland	Every year	Terena Plowright	To make sure that the woodland is being managed professionally and within the guidance
7	All planting shall be NBL and from a local gene pool	Visual assessment and proof of purchase where relevant	Every year	Terena Plowright/Tim Speller	To make sure any planting meets criteria
8	Meet the criteria	Visual and by records	Every year	Terena Plowright/Tim Speller	To make sure the work meets the criteria
9	Relevant spread of tree ages	Visual	3 years	Terena Plowright/Tim Speller	To make sure there will be woodland cover long term
10	No motorbikes	Visual	Every year	Tim Speller	To stop motorbikes damaging the woodland and increase efforts if measures are not successful
11	Parking	Visual	1 year	Tim Speller	To discover if

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	for at least 5 cars				achieved target and reassess if not
12	2 small glades	Visual	1 year	Terena Plowright	To discover if measures are working
13	2 small bridges on main track, 1 information board, dig ditches beside main track	Visual	2 years	Terena Plowright/Tim Speller	To check that the volunteer programme is producing results
14	Pond has two increased species, weir and overflow working	Visual and records	2 years	Terena Plowright	To make sure that the volunteer programme is producing results
15	2 areas of habitat created specific to butterfly	Assessment from Butterfly Conservation	2 years	Terena Plowright	To make sure the volunteer programme is producing results
16	Good canopy in Section 3	Visual	2 years	Terena Plowright/Tim Speller	To make sure that the management system is producing the results required to keep the noise from the woodland
17	3 coppiced coups	Visual	3 years	Terena Plowright	To make sure the woodland is being managed professionally and sustainably

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18	No drop in the number of recorded trees left on the ground and standing for habitat	Visual	2 years	Terena Plowright	To make sure wood is not being removed by locals for firewood
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7 Work programmes

7.1 Outline long-term work programme (2013__ - 2033__)

(Use this table to outline medium to long term areas of work)

Cpt. Ref. or Name	Activity	Year (tick)	
		6-10	11-20
Section 1 and 2	7 year rotational coppice across section 1 and 2 of the site. Restock Section 1 and 2 where appropriate. In Section 2 standards will be kept at about 20% of the total canopy area across age categories. Coupe will be 1 acre	√	√
Section 3	12 year rotational coppice in middle area of the Section – Area 3a – 3f	√	√
Section 1	Replacement planting will take place where necessary to meet the management plan and ensure the longevity of the high forest.	√	√
Section 1 and 2	Re-establishment of the sweet chestnut coppice	√	√
Section 1 Area f	Support the health of the ponds and wildlife in area 12 and 13 Open up the canopy, reinstate the dipping platform and paths. Reintroduce educational and volunteer programmes	√	
Section 3	Investigate the drainage which has been blocked by the road building programme	√	
Section 2	Create 2 woodland glades	√	
Section 1 and 2	Clear ditches beside footpath and make 2 walkways over springs	√	
Section 3	Make 2 walkways over streams		
Whole site	Better understanding the biodiversity of the site, introducing support for habitat and investigate the impact of the Ash disease		

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Section 1 Area 3.i.i	Brush cut bramble to allow blue bells to spread	√	
Section 1 and 3 Areas 3j.i, 3g and 1g	Establish areas of non intervention and monitor development	√	
Whole site	Maintain footpath and permissive paths to enhance public access	√	√

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7.2 Short-term work programme (2013__ - 2018)

(Use this table to collect basic inventory data for the woodland areas you propose to work during the next 5 years)

Cpt. Ref./ Name	Area (ha)	Main Species	P. Year	Yield Class	Activity	Year				
						1	2	3	4	5
2.a	.40	hazel	n/a	4	To coppice the Hazel and selectively fell standards if too tightly grouped to allow the stronger room to survive and flourish, plant new hazel where stools have died.	√				
2.b	.05	bramble	n/a	n/a	Create glade for encouraging woodland butterflies	√				
2.f	.05	Bramble	n/a	n/a	Create glade for encouraging woodland butterflies	√				
3.j.ii	.40	Alder	n/a	n/a	Establish area of non-intervention	√				
3g	.40	Oak	n/a	n/a	Establish area of non-intervention	√				
1g	.80	Ash	n/a	n/a	Establish area of non-intervention	√				
2 and 3	n/a	n/a	n/a	n/a	Woodchip permissive path	√				
1f	n/a	Alder / willow scrub	n/a	n/a	Cut back vegetation to allow light to get to the pond	√				
2.b	.40	Hazel	n/a	4	To coppice the Hazel and sweet chestnut, and selectively fell standards if too tightly grouped to allow the stronger room to survive and flourish, plant new hazel where stools have died.		√			
1.a	.40	hazel	n/a	5	Coppice the hazel		√			
3a	.20	Hazel	n/a	4	Coppice the hazel		√			
3.b	.20	Hazel	n/a	4	Coppice the hazel		√			
3.c	.15	Hazel	n/a	4	Coppice the hazel		√			

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2.c	.40	Hazel	n/a	4	Coppice the hazel and sweet chestnut			√		
1b	.40	Hazel	n/a	4	To coppice the Hazel and selectively fell standards if too tightly grouped to allow the stronger room to survive and flourish, plant new hazel where stools have died.			√		
2d	.40	Hazel	n/a	4	Coppice the hazel				√	
1.c	.40	Hazel	n/a	4	Coppice the hazel				√	
3.e	.20	Hazel	n/a	4	Coppice the hazel				√	
3.f	.30	Hazel	n/a	4	Coppice the hazel				√	
2.e	.30	Hazel	n/a	4	Coppice the hazel					√
3 d	.20	Hazel	n/a	4	Coppice the hazel					√
1.d	.40	Hazel	n/a	4	Coppice the hazel					√
					Note – in all the above some selective felling will be necessary but this will not be the main crop.					

8. Costing Operations

Outline projected costs and income over plan period. Please read guidance note for further information.

The cost of the woodland management will be met by the Pet Cemetery business and this will be arranged as a sub-contract.

There will be some income from the Pet Burial Business surplus to that needed to fund the woodland management. As this is a new business the exact sum of money is as yet unknown.

The cost of the pond management will be negligible because the work will be covered by volunteers, as will path clearance.

Ditches will need to be dug and this could be carried out by volunteers, otherwise it may need the hire of a small digger for 2 days.

Bridges across streams – cost of wood but this work can be carried out by volunteers and so can the boundary bank ramp.

Ducts under the main footpath can again be dug by volunteers.

Surveys can be carried out by the expert bodies and enthusiasts in the area e.g. Butterfly Conservation.

9. Maps

It is recommended that you show as much information on subject based maps as possible. For example, a map showing site constraints or a concept map showing the main proposals.

List all maps here and append to plan:

Map no./Title	Description
1	Position of woodland in the surrounding area, schools, SINC.
2	Boundary trees, boundary bank, great oaks, notable deadwood
3	Car park, gates, fence line, footpath, permissive paths, bridges and ducts, ditch beside path, Gas line, water course, pond and weir, marsh, mini glade, site of clearings. Rhododendron, new permissive path.

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4	Previous management areas and dates
5	Hampshire Biodiversity Information Centre- woodland biodiversity survey areas. Bird sightings.
6	2013 Woodland Management Compartments
7	Old map of woodland prior to building of A3M

10 Thinning, felling and restocking proposals

The template and guidance should be carefully followed to aid production of a good management plan, and ensure that we can pay the grant.

Most of the template will need to be completed by everyone, but the following sections are not compulsory, unless you wish to apply for woodfuel grants or Category B approval.

- You must complete **Section 10, Table A** if you want to use the plan to gain Wood Fuel WIG support or seek funding through other wood fuel initiatives.
- You must complete **Section 10, Table B** if you want to gain 10 year thinning and felling approval and / or meet the requirements of Category B.

This section **should not be completed** for any other applications.

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10.2 Table B

This section must be fully completed by the applicant if they wish to gain felling licence approval from the Forestry Commission. The work detailed below must match the proposals set out in the plan. For details on how to complete this table, please refer to **EWGS4 – Woodland Regeneration** for guidance and Tree Felling guidance.

4 Cpt / Sub Cpt	5 Area (ha)	6 % area to be worked	7 Type of felling	8 % of felled area comprising:		9 Felling licence type	10 Change in woodland type		11 Preferred claim year	13 Restock mixture		14 % Estab by natural regen	Standard Proposals	12 Notes / Details
				BL	CON		From	To		Species	%			
1a	2.7	30%	SF	100	100	C	PAWS	Nat	11/12	POK	40%	10%	1(i)	example
1a	.40	100%	T/FC	100%	/	C	Nat	Nat	13/14	NBL	100%	/	20% Canop y cover	POK, SOK, HAZ, BI, AR Re-establish the coppice and only reduce the number of standards by SF to give 20% max cover in the coppice area. Where poss will use seed/layering on site from site
1b	.30	100%	T/FC	100%	/	C	Nat	Nat	14/15	NBL	100%	/	20% cover	AR, HAZ, AH, POK, SOK, BI Re-establish the coppice and reduce the number of standards by SF to give 30% max cover. Where poss will use seed/layering on site

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1c	.30	100%	T/FC	100%	/	C	Nat	Nat	15/16	NBL	100%	/	30%	HAZ, AH, POK, SOK, BI Re-establish the coppice and maintain the number of standards by SF to give 30% max cover. Where poss will use seed/layering on site
1d	.40	100%	T/FC	100%	/	C	Nat	Nat	16/17	NBL	100%	/	20%	HAZ, AR, WL Re-establish the coppice and maintain the number of standards by SF to give 20% max cover. Where poss will use seed/layering on site
1e	.20	100%	T/FC	100%	/	C	Nat	Nat	17/18	NBL	100%	/	30%	SC, HAZ, BI, SOK, POK Re-establish the coppice and reduce the number of standards by SF to give 30% max cover. Where poss will use seed/layering on site.
1f	.30	10%	T	100%	/	C	Nat	Nat	/	NBL	100%	/	.10%	WL Manage as pond area
1g	/	/	/	/	/	/	/	/	/	/	/	/	/	Non-intervention
2a	.40	100%	T/FC	100%	/	C	Nat	Nat	13/14	NBL	100%	/	30%/20%	HAZ, AR, BI, WL, AH, POK, SOK Re-establish the coppice and reduce the number of standards by SF to give 30% max cover in 2l

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														and 20% in 2ii/iii. Where poss will use seed/layering on site
2b	.60	100%	T/FC	100%	/	C	Nat	Nat	14/15	NBL	100%	/	30%	HAZ, SC, BI, SOK, POK, AR Re-establish the coppice and restock, and maintain the number of standards by SF to give 30% max cover. Where poss will use seed/layering on site
2c	.40	100%	T/FC	100%	/	C	Nat	Nat	15/16	NBL	100%	/	30%	SC, HAZ, POK, SOK, BI, AH, WSH, Re-establish the coppice and reduce the number of standards by SF to give 30% max cover. Where poss will use seed/layering on site
2d	.30	100%	T/SF	100%	/	C	Nat	Nat	16/17	NBL	100%	/	30%	POK, SOK, AH, BI, HAZ WSH, Re-establish the coppice and reduce the number of standards by SF to give 30% max cover. Where poss will use seed/layering on site
2e	.25	100%	T/SF	100%	/	C	Nat	Nat	17/18	NBL	100%	/	20%	AR, WL, HAZ, WSH, Maintain low canopy cover. Re-establish

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														coppice. SF to give max 20% cover. Where poss will use seed/layering on site
2f	.60	100%	T/SF	100%	/	C	Nat	Nat	18/19	NBL	100%	/	20%/30%	HAZ, AR, WL, POK, SOK, AH, BJ, WSH Maintain low canopy cover. Re-establish coppice. SF to give area i/ii 20% cover and iii 30%. Where poss will use seed/layering on site
2g	.65	100%	T/SF	100%	/	C	Nat	Nat	19/20	NBL	100%	/	20%/3%	SC, HAZ, AR, POK, SOK, BI, WSH Maintain low canopy cover. Re-establish coppice. SF to give area i 20% and area ii 30% 20% cover. Where poss will use seed/layering on site
3a	.15	100%	T/SF	100%	/	C	Nat	Nat	13/14	NBL	100%	/	20%/30%	AR, WL, HAZ, WSH, AH, BI, POK, SOK Coppice and SF to reduce canopy where needed. No planting in 3i until 2 nd cut to see what flora shows. 3ii SF to 30% replant coppice.
3b	.15	100%	T/SF	100%	/	C	Nat	Nat	13/14	NBL	100%	/	20%	AR, HAZ, WSH, AH, BI, POK, SOK Coppice

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														any Hazel and SF to reduce canopy where needed. No planting until 2 nd cut to see what flora shows. And what WSH is there.
3c	.15	100%	T/SF	100%	/	C	Nat	Nat	13/14	NBL	100%	/	30%	AR, HAZ, WSH, AH, BI,POK,SOK Coppice any Hazel and SF to reduce canopy where needed for 30% cover. No planting until 2 nd cut to see what flora shows. And what WSH is there.
3d	.20	100%	T/SF	100%	/	C	Nat	Nat	17/18	NBL	100%	/	30%	AH, HAZ, WSH Maintain low canopy cover. Re-establish coppice. SF to give max 30% cover. Layering where necessary.
3e	.20	100%	T/SF	100%	/	C	Nat	Nat	20/21	NBL	100%	/	30%/80%	AL, AH, HAZ, WSH Maintain canopy cover. Re-establish coppice. SF to give 30% in i) and 80% in ii)cover. No planting until after second cut.
3f	.30	100%	T/SF	100%	/	C	Nat	Nat	20/21	NBL	100%	/	20%	AL, SOK, BI, HAZ, WSH Sub i.Maintain canopy cover. Coppice. SF to

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														give 30% cover. No planting after second cut. Sub 2 – coppice and plant SF to 30%
3g	.40	/	/	/	/	C	/	/	/	/	/	/	/	Non intervention
3h	.40	100%	T/SF	100%	/	C	Nat	Nat	20/21	NBL	100%	/	20%	AH, HAZ, WSH SF and coppice
3i	.30	100%	T/SF	100%	/	C	Nat	Nat	20/21	NBL	100%	/	30%	AL, SOK, AH, SC, BI, HAZ, WSH Sub i Maintain canopy cover. Coppice. SF to give max 30% cover. No planting until after second cut. Sub ii – coppice and plant Sub iii – Maintain same level of cover from standards and coppice
3j	.80	100%	T/SF	100%	/	C	Nat	Nat	20/21	NBL	100%	/	80%	AL, SOK, AH, HAZ, WSH Sub i. Maintain canopy cover 80% . Coppice. SF. Layer Sub ii non intervention

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Appendix

Appendix 1	HBIC Community Survey
Appendix 2	HBIC Species Survey 2007
Appendix 3	1988 Species Survey - Hayling Ranger Service