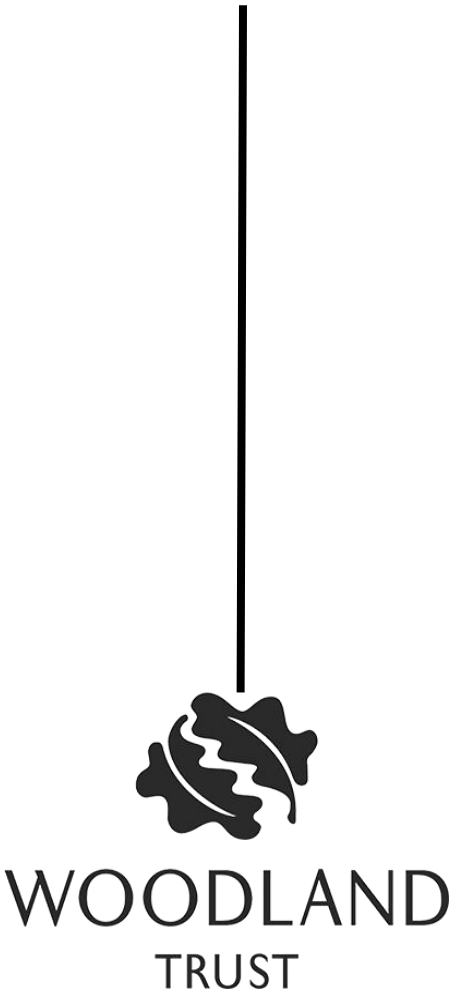
Top Wood

(Plan period – 2023 to 2028)



Management Plan Content Page

Introduction to the Woodland Trust Estate

The Woodland Trust owns and cares for well over 1,250 sites covering almost 30,000 hectares (ha) across the UK. This includes more than 4,000ha of ancient semi-natural woodland and almost 4,000ha of non-native plantations on ancient woodland sites and we have created over 5,000ha of new native woodland. We also manage other valuable habitats such as flower-rich grasslands, heaths, ponds/lakes and moorland.

Our Vision is:

"A UK rich in native woods and trees for people and wildlife."

To realise all the environmental, social and economic benefits woods and trees bring to society, we:

- **Create Woodland** – championing the need to hugely increase the UK's native woodland and trees.
- **Protect Woodland** – fighting to defend native woodland, especially irreplaceable ancient woodland and veteran trees; there should be no loss of ancient woodland
- **Restore Woodland** – ensuring the sensitive restoration of all damaged ancient woodland and the re-creation of native wooded landscapes.

Management of the Woodland Trust Estate

All our sites have a management plan which is freely accessible via our website

www.woodlandtrust.org.uk

Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

The following principles provide an overarching framework to guide the management of all our sites but we recognise that all woods are different and that their management also needs to reflect their local landscape, history and where appropriate support local projects and initiatives.

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene in our woods when there is evidence that it is necessary to maintain or improve biodiversity, safety and to further the development of more resilient woods and landscapes.

2. We establish new native woodland for all the positive reasons set out in our Conservation Principles, preferably using natural regeneration but often by planting trees, particularly when there are opportunities for involving people.

3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe. Where possible, we pro-actively engage with people to help them appreciate the value of woods and trees.

4. The long term vision for all our ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.

5. Existing semi-natural open ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.

6. The natural and cultural heritage value of sites is taken into account in our management and in particular, our ancient trees are retained for as long as possible.

7. Land and woods can generate income both from the sustainable harvesting of wood products and the delivery of other services. We therefore consider the appropriateness of opportunities to generate income from our Estate to help support our aims.

8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we encourage our woods to be used for local woodland, conservation, education and access initiatives.

9. We use and offer the Estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. We maintain a network of sites for long-term monitoring and trials leading to reductions in plastics and pesticides.

10. Any activities we undertake are in line with our wider Conservation Principles, conform to sustainable forest management practices, are appropriate for the site and balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

The Public Management Plan

This public management plan describes the site and sets out the long term aims for our management and lists the Key Features which drive our management actions. The Key Features are specific to this site – their significance is outlined together with our long, 50 years and beyond, and our short, the next 5 years, term objectives for the management and enhancement of these features. The short term objectives are complemented by an outline Work Programme for the period of this management plan aimed at delivering our management aims.

Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. Any legally confidential or sensitive species information about this site is not included in this version of the plan.

There is a formal review of this plan every 5 years and we continually monitor our sites to assess the success of our management, therefore this printed version may quickly become out of date, particularly in relation to the planned work programme.

Please either consult The Woodland Trust website

www.woodlandtrust.org.uk

or contact the Woodland Trust

operations@woodlandtrust.org.uk

to confirm details of the current management programme.

A short glossary of technical terms can be found at the end of the plan.

Location and Access

Location maps and directions for how to find and access our woods, including this site, can be found by using the following link to the Woodland Trust web-site which contains information on accessible woodlands across the UK

https://www.woodlandtrust.org.uk/visiting-woods/find-woods/

In Scotland access to our sites is in accordance with the Land Reform Act (of Scotland) 2003 and the Scottish Outdoor Access Code.

In England, Wales and NI, with the exception of designated Public Rights of Ways, all routes across our sites are permissive in nature and where we have specific access provision for horse riders and/or cyclists this will be noted in the management plan.

The Management Plan

1. SITE DETAILS

Top Wood

Location:	Grangewood, Linton Grid reference: SK268155 OS 1:50,000 Sheet No. 128
Area:	81.01 hectares (200.18 acres)
External Designations:	National Forest, Woods on your Doorstep
Internal Designations:	N/A

2. SITE DESCRIPTION

Top Wood sits on the edge of Linton, Derbyshire within the wider National Forest and is one of a number of woodlands in the local area many of which are native broadleaf plantations and are publicly accessible. Top Wood abuts immediately up to Penguin Wood, another Woodland Trust property. It also is connected to Grange Wood, which is a mix of ancient semi natural woodland and plantation under private ownership; there is no hard boundary between these woodlands and visitors can easily move between the properties, all of which have some public access. These woodlands, make up the core of 260ha of woodland, meadow and open water all designated as amenity/conservation green spaces and only crossed by minor country lanes. The trust also owns two other reasonable sized properties in the locality, Coton wood and Foxley wood.

Before planting, Top Wood was originally made up of permanent pasture, arable land, temporary grass leys, some rough grassland, numerous ponds and some small copses. An embankment of a former mineral railway line and associated pipework to carry water beneath it, crosses the northern part of the site from north-west to south-east. This pipe and embankment cause some localised flooding during wet weather, which add to the large amounts of surface water that seem to dominate areas of the wood. There are also some signs of medieval ridge and furrow at the property.

The soil type, structure and drainage status varies considerably across the site which probably accounts for the variation in establishment and growth of trees in a number of sub-compartments. The soil type largely consists of clay loam over sandy loam with frequent pebbles, there is evidence of soil compaction in some areas and resultant poor drainage.

The planting was undertaken over three years commencing in 1997 with completion in 1999. The species distribution of the initial planting was European Larch 44.5%, Oak 33%, Native broadleaves 20% and Woody shrubs 2.5%. When the planting plan was drawn up in 1996 one of the guiding principles was that there should be a semi-commercial element to the scheme in both the short and long term. Thus, the planting of Larch was designed both to act as a nurse crop for the native broadleaves and to provide an income in the early phase of development. The larch has not been removed in time to truly realise the ambition of a successful nurse crop and has instead overtopped the native broadleaved trees. If phytophora ramorum were to affect the woodland and require the removal of all larch from the site, then the site would require replanting in order to remain a woodland.

The initial woodland design incorporated a number of large unplanted areas so as to maintain views across to the Trent Valley in the north and the open countryside to the south particularly from the high point just south of Park Farm. Additionally, the original horse ponds of the former agricultural period were retained and enlarged and these together with the open areas sustain a wide variety of wildlife, including Great Crested Newts, whose presence are confirmed in three of these ponds. There are 10 ponds within the site, but the site also has a further 15 ponds surrounding it that are potentially suitable for this endangered species. Any activities on site require careful planning around this European Protected Species.

Before acquisition there was already a well-developed pattern of public footpaths which traversed the site. These transverse paths have been further enhanced and additional permissive bridleways established. The woodland itself fits nicely into the wider access network with a number of amenities and visitor attractions such as Beehive Farm Shop and Rosliston Forestry Center within easy travelling distance. Grange Wood Farm and a limited area of Top

Wood is also open to horse riding for a small fee, permits can be obtained from Grange Wood Farm.

The key features for this site are informal public access and secondary woodland.

3. LONG TERM POLICY

The wood will be allowed to reach maturity and will develop the characteristics of more naturally occurring woodland, as opposed to a plantation of single aged trees. As the woodland was planted with a predominantly larch, ash and oak mix and Ash Die Back disease has vastly reduced the long term survival and potential co-dominance of ash on site, the woodland is likely to evolve into a larch and oak dominated wood. The original intention of removing the larch in its entirety is not practical so this species shall be reduced over time rather than all in one hit. Cherry, birch, willow and other species will always be retained, and silvicultural interventions will be considered as the wood develops to ensure the wood is diverse in tree species and structure, promoting a good mixture of both young and mature trees. This will enable the wood to be more resilient to change in the future and will ensure it supports the greatest range of wildlife.

Open habitats will also remain and be managed within the woodland matrix, including the meadow areas but also sunny rides and water bodies.

A good standard of access provision will be maintained at Top Wood. The entrances will be accessible and clearly signed as per WT Spec 1.1 It shall be clearly visible from approach routes, attractive and inviting, easy and safe to use. The existing path network will be kept open for use and any new desire line paths that are created and are sensible will become official paths and be maintained. The information boards on site will be maintained for as long as they are deemed attractive and usable. Once they are no longer attractive or useful, replacement interpretation will be reviewed.

The wood will be made as safe as practical for visitors through regular tree safety inspections as per Woodland Trust Internal Guidance and best practice.

4. KEY FEATURES

4.1 f1 Informal Public Access

Description
The existing 5 public rights of way that cross the site have been complimented with over 6 kilometres of permissive paths and bridleways. High points on the site have had open space left below them so as to allow for significant views across the surrounding countryside. The property links well into the surrounding access network and other publicly accessible woodlands both privately owned and by the Woodland Trust. Top Wood also incorporates sections of the National Forest Long Distance Trail.
Significance
The site boasts over 10km of permissive paths and public rights of way, all of which are grassy woodland rides. This adds considerably to the publicly accessible green-space in the National Forest area and links in well to the wider access network through 14 separate access points. Public access and its promotion is an important objective of the National Forest initiative, the access provided at Top Wood being an important contribution to that wider goal and symbolic of on-going successful partnership working between the Woodland Trust and The National Forest Company. The site also has two interpretation boards. One giving a brief history of the site and the other detailing the work of the natural flood management scheme and associated wet areas.
Opportunities & Constraints
The woodland presents a great opportunity for local residents to get out and enjoy this valuable woodland improving their health and wellbeing. The site is restricted in that it is a large site but doesn't have an associated car park. The trust therefore relies on a neighbour to maintain access or a small housing estates on-road parking. Motorbikes and occasional misuse by horses can be an issue and one that needs to be monitored and dealt with accordingly. Top Wood remains an important amenity resource for local people, sitting within the National Forest and linking in nicely into the wider public rights of way network. There is interest from a local horse-riding group in further access for horses at Top Wood as part of a larger trail in the local area. There may be an opportunity to work in partnership with the horse-riding group, The National Forest Company, South Derbyshire District Council and other landowners in this regard. However local sensitivities regarding horse riding need to be born in mind; responsibility for investigating this possibility locally currently sits with the horse-riding group.

Factors Causing Change

Ash die back is prevalent on site and this could affect the safety of visitors on the path networks. The site can become very wet and muddy conditions can make the path network difficult to traverse in certain places. There is also localised flooding associated with the large pipe in compartment 1.

Long term Objective (50 years+)

A good standard of access provision will be maintained at Top Wood. The entrances will be accessible and clearly signed as per WT Spec 1.1 It shall be clearly visible from approach routes, attractive and inviting, easy and safe to use. The existing path network will be kept open for use and any new desire line paths that are created and are sensible will become official paths and be maintained. The information boards on site will be maintained for as long as they are deemed attractive and usable. Once this is no longer the case, then the interpretation provision will be reviewed.

The wood will be made as safe as practical for visitors through regular tree safety inspections as per Woodland Trust Internal Guidance and best practice.

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

The priorities this plan period will be to keep the wood safe, accessible and welcoming by including the following actions in the Estate Maintenance Contract:

To mow the paths five times a year in May, June, July, August and September, this includes the open grassed areas.
To maintain the Woodland Trust "Welcome" signage at the entrance, to be inspected and cleaned by the contractor in July annually.
To maintain the existing pedestrian access points as part of the visits made by the contractor as described above.

Woodland trust staff will also undertake regular tree safety inspections and instruct contractors to deal with anything deemed unsafe in an appropriate timeframe.

4.2 f2 Secondary Woodland

Description

A total of 64.6 ha. of former agricultural land planted in three annual phases from 1997 as part of the National Forest Tender Scheme. The species distribution of the initial planting was European Larch 44.5%, Oak 33%, Native broadleaves 20% and Woody shrubs 2.5%. The Native broadleaved mix included Ash, Silver Birch, Wild Cherry, Field Maple, Rowan, Hazel and in addition Willow and Alder were planted in the wetter areas of compartments 2 and 3. The Woody Shrubs included Guelder Rose, Dogwood, Purging Buckthorn, Hawthorn and Dogrose. The species were planted in rectangular blocks along sinuous planting lines so as to avoid the regimented look of a commercial plantation. The northern section of compartment 1 and compartment 8 were planted without Larch as were the margins of the planting areas. Compartment 7, which forms a buffer between the planting and Grange Wood, was treated in such a way to encourage natural regeneration.
In those sub-compartments where establishment has been problematic Ash was been used to beat up the initial planting to achieve the necessary stocking levels.
There are two meadows on site totalling just over 1 hectare, although both are improved grassland and therefore low in species diversity, management activities over the past few years has seen a reduction in the amount of coarse

vegetation such as nettles and dock and a higher percentage of grass. It is hoped that should management continue, the species diversity of the meadows will increase.

Significance

Top Wood along with the Woodland Trust's other holdings nearby and other National Forest initiatives in the wider area now form an extensive block of woodland, in what was once a landscape with very little tree cover. Thus, the site contributes significantly to regional biodiversity in an area that was predominantly farmland.

The close proximity of the new native plantation to the large semi-natural ancient woodland at Grange Wood will act as a buffer for the ancient woodland habitat and overtime facilitate the gradual colonisation and movement of the ancient woodland species associated therewith.

Opportunities & Constraints

The woodland incorporates a number of large un-treed areas so as to maintain views across to the Trent Valley in the north and the open countryside to the south particularly from the high point just south of Park Farm. Additionally, the original horse ponds of the former agricultural period were retained and enlarged and these together with the open areas will sustain a greater variety of wildlife in a diversity of habitats. The wet area of the site in compartment 2, associated with the piped watercourse, could be opened up to create a natural flood management scheme.

The larch planting is potentially of detriment to the other native species in the longer term, being faster growing and out-competing / shading out the native species we aim to promote. Thinning of larch will likely be necessary. This however may facilitate partnership working with other woodland owners in the local area and the National Forest Company and potentially will help meet one of the woodlands original aims associated with the production of an economically viable timber crop from the property.

Pests and diseases, particularly Ash Die Back which now has a firm grip in the National Forest area. This is having a significant impact at Top Wood as Ash form a major component of the original planting. If phytophthora ramorum infects the larch then this woodland would likely need to be replanted to some degree. It is hoped that some work to reduce the dominance of larch and the creation of internal extraction routes will alleviate any future panic should a statutory plant health notice be issued for the larch.

Factors Causing Change

Ash Die Back - this has taken hold of the ash component of the woodland. Where safe to do so, dead and dying ash will be retained to create standing deadwood habitat across the site. Diseased ash near to the path network should be removed for safety reasons.

Over topping and shading out of native species by the larch component. this will need to be thinned out to facilitate the woods transformation to a broadleaf dominant wood.

Squirrels have caused severe damage to the tree stock on site as noted in several herbivore impact assessments. A high percentage of the younger oak and birch trees have had the bark stripped from the leading stems and the tops then snap off. We have evidence that squirrel control over recent years has made a significant reduction to the amount of fresh damage and so this control should continue.

Deer have not yet been noted in any great numbers although muntjac have been reported more frequently recently. This situation will continue to be monitored.

Long term Objective (50 years+)

To allow the woodland to develop into native high-forest with trees and shrubs of varying age classes and species types. The woodland will reach this state through silvicultural interventions informed by "Woodland Condition Assessments". The aim being to ensure the long-term resilience of the woodland in perpetuity by increasing the structural diversity of the woodland. As squirrels have been noted to being having a deleterious effect on the tree stock and the National Forest has a landscape scale approach to their control, this will continue to be monitored and enacted upon when required. The local deer population will be at a balanced and sustainable level to ensure they are not posing a threat to the ecology and natural regeneration of the woodland.

Non woodland habitat on site will be maintained and improved where this is possible. The watercourses on site will act as sustainable drainage systems (SUDS), improving the water quality and alleviating flooding downstream, whilst at the same time being a home for an increased range of biodiversity. The SUDS will give Top Wood a unique feel to other plantation woodlands in the area.

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

To open up the canopy across the site via thinning to various intensities, coppicing of shrubs and the creation of glades. Increasing light to the woodland floor and improving the woodland for biodiversity. Look to ensure this process is financially economical. The dominant larch in compartments 1 to 5 will need to be addressed due to the spread of phytophora ramorum. Harvesting work should create internal access racks and reduce the larch component, and planning for the potential outbreak of this disease and any statutory plant health notice which may require the complete removal of it with a short notice period. This entails the improvement of the sites stacking and uplift of timber area. This work will hopefully start again in 2024 depending on acquiring licenses to work due to great crested newts on site.

To tackle the growing issue with water on site via the creation of natural flood management schemes. This will seek to replace the need for the large bore pipe found in compartment 2, with a series of scrapes and swales, better managing the water that passes through the site and retaining and filtering it where possible. This should lead to a great improvement to site biodiversity by the creation of waterbodies and riparian woodland as well as see a reduction of seasonal flooding associated with wet weather events. This will also have an impact on water quality and flooding downstream. Planning permission for this scheme has now been obtained and a final design agreed upon. Planning around the great crested newts on site will need to be completed before works can go ahead. Funding sources are being sought, with two options currently being explored. It is hoped that this work will be complete by the end of 2024

An annual squirrel and deer management contract will be implemented, using professional stalkers, with appropriate cull targets set to reduce the level of pressure on the woodland ecology. This will be supported and informed by a regular herbivore impact assessment, and other monitoring, to determine the effectiveness of the control measures.

Just prior to the next management plan review, assess the woodland using a "Woodland Condition Assessment" to inform management during the next management planning period.

5. WORK PROGRAMME

Year	Type Of Work	Description	Due Date
2024	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	January
2024	SL - Emergency Safety Works	Works associated with unplanned emergency safety works, other than tree safety, such as repairs/restoration works after damage caused by storms / floods /landslips	January
2024	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	February
2024	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	February
2024	CS – Legal Fees (ED)		March
2024	CS - Planning Permissions / Designs	Use of external consultants to undertake planning permission designs, supporting documents, oversee planning application process and presentation to planning committees	March
2023	CS - Silvicultural Agent's Fees	Use of external consultants/agents to support silvicultural operations – supervision, timber sales, roading etc	April
2023	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	May
2024	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	May
2024	CS - Silvicultural Agent's Fees	Use of external consultants/agents to support silvicultural operations – supervision, timber sales, roading etc	June
2024	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	July
2024	NWH - Initial Creation Work	Works associated with the creation of new non-woodland habitats such as ponds , ground prep and seeding of grassland areas etc	July
2024	NWH - Initial Creation Work	Works associated with the creation of new non-woodland habitats such as ponds , ground prep and seeding of grassland areas etc	July
2024	CS - Planning Permissions / Designs	Use of external consultants to undertake planning permission designs, supporting documents, oversee planning application process and presentation to planning committees	July

Year	Type Of Work	Description	Due Date
2024	NWH - Initial Creation Work	Works associated with the creation of new non-woodland habitats such as ponds , ground prep and seeding of grassland areas etc	July
2024	NWH - Initial Creation Work	Works associated with the creation of new non-woodland habitats such as ponds , ground prep and seeding of grassland areas etc	July
2024	PC - Squirrel Control - Hoppers		July
2024	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	July
2024	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	August
2024	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	August
2024	AW - Management Access Capital	Works associated with installing new or replacement management access infrastructure. Such as management access gates, vehicle bridges, fencing and surfacing works.	September
2024	NWH - Initial Creation Work	Works associated with the creation of new non-woodland habitats such as ponds , ground prep and seeding of grassland areas etc	September
2024	NWH - Initial Creation Work	Works associated with the creation of new non-woodland habitats such as ponds , ground prep and seeding of grassland areas etc	September
2024	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	October
2024	WMM - Secondary Silviculture	Works associated with silvicultural operations within secondary woods to meet our primary aims of conserving woodlands and encouraging public enjoyment– such as the removal of non-natives, thinning and promotion of native trees and shrubs, creating and managing view points and providing welcoming sites for visitors	March
2025	PC - Squirrel Control - Hoppers		July
2025	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	August

Year	Type Of Work	Description	Due Date
2025	NWH - Initial Restoration Work	Works associated with the initial restoration or significant reinvestment works of existing non-woodland habitats to improve or protect their conservation value	October
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	October
2025	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	March
2026	PC - Squirrel Control - Hoppers		July
2026	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	August
2026	WMM - Secondary Silviculture	Works associated with silvicultural operations within secondary woods to meet our primary aims of conserving woodlands and encouraging public enjoyment– such as the removal of non-natives, thinning and promotion of native trees and shrubs, creating and managing view points and providing welcoming sites for visitors	February
2027	PC - Squirrel Control - Hoppers		July
2027	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	August

APPENDIX 1 : COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
1a	10.12	European larch	1997	High forest		National Forest, Woods on your Doorstep
Formerly compartments 1 and 2 of the Long Close Wood WOYD planted in 1997 on former agricultural land. The planting consists of European Larch together with oak, ash, birch and wild cherry. The shrub component is hazel, hawthorn, elder and black thorn. There is also a strip of secondary broadleaved woodland growing on the old abandoned railway embankment. In the northern sector is a shallow pond which has been extended to create an aquatic, wetland habitat. This pond has confirmed GCN. In the southern corner of the sub-compartment is a partially exposed storm-water drainage pipe and beneath the grassy ride on the northern roadside boundary is a foul sewer pipe made obvious by the presence of a manhole cover part way along the ride. An electricity power line runs parallel to the railway embankment above open ground for the full extent of the western edge of the sub-compartment.						
2a	3.71	European larch	1997	High forest		National Forest
This L-shaped sub-compartment slopes gently to the south and was formerly agricultural land. The area was planted in 1997 with European Larch and native broadleaves. Both the eastern and western boundaries of the sub-compartment are made up of former field boundary hedges. A public right of way runs up along the western boundary.						
3a	4.77	European larch	1997	High forest		National Forest
This sub-compartment was planted with European Larch and Native broadleaves in 1997. As the area is low lying and prone to water-logging Alder and Willow were planted in addition to the normal Native broadleaved mix. There is a small pond on the eastern boundary. Between the line of the former railway embankment and the new woodland is a broad strip of open ground which has an electricity power line above it.						
3b	6.32	Mixed native broadleaves	1997	High forest		National Forest
This sub-compartment lies on the gently rising ground to the south of the former railway embankment which has been removed in all but the northern section and which used to bridge over the public footpath. A section of the embankment has been regraded and has been colonised by secondary woodland. The planting consists of European						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
Larch and Native broadleaves planted in 1997. Both the eastern and western boundaries of this triangular sub-compartment are made up of former field boundary hedges.						
4a	6.84	Mixed native broadleaves	1997	High forest		National Forest
The planting in this sub-compartment is divided into two areas by a broad strip of open ground which was designed, together with a similar strip in sub-compartment 4b, to provide a vista out towards cannock chase from the high point to the south-east. The planting was undertaken in 1998 and consist of European Larch and mixed Native broadleaves.						
4b	6.08	Mixed native broadleaves	1997	High forest		National Forest
Like 4a this sub-compartment is divided by a broad strip of open ground providing a vista from the south east corner. The two areas of planting were undertaken in 1998 and consist of the standard mix of European Larch and mixed Native broadleaves. Located on the northern boundary are two significant ponds surrounded by mature broadleaves. A public right of way follows the eastern boundary and connects to the sub-compartments on the southern side of Park Farm.						
5a	8.85	Mixed native broadleaves	1998	High forest		National Forest
This sub-compartment is most visible when approaching the site from the west being located on gently rising ground climbing up towards Park Farm. It was planted with European Larch with a native Broadleaved mix in 1998. A large pond is located on the northern boundary. Establishment in this compartment was difficult, perhaps due to some kind of nutrient deficiency in the soil, frost hollows or a combination of environmental factors. As such many of the trees here are stunted in terms of growth. This scrubby woodland block does give some habitat diversity in contrast to the wider woodland habitat.						
5b	3.53	Mixed native broadleaves	1998	High forest		National Forest
This long narrow sub-compartment on a gentle north-west facing slope has at its northern end three significant ponds surrounded by mature broadleaved trees, principally oaks. The sub-compartment was planted in 1998 with European Larch and mixed Native broadleaves.						
5c	6.08	Mixed native broadleaves	1998	High forest		National Forest
This sub-compartment consists of European Larch and native broadleaves planted in 1998. A small pond is located on the southern boundary.						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
6a	2.46	Mixed native broadleaves	1998	High forest		National Forest
The Botany Bay- Linton road forms the northern boundary of this sub-compartment which was planted with European Larch and Native broadleaves in 1998. A large pond straddles the southern boundary with compartments 5a and 5b.						
7a	0.94	Mixed native broadleaves	1998	High forest		National Forest
This triangular sub-compartment forms a buffer between the wider planted area and the ecologically sensitive semi-natural ancient woodland at Grange Wood. The sub-compartment was enclosed by a rabbit fence, areas were scarified and treated with herbicide to encourage natural regeneration. Subsequently some additional planting of native broadleaved tree stock took place to compliment any natural regeneration.						
8a	6.53	Mixed native broadleaves	1998	High forest		National Forest
This sub-compartment occupies the land immediately south of Park Farm and is the highest spot at the site at 126 m above sea level. In order to provide a vista to the south from this high point only 50% of the sub-compartment was planted with mixed Native broadleaves in 1998. The sub-compartment also contains a linear clump of mature Beech trees, a triangulation pillar and a radio mast. The sub-compartment is traversed by a number of public and permissive rights of way and has a major management access point in its northern boundary.						
9a	3.71	Mixed native broadleaves	1999	High forest		National Forest
This sub-compartment is situated on the south-west slope to the immediate south of the high point in sub-compartment 8a. This area planted with European Larch and mixed native broadleaves in 1999. A significant area of open ground was left to the east of the permissive bridleway that runs through the sub-compartment in order to maintain vistas.						
9b	4.37	Mixed broadleaves	1999	High forest		National Forest
This sub-compartment was planted with the European Larch and Native broadleaves in 1999. As in sub-compartment 9a the area to the east of the bridleway was retained as open ground.						
9c	5.12	Mixed native broadleaves	1999	High forest		National Forest

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
This sub-compartment forms the most westerly section of compartment 9 and was planted with European Larch and Native broadleaves in 1999. This sub-compartment accommodates the permissive bridleway, a significant pond in the north and provides views to the southwest.						
10a	0.77	Oak (pedunculate)	1880	Min-intervention		National Forest
This sub-compartment is a well established mature broadleaved copse which was augmented by the planting of a number of conifers in the mid 20th Century. The original 19th Century planting was of Oak, Beech and Ash and the conifers are Corsican and Scots pine. The sub-canopy is formed by Holly, Hazel and Elder. In low light environments the ground flora is sparse whereas beneath the conifers bramble and bracken dominate. There are a number of shallow depressions and banks/ditches.						

GLOSSARY

Ancient Woodland
Ancient woods are defined as those where there has been continuous woodland cover since at least 1600 AD. In Scotland ancient woods are defined strictly as sites shown as semi-natural woodland on the 'Roy' maps (a military survey carried out in 1750 AD, which is the best source of historical map evidence) and as woodland all subsequent maps. However, they have been combined with long-established woods of semi-natural origin (originating from between 1750 and 1860) into a single category of Ancient Semi-Natural Woodland to take account of uncertainties in their identification. Ancient woods include Ancient Semi-Natural Woodland and plantations on Ancient Woodland Sites (see below). May support many species that are only found in ancient woodland.

Ancient Semi - Natural Woodland
Stands in ancient woods defined as those consisting predominantly of native trees and shrubs that have not obviously been planted, which have arisen from natural regeneration or coppice regrowth.

Ancient Woodland Site
Stands in ancient woods that have been converted to plantations, of coniferous, broadleaved or mixed species, usually for timber production, including plantations of native species planted so closely together that any semi-natural elements of the understorey have been suppressed.

Beating Up
Replacing any newly planted trees that have died in the first few years after planting.

Broadleaf
A tree having broad leaves (such as oak) rather than needles found on conifers (such as Scots pine).

Canopy
The uppermost layer of vegetation in a woodland, or the upper foliage and branches of an individual tree.

Clearfell
Felling of all trees within a defined area.

Compartment
Permanent management division of a woodland, usually defined on site by permanent features such as roads. See Sub-compartments.

Conifer
A tree having needles, rather than broadleaves, and typically bearing cones.

Continuous Cover forestry
A term used for managing woods to ensure that there are groups or individual trees of different ages scattered over the whole wood and that some mature tree cover is always maintained. Management is by repeated thinning and no large areas are ever completely felled all at once.

Coppice
Trees which are cut back to ground levels at regular intervals (3-25 years).

Exotic (non-native) Species
Species originating from other countries (or other parts of the UK) that have been introduced by humans, deliberately or accidentally.

Field Layer
Layer of small, non-woody herbaceous plants such as bluebells.

Group Fell
The felling of a small group of trees, often to promote natural regeneration or allow planting.

Long Term Retention
Discrete groups of trees (or in some cases single trees) that are retained significantly past their economic felling age. Operations may still be carried out within them and thinning is often necessary to maintain stability.

Minimum Intervention
Areas where no operations (such as thinning) will take place other than to protect public safety or possibly to control invasive exotic species.

Mixed Woodland
Woodland made up of broadleaved and coniferous trees.

National vegetation classification (NVC)
A classification scheme that allows an area of vegetation to be assigned to the standardised type that best matches the combination of plant species that it contains. All woodlands in the UK can be described as being one of 18 main woodland types (W1 - W18), which principally reflect soil and climatic conditions. For example, Upland Oakwoods are type W11, and normally occur on well drained infertile soils in the cooler and wetter north and west of Britain. Each main type can be subdivided into numerous subtypes. Most real woods contain more than one type or sub-type and inevitably some woods are intermediate in character and can't be properly described by any sub type.

Native Species
Species that arrived in Britain without human assistance.

Natural Regeneration
Naturally grown trees from seeds falling from mature trees. Also regeneration from coppicing and suckering.

Origin & Provenance
The provenance of a tree or seed is the place where seed was collected to grow the tree or plant. The origin is the geographical location within the natural range of a species from where seeds/tree originally derives. Thus an acorn collected from a Turkey oak in Edinburgh would have an Edinburgh provenance and a southern European origin.

Re-Stocking
Re-planting an area of woodland, after it has been felled.

Shrub Layer
Formed by woody plants 1-10m tall.

Silviculture

The growing and care of trees in woodlands.

Stand
Trees of one type or species, grouped together within a woodland.

Sub-Compartment
Temporary management division of a compartment, which may change between management plan periods.

Thinning
The felling of a proportion of individual trees within a given area. The remaining trees grow to fill in the space created.

Tubex or Grow or Tuley Tubes
Tubes placed over newly planted trees or natural regeneration that promote growth and provide protection from animals such as rabbits and deer.

Weeding
The control of vegetation immediately around newly planted trees or natural regeneration to promote tree growth until they become established.

Windblow/Windthrow
Trees or groups of trees blown over (usually uprooted) by strong winds and gales.