



Twywell Plantation

Management Plan 2019-2024

MANAGEMENT PLAN - CONTENTS PAGE

ITEM	Page No.
Introduction	
Plan review and updating	
Woodland Management Approach	
Summary	
1.0 Site details	
2.0 Site description	
2.1 Summary Description	
2.2 Extended Description	
3.0 Public access information	
3.1 Getting there	
3.2 Access / Walks	
4.0 Long term policy	
5.0 Key Features	
5.1 Secondary Woodland	
5.2 Connecting People with woods & trees	
6.0 Work Programme	
Appendix 1: Compartment descriptions	
Appendix 2: Harvesting operations (20 years)	
Glossary	
MAPS	
Access	
Conservation Features	
Management	

THE WOODLAND TRUST

INTRODUCTION

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations. Please either consult The Woodland Trust website www.woodlandtrust.org.uk or contact the Woodland Trust (wopsmail@woodlandtrust.org.uk) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland. Our strategic aims are to:

- Protect native woods, trees and their wildlife for the future
- Work with others to create more native woodlands and places rich in trees
- Inspire everyone to enjoy and value woods and trees

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.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, 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.
4. The long term vision for our non-native plantations on 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 heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential 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 allow our woods to be used to support 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. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
- 10 Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

SUMMARY

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site - their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

1.0 SITE DETAILS

Site name:	Twywell Plantation
Location:	Kettering
Grid reference:	SP947776, OS 1:50,000 Sheet No. 141
Area:	15.33 hectares (37.88 acres)
Designations:	Rockingham Forest

2.0 SITE DESCRIPTION

2.1 Summary Description

Twywell Plantation was planted with Larch in 1932, on steeply undulating ground left by former mineral extraction (iron stone, limestone). During the 1950's further planting of Larch, Scot's pine, Sycamore, Oak, Spruce and Corsican pine was carried out.

In some areas ash, birch, willow and sycamore have regenerated where there were gaps in the canopy.

Twywell Plantation was acquired by the Woodland Trust in 1997. Due to the previous dense conifer cover, which was heavily thinned in 2003, and very poor soils there is ill defined shrub layer and species poor field layer.

Shrubs such as elder, hawthorn, blackthorn, willow, dog rose and regenerating ash, sycamore and birch are on the increase

The field layer is similarly poor.

The stretch of land nearest the A14, to the south of the site is flatter and exhibits more natural woodland structure due to its more varied planting and greater age

There is one seasonal pond in the centre of the woodland block which has an associated glade vegetation of rushes and sedges. Other semi permanent water bodies form in the deeper furrows in wet weather.

A number of wide open rides criss-cross the wood, forming an important limestone grassland habitat. The main ride also forms a public foot path that connects to Twywell Village in the east and the rest of Twywell Hills and Dales countryside area in the west.

The wood is bounded on the south side by the A14 trunk road, on the north and west sides by Twywell Gullet SSSI and on the east side by an area of improved pasture.

The site is well used by locals from Twywell village and by visitors from further a field who park in the nearby Hills and Dale's car park. The wood forms part of the Twywell Hills and Dales area managed in association with Rockingham forest Trust and The Land Trust.

Entrance to the site can be gained via 6 kissing gates located along the eastern, western and northern boundary. Access to the entrances can be gained by following the public right of way from the east/Twywell village or by following the footpaths through Twywell Hills and Dales Nature Reserve to the west and north of Twywell Plantation.

Key Features for this site are:

KF1 - Secondary Woodland

KF2 - Connecting People With Woods and Trees

2.2 Extended Description

Twywell Plantation was planted with Larch in 1932, on steeply undulating ground left by former mineral extraction (iron stone, limestone). During the 1950's further planting of Larch, Scot's pine, Sycamore, Oak, Spruce and Corsican pine was carried out.

In some areas ash, birch, willow and sycamore have regenerated where there were gaps in the canopy.

Twywell Plantation was acquired by the Woodland Trust in 1997. Due to the previous dense conifer cover, which was heavily thinned in 2003, and very poor soils there is ill defined shrub layer and species poor field layer.

Shrubs such as elder, hawthorn, blackthorn, willow, dog rose and regenerating ash, sycamore and birch are on the increase

The field layer is similarly poor.

The stretch of land nearest the A14, to the south of the site is flatter and exhibits more natural woodland structure due to its more varied planting and greater age

There is one seasonal pond in the centre of the woodland block which has an associated glade vegetation of rushes and sedges. Other semi permanent water bodies form in the deeper furrows in wet weather.

A number of wide open rides criss-cross the wood, forming an important limestone grassland habitat. The main ride also forms a public foot path that connects to Twywell Village in the east and the rest of Twywell Hills and Dales countryside area in the west.

The wood is bounded on the south side by the A14 trunk road, on the north and west sides by Twywell Gullet SSSI and on the east side by an area of improved pasture.

The site is well used by locals from Twywell village and by visitors from further a field who park in the nearby Hills and Dale's car park. The wood forms part of the Twywell Hills and Dales area managed in association with Rockingham forest Trust and The Land Trust.

Entrance to the site can be gained via 6 kissing gates located along the eastern, western and northern boundary. Access to the entrances can be gained by following the public right of way from the east/Twywell village or by following the footpaths through Twywell Hills and Dales Nature Reserve to the west and north of Twywell Plantation.

Key Features for this site are:

KF1 - Secondary Woodland

KF2 - Connecting People With Woods and Trees

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Access for the public is using the network of permissive paths and public rights of way from the adjoining Hills and Dales Nature Reserve to the west and the public footpaths which cross the site that start in Twywell village to the east. Parking is available in the village of Twywell and then a walk of 2-300m across a grass field to the wood. An alternative is to park in the Hills & Dales car park, just off J11 of the A14 and walk through the Hills & Dales nature reserve to the wood. Be aware that this route contains very uneven ground with steep slopes and steps and can become very muddy when wet. The Wildlife Trust has improved this route and has linked it into the surfaced route in the wood. The main ride through wood is surfaced but off this ride the paths can become very muddy when wet. There is a bus stop in the village of Twywell served by a limited bus service. Call the Travelline on 08712002233 or visit www.traveline.org.uk for available services. The nearest public toilets are in the neighbouring town of Thrapston, next to the Co-op, disabled facilities 8am>6pm.

3.2 Access / Walks

4.0 LONG TERM POLICY

After balanced consideration of the Trust's Woodland Management Approach (WMA) the overall objective is to manage the site as mixed conifer/broadleaved high forest. We intervene in our woods when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient and robust woodlands.

To achieve this corporate objective we will manage the woodland as predominantly high forest consisting of mixed conifer/broadleaf at approximately 10% conifer and 90% broadleaf as the long-term target, along with a maximum of 10% open space. Managed conservation rides/limestone grassland display good regeneration of tree and shrub species, moving further into the stand in areas. Through regeneration felling of conifer species adjacent to rides, the aim is to increase structural diversity and species diversity across the woodland in the long-term, creating improved resilience against pests and diseases, and environmental threats to the woodland such as climate change. A selection of the maturing pines will be retained which will provide character and a link to the past.

The woodland is to be stocked with a proportion of deadwood (both standing and fallen) providing valuable habitat where safe to do so within the constraints of tree safety.

Conservation Features include limestone grassland/conservation rides and a seasonal pond area. Open rides/limestone grassland is to be managed through annual cutting on a rotation over the management plan period of 5 years, creating a transient mosaic habitat. The seasonal pond area will be managed through periodic clearance/coppicing of woody vegetation from the pond edge where needed and clearance of debris from within the pond.

Historic Features include ironstone workings/quarry trenches across the whole site and a historic railway cutting. Management of these features will primarily consist of ensuring that any woodland operations are carried out in a sensitive manner in relation the features.

The Trusts corporate objective of increasing enjoyment of woodland will be achieved by maintaining open pedestrian public access across the site and where possible link into neighboring permissive footpaths across the Twywell Hills and Dales Nature Reserve Ensure and where required enhance safe access, providing on site interpretation and maintaining a tree safety zone along road edges and designated footpaths. This may include silvicultural operations in light of any tree health risks such as *Hymenoscyphus fraxineus* (Chalara/Ash Dieback) where trees within safety zones pose a significant hazard to site users.

5.0 KEY FEATURES

The Key Features of the site are identified and described below. They encapsulate what is important about the site. The short and long-term objectives are stated and any management necessary to maintain and improve the Key Feature.

5.1 Secondary Woodland

Description

An ex ironstone quarry left as Hill & Dale (very large ridge and furrow) and planted between 1930>1948 with a mix of conifers (mainly Scots Pine and European larch) with an area of more diverse planting next to the A14 containing Larch, Corsican pine and Ash. Sycamore may have also been planted or naturally colonised the site as has birch, elm and willow in places. This has created woodland of limited species diversity and age structure. The rides do hold interest as they mirror the important limestone grassland on the adjacent SSSI supporting a range of flora and fauna including bird's-foot trefoil and common spotted orchid, along with buzzards and marbled white, brown argus, green hairstreak, dingy skipper and grizzled skipper butterflies.

Significance

It is a very visible part of the local landscape which is predominantly made up of agricultural grassland. This combination of soils and topography are only found on these ex-ironstone workings leading to opportunities for species uncommon in the wider environment.

Opportunities & Constraints

Constraints:

Very difficult terrain to manage. Ridge and furrow extraction spoil has created steep, unstable slopes throughout the site leading to constraints around harvesting timber and extraction. Very poor soils prone to waterlogging leading to management access problems and slow re-colonisation of plants.

Opportunities:

The wood is adjacent to the SSSI and shares many similarities in soils and topography. Natural succession of broadleaf tree species is good along managed ride edges and could be used to spread structural and species through adjacent areas of the woodland. Ride network good in places meaning areas close to rides maybe more accessible for harvesting/extraction compared to areas within the stand on unstable/steep slopes.

Factors Causing Change

Natural succession to broadleaved woodland.
 Scrub cover over limestone grassland if not managed.
 Impact of ash population through the spread of Ash Dieback/Chalara (*Hymenoscyphus fraxineus*).
 Increase in browsing from deer.

Long term Objective (50 years+)

Woodland to consist of a variety of habitats that interlink with and add to the already nationally important SSSI adjacent. The woodland is to convert to a broadleaf dominated structure in the very long term through the gradual reduction of coniferous species from the stand and the increase in broadleaf species through natural regeneration such as silver birch, field maple, beech and cherry, along with willow and alder in wetter areas. This will enhance structural and species diversity across the site leading to a more resilient and robust woodland when considering issues such as tree disease and climate change.

To maintain and enhance the extent of the important grassland ride habitats which form a minimum of 10% of the total area of the site through cutting an area of scrub annually over the plan period. Manage tree safety through annual inspection of Zone A trees and biennial inspection of Zone B trees.

Additionally, within the constraints of tree safety, increasing amounts of deadwood and old trees will be retained in situ where they do not present a safety hazard to visitors.

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

Potential factors causing change will be monitored as part of a 5 yearly Woodland Condition Assessment and through Key Feature monitoring.

Manage open ride/limestone grassland areas through annual cutting of woody and coarse vegetation on a 5 year cycle, creating a mosaic habitat across the site, benefiting a range of species including a number of recorded butterflies. Additionally, cut back informal footpaths where deemed necessary for visitor enjoyment.

Continue to monitor Ash Dieback/Chalara (*Hymenoscyphus fraxineus*) through annual tree safety inspections, scheduling silvicultural intervention (selective fell) where deemed necessary to reduce risk for site users.

2020 1a, 2a - Install deer exclusion plots (x5 in total) through the stand to provide continuing evidence of deer impact on natural regeneration and ground flora.

2022 1a - Regeneration felling of mature mixed conifer to favour the establishment of natural broadleaf regeneration. Felling areas to be located adjacent to/on the corner of the main ride system where broadleaf species are already established due to previous ride management. To be done through felling of small groups <0.2ha each. Approximately 8 areas in total.

2023 1a - Clear pond area of any significant debris such as logs and coppice surrounding woody vegetation where, increasing light conditions around the pond to encourage marginal vegetation.

Annual site safety and condition assessments will be carried out and will inform any work required. The removal of trees to maintain site safety may be necessary.

Manage open ride/limestone grassland areas through annual rotational cutting over the plan period.

5.2 Connecting People with woods & trees

Description

Originally planted in 1932, Twywell Plantation is now part of the Woodland Trust's Welcoming Sites Programme; aiming to deliver a consistent level of visitor experience across an extensive suite of our woodland estate.

Originally planted with Larch, other trees including Scot's pine, sycamore and oak have since also been introduced, with natural generation occurring among some species.

'Its position in the landscape'

Twywell Plantation forms part of a larger, connected area of greenspace which also includes Twywell Gullet and Twywell Hills and Dales (collectively referred to as Twywell Hills and Dales Nature Reserve).

The wood is bounded on the south side by the A14 trunk road, on the north and west sides by Twywell Gullet SSSI and on the east side by an area of improved pasture.

It is close to various villages, including Twywell, Cranford and Woodford, and is also not far from the larger towns of Thrapston (5 miles) and Kettering (6 miles).

Lying less than 5 miles west of the River Nene, Twywell Plantation is part of the Nene Valley landscape; a feature of significant importance throughout the county of Northamptonshire.

'General description of the access'

The wood is linked by permissive and public rights of way into the surrounding path network, accessible from Twywell village and from the neighboring the Hills & Dales nature reserve. The route through the nature reserve to the wood contains very uneven ground with steep slopes and steps and can become very muddy when wet.

Car parking is available at the Hills and Dales, or alternative parking is also available in the village of Twywell. There is a bus stop in the village of Twywell served by a limited bus service.

A number of wide open rides criss-cross the wood; these are heavily browsed by rabbits and the main ride also forms a public foot path that connects to Twywell Village in the east and the rest of Twywell Hills and Dales countryside area in the west. The main ride through wood is surfaced but off this ride the paths can become very muddy when wet.

The nearest public toilets are in the neighbouring town of Thrapston, next to the Co-op, disabled facilities 8am->6pm.

'Specific furniture/ access point description'

There are 6 entrances, including the main car park. Entrances and welcome signs into the woodland have recently (2018) been renewed.

There are few Woodland Trust signs at the main car park entrance as the land is not owned or managed by the Trust, and visitors must walk some way across neighboring land before reaching

the boundary of our wood.

There is a network of permissive paths and public rights of way on site totaling approximately 3km which cross the site on a grid pattern and allow access for walking. These are difficult in places, with boggy ground and very narrow paths through overgrown areas.

'The visitor profile'

The site is well used by locals from Twywell village and by visitors from further afield who park in the nearby Hills and Dales car park. Anecdotally we know that the wider area as a whole is extremely popular with dog walkers, and there is a very active local dog-walking community. The wider Hills and Dales area is also visited by botanists and butterfly enthusiasts who come to see the species associated with the limestone habitat.

As such the visitor profile is likely to be made up predominantly of frequent, repeat visitors.

There are over 2,000 households within the immediate postcode area, and a population of around 80,000 people just 6 miles away in Kettering.

The site has the benefit of being easily accessible to a rural population on foot from nearby villages and also a large urban population nearby via the A14.

The visitor offer currently present at Twywell Plantation reflects the Trust's original intention of creating places for quiet, informal recreation.

'Nearby Woodland Trust sites'

Nearby Woods owned by the Woodland Trust are Telford Way and Bracher's Wood, but these are both very small, with limited capacity for engagement. Also nearby is Boughton Estate and Grafton Park Wood which are not Woodland Trust owned but which also offer outdoor recreational opportunities to the local population. Rockingham Castle and the Rockingham Forest are both also local, with nearby Fermyn Woods forming part of the Rockingham Estate.

Nearby attractions include Wicksteed Park (<http://wicksteedpark.org/>), Fermyn Woods Country Park (<http://www.northamptonshireparks.co.uk/fermyn-woods-country-park/Pages/default.aspx>), run by Northamptonshire County Council, and Lyveden National Trust property.

'Events and Activities'

There is currently no event programme for this site. There is a possibility of doing joint events with the wider Twywell Hills and Dales reserve, such as guided walks or trails which could encompass the whole site. There is also a possibility of doing an orienteering course through this wood if local groups would be interested.

'Schools'

There are no schools using the site currently. It is too far to walk from local schools and there is no appropriate access or space for them to use onsite.

Local schools include Cranford Church of England Primary School and Woodford Church of England Primary School. These are both very close to the site and there may be opportunities to work with them in future if a suitable interpretation project and access method could be identified.

'Volunteering'

There is currently (2019) a local Woodland Warden volunteer for this site. There has been some interest from local villagers in the past and this could be explored if further suitable roles could be identified. There is the possibility for a working group, however this would require the purchase and storage of equipment and have budget and training implications.

Significance

Twywell Plantation is one of the few woods open to the public locally, and is significant as it is intimately linked to the habitats of the wider Hills and Dales area.

Although accessibility is limited once within the wood, Twywell Plantation is easy to get to, either via local footpaths to nearby Twywell village, or via the A14 from further afield, meaning it's within easy reach of a significant potential visitor base.

The habitats of Twywell Plantation provide visitors with interest; as well as woodland there is a pond in the centre of the woodland which has an associated glade and vegetation of rushes and sedges, as well as other semi-permanent water bodies form in the deeper furrows in wet weather. The wide grassy rides are of interest as they mirror the more extensive limestone grassland found in the adjacent SSSI.

The history of the site is also of significance, as the landscape has been extensively shaped by former mineral extraction, leaving steeply undulating ground which is, on the whole, unusual in the local area.

Opportunities & Constraints

Constraints

The whole of the land (both that managed by Woodland Trust and the adjacent site) is Council owned, although a formal partnership agreement is in place.

Work to engage users is restricted on site because our wood is accessed across land managed by other people

Wood is inaccessible off the ride network due to the steepness of slopes

Off the surfaced path the ground becomes very muddy in wet conditions

Not an easy walk from the Hills and Dales car park entrance

Unsuitable for events with steeply sided, uneven surface with no flat open spaces

Difficulties in erecting signage at entrance because land is not ours

There is an area of land which is subject to disputed ownership, where gates 5 and 6 sit, and who is responsible for the maintenance work on these gates needs to be established.

Opportunities

Close to Twywell village

Part of the larger Hills & Dales nature reserve

Next to major transport route, the A14, with good transport links

Close to large urban population of Kettering

The site is crossed by and adjacent to a number of public footpaths and PROWs

Partnership opportunities with Council and Rockingham Forest Trust.

Historical features of interest on site, including old ironstone workings, archaeological features and the remains of an old quarrying rail trackway.

Improvements in signage at entrance to signpost people to our part of the site

Factors Causing Change

Harvesting operations are likely due to take place over coming years which will impact on which paths are open and accessible to the public. This will need to be appropriately communicated to visitors in a timely fashion.

Increase in litter accumulating from A14 parking parking/rest stop area on boundary with woodland.

Erosion of footpaths where located next to slope.

Long term Objective (50 years+)

Twywell Plantation is one of the Trust's key woods within Northamptonshire and forms part of the wider Twywell Hills and Dales reserve which is a designated Site of Special Scientific Interest . The site provides an excellent visitor experience throughout the year and as such the site will be welcoming with signed entrances and a managed path network in perpetuity.

Increased awareness of the wood among local people/users of the wider Twywell Hills and Dales reserve.

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

Maintain the present ride and path network of approximately 3km to a good standard. This will be achieved through maintaining the entrances annually and through Key Feature monitoring. Also monitor the use of the woodland by members of the public and respond appropriately if the level of usage/activities start to have an adverse impact.

Carry out biannual litterpick of woodland boundary with A14, concentrating on car park/rest stop area to ensure that litter on the site is kept to a minimum.

Explore joint interpretation with the wider Twywell Hills and Dales reserve at the main entrance/car park on site with a final product in place by the end of 2024.

Access provision will be in keeping with WT access guidelines. Achieved by ensuring that:

Upgrade entrances to improve access & visitor welcome in line with entrance audit finding by 2019

The site is kept safe and through undertaking regular site safety surveys (as per risk assessment)

New volunteer activity and volunteer roles will be encouraged where there is a desire, with the assistance of the Volunteer Development Officer.

Replace finger post (2021)

Explore with neighbouring land manager whether work can be done to improve access to our own site by improving the drainage and surfacing of the paths in their site which lead to ours. Explore ways in which this might be jointly funded. Due by 2024.

If available resource can be found, there is opportunity to develop guided walks, bat nights, and other public activities which may be delivered by the Woodland Trust or a third party. Due by 2024

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
------	--------------	-------------	--------

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	14.00	Scots pine	1950	Min-intervention	Gullies/Deep Valleys/Uneven/Rocky ground	Connecting People with woods & trees, Secondary Woodland	Other
<p>A plantation of larch, sycamore, scots pine planted in 1949-50 with some later plantings of ash, larch and spruce up to 1957. The eastern bank facing the village was part planted with a variety of other species including black poplar, beech and Lawson Cypruss. The area around a central permanent pond has been colonised by willows and birch. Some of the deeper furrows in 'hill & dale' do flood in wet weather. Landform typical of area of ex-ironstone workings in East Northants . A ridge and furrow landscape of deep V shaped trenches and high ridges oriented south west to northeast, work started in the 1920's and was closed in 1948. This difficult terrain has been levelled out in places to form a long central 6m wide ride running parallel with the ridges and 5 short cross rides at right angles to the ridge and furrow. Understorey not well developed due to being an ex quarry, but has been improving in density and variety since the heavy thinning of 2003. Field layer missing for the most part with the ground layer being a thick moss carpet where the conifer canopy is still dense and an ever increasing carpet of Wild Strawberries (2007). Some grasses, sedges and rushes in the open glades and near the central pond, some small ant hills have developed on the rabbit browsed rides</p> <p>The Key Features within this compartment are: KF1 Secondary Woodland KF2 Connecting People With Woods & Trees</p>							
2a	2.00	Ash	1950	Min-intervention	Very steep slope/cliff/quarry/mine shafts/sink holes etc	Connecting People with woods & trees, Secondary Woodland	Other

A narrow strip of land to the south of the main ridge and furrow cpt 1. Demarked by the edge of an old railway line which served the Islip steel works and by a high fence adjacent to the A14 trunk road. Differs from cpt 1 in that it is not ridge and furrow but does contain a railway cutting. Species mix is larch, Corsican pine, sycamore and ash along with elm regeneration and willow. A more natural looking compartment with elements from the older 1930's planting still in existence. Understorey of hawthorn and elder is more defined here and is dominant on old railway embankements. Ground layer is unremarkable over most of the cpt being mainly moss or nettle but in southern section on the path a few twayblades located in April 2001.

The Key Features within this compartment are:

KF1 Secondary Woodland

KF2 Connecting People With Woods & Trees

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2022	1a	Selective Fell	2.00	125	250
2032	1a	Selective Fell	2.00	125	250

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. Either by hand cutting or with carefully selected weed killers such as glyphosate.

Windblow/Windthrow

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