Twywell Plantation
(Plan period – 2024 to 2029)



Management Plan Content Page

Introduction to the Woodland Trust Estate

Management of the Woodland Trust Estate

The Public Management Plan

Location and Access

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 woodled 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 seminatural 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
- 2. Site Description
- 3. Long Term Policy
- 4. Key Features
 - 4.1 F1 Secondary Woodland
 - 4.2 F2 Connecting People with woods & trees
- 5. Work Programme

Appendix 1: Compartment Descriptions

GLOSSARY

1. SITE DETAILS

Twywell Plantation

Location: Kettering Grid reference: SP947776 OS 1:50,000 Sheet No. 141

Area: 15.33 hectares (37.88 acres)

External Designations: Rockingham Forest

Internal Designations: Welcoming Sites Programme

2. SITE DESCRIPTION

Twywell Plantation was acquired by the Woodland Trust in 1997; it forms part of the Hills and Dales Country Park, which includes Twywell Gullet SSSI, an excellent site for butterflies. The woodland is well used by both locals and visitors from further afield who can park in the nearby Hills and Dales car park. It is managed in association with Rockingham Forest Trust and The Land Trust.

Much of the site has steeply undulating ground left by former mineral extraction - iron stone and limestone – which was planted with larch in 1932. During the 1950's there was further planting of larch, Scot's pine, sycamore, oak, spruce and Corsican pine. The resulting dense canopy and poor soil has led to an ill-defined shrub layer and species poor field layer. To increase the proportion of native broadleaf species, in 2003, The Woodland Trust have began a programme to gradually thin the conifers. This has encouraged natural regeneration across the site; ash, sycamore, birch, beech, sorbus, willow, elder, hawthorn, blackthorn, hazel, cornus and dog rose are now found along the rides, woodland edge and where the canopy is more open.

The narrow strip of land running along the A14 to the south of the site is flatter with more varied broadleaved woodland planting.

There is a seasonal pond in the centre of the woodland and semi-permanent water bodies form in the deeper furrows in wet weather. A number of wide, open rides cross the wood, forming an important mosaic of limestone grassland and scrub habitat. A public footpath that connects Twywell Village in the east with the Hills and Dales carpark in the west runs along the main ride. Access to the wood is via the public right of way from Twywell village in the east, or along footpaths through the Hills and Dales Country Park to the west and north of Twywell Plantation.

The A14 trunk road forms the boundary on the south side, with Twywell Gullet SSSI to the north and west, and an area of improved pasture to the east.

Key Features for this site are: -

KF1 - Secondary Woodland

KF2 - Connecting People with Woods and Trees

3. LONG TERM POLICY

Twywell Plantation will become a mixed conifer (~10%) and broadleaved (~90%) high forest. Whilst most of the existing conifers will gradually be replaced with a range of broadleaf species through natural regeneration, a number of mature pines will be retained to provide a link with the past. The wood will be diverse in tree species and age structure with an established understorey. This will enable the wood to be more resilient to change in the future and also ensure that it supports the greatest range of wildlife. The plantation will contain a good level of deadwood (both standing and fallen) providing valuable habitat. Silvicultural management will take place when necessary to ensure these woodland conditions are present and to encourage natural regeneration to occur. There will be a network of managed footpaths and wide, sunny rides throughout the wood creating a mosaic of limestone grassland evolving through to scrub habitat. These areas will benefit wildlife requiring open habitat conditions whilst also creating variety and interest for visitors enjoying the wood. The seasonal pond area will provide a valuable woodland wetland habitat and will be kept clear of any debris and encroaching or overhanging vegetation. A good standard of low-key access provision will be maintained at Twywell Plantation. The path network will be kept open for use and the entrances will be welcoming, accessible and clearly signed. The wood will be made as safe as practical for visitors through regular inspections and tree safety work.

4. KEY FEATURES

4.1 F1 Secondary Woodland

Description

Twywell Plantation is a conifer dominated woodland planted on the large, steep ridge and furrow site of an old ironstone quarry which has created woodland of limited species diversity and age structure. A greater variety of broadleaves are found in the area running along the A14 and also in the natural regeneration following silvicultural work. Sycamore, willow and birch dominate the natural regeneration. The wide rides mirror the important limestone grassland on the adjacent SSSI and are managed to create a succession of habitats from grassland through to scrub. They support 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

Twywell Plantation forms part of the Hills and Dales complex of habitats and is adjacent to Twywell Gullet SSSI. The combination of soils and topography are only found on these old ironstone workings leading to opportunities for species less common in the wider environment. In an area of predominantly agricultural grassland, the plantation provides a valuable area of woodland.

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 soil which is prone to waterlogging leads to management access problems and slow re-colonisation of plants.

Opportunities:

The wood is adjacent to Twywell Gullet SSSI with similar soil and topography.

Natural succession of broadleaf tree species is good along managed ride edges which is increasing the structural and species diversity through adjacent areas of the woodland.

Ride network is accessible in some places for harvesting/extraction.

Factors Causing Change

Scrub encroaching over limestone grassland if not managed.

Pests and diseases (e.g. Ash Dieback throughout the site).

Increase in browsing from deer.

Long term Objective (50 years+)

Twywell plantation will consist of a variety of habitats that interlink with and add to the already nationally important adjacent SSSI. The woodland will become predominantly broadleaf through the gradual reduction of conifers from the stand and the increase in native broadleaves through natural regeneration. This will enhance the 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. The wood will contain a good proportion of standing and fallen deadwood habitat. The wide rides will include a succession of habitats from limestone grassland through to scrub.

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

To increase and diversify the habitats within the woodland and compliment those of the adjacent Hills and Dales SSSI. This will be achieved by sequential thinning of the conifers with the regen monitored to ensure a mix of species with possible planting of broadleaves if necessary. Coppicing some of the sycamore regen will also reduce the spread of sycamore whilst increasing structural diversity. Ash Dieback – ash trees will be monitored for safety, and left as standing deadwood if possible, with intervention where necessary.

Continue with the 5-year rotational scrub management plan along the rides which keeps the rides wide and open and ensures a mosaic of grassland through to scrub across the woodland. The northwest facing bank along the northern boundary provides a good habitat for insects and butterflies and will be managed cyclically to prevent scrub encroachment along the path and create a variety of structures.

The pond will be kept clear of fallen branches and debris. Coppicing or felling the trees/shrubs, particularly along the southern edge of the pond will reduce shading and allow in more light.

4.2 F2 Connecting People with woods & trees

Description

Twywell Plantation is a popular wood which forms part of the larger Twywell Hills and Dales Nature Reserve. There is a network of permissive paths and public rights of way through the wood – approx. 3km – which links with the footpath to Twywell village in the east and the neighbouring Hills & Dales nature reserve to the north and west. The route through the nature reserve to the wood contains uneven ground with steep slopes and steps and can become very muddy when wet. The wood lies within the Nene valley and is close to the villages of Twywell, Cranford and Woodford, and 5 miles from the larger towns of Thrapston and Kettering. The site is popular with both dog walkers and also botanists and butterfly enthusiasts who come to see the species associated with the limestone habitat. Car parking is available in the Hills and Dales car park.

Significance

Twywell Plantation is one of the few woods open to the public locally It is linked to the wider Hills and Dales area which is an important site for butterflies.

The variety of habitats - woodland, limestone grassland, scrub and a pond in the centre of the woodland, as well as other semi-permanent water bodies which form in the deeper furrows in wet weather -create an interesting walk for visitors

The history of the site is also of significance, as the landscape has been extensively shaped by former mineral extraction, leaving steeply undulating ground.

It is accessible by footpath from Twywell village, and the Hills and Dales Country Park carpark which is close to the A14.

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. The plantation is accessed across land managed by other Trusts.

The wood is difficult to access off the ride network due to the steepness of slopes.

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

Uneven walk from the Hills and Dales car park entrance.

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 and adjoining 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.

Partnership opportunities with the local council, The Land Trust/Groundworks 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.

Factors Causing Change

Harvesting operations will temporarily impact on paths that are open and accessible to the public. 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 a Site of Special Scientific Interest. The site provides an excellent visitor experience throughout the year and as such the wood will be welcoming with signed entrances and a managed path network in perpetuity.

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

To maintain the site as an area of informal public access, with the rides and pathways annually cut and kept cleared of any encroaching vegetation. Entrances will be maintained and kept welcoming through vegetation clearance and sign maintenance (cleaning and replacement when required).

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.

5. WORK PROGRAMME

Year	Type Of Work	Description	Due Date
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	December
2025	SL - Tree Safety Inspections	The provision of external consultants/contractors to provide specialist tree safety related advice / inspections – such as climbing inspections	July
2025	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	August
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,	September
2025	SL - Tree Safety Silviculture Work	Retrieving data. Wait a few seconds and try to cut or copy again.	December
2026	WMI - General Site Restoration Work	Works associated with initial or restoration phases to conservation and physical features within the sites such as boundary ditches, fences and walls, hedges, infield and boundary trees	July
2026	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
2026	SL - Tree Safety Inspections	The provision of external consultants/contractors to provide specialist tree safety related advice / inspections – such as climbing inspections	August
2026	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	December
2026	WMI - General Site Restoration Work	Works associated with initial or restoration phases to conservation and physical features within the sites such as boundary ditches, fences and walls, hedges, infield and boundary trees	January
2027	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
2027	SL - Tree Safety Inspections	The provision of external consultants/contractors to provide specialist tree safety related advice / inspections – such as climbing inspections	August

Year	Type Of Work	Description	Due Date
2027	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	December
2028	SL - Tree Safety Inspections	The provision of external consultants/contractors to provide specialist tree safety related advice / inspections – such as climbing inspections	August
2028	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
2028	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	December
2029	SL - Tree Safety Inspections	The provision of external consultants/contractors to provide specialist tree safety related advice / inspections – such as climbing inspections	August
2029	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

APPENDIX 1 : COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
1a	14	Scots pine	1950	Min- intervention	Gullies/Deep Valleys/Uneven/Rocky ground	Other

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

The Key Features within this compartment are:

KF1 Secondary Woodland

KF2 Connecting People With Woods & Trees

Ī	2a	2	Ash	1950	Min-	Very steep	Other
					intervention	slope/cliff/quarry/mine	
						shafts/sink holes etc	

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

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.

Registered Office:

The Woodland Trust, Kempton Way, Grantham, Lincolnshire NG31 6LL.

The Woodland Trust is a charity registered in England and Wales no. 294344 and in Scotland no. SC038885. A non-profit making company limited by guarantee. Registered in England no. 1982873. The Woodland Trust logo is a registered trademark.