# Hargate Forest (Plan period - 2023 to 2028)



# Management Plan Content Page

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# 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<sup>®</sup> (FSC<sup>®</sup>) 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

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## Appendix 1 : Compartment Descriptions

GLOSSARY

# 1. SITE DETAILS

# Hargate Forest

Location:	Tunbridge Wells. Grid reference: TQ574370
Area:	61.72 hectares (152.51 acres)
External Designations:	Area of Outstanding Natural Beauty
Internal Designations:	Ancient Woodland Restoration Project

# 2. SITE DESCRIPTION

Hargate Forest is a large area of mixed coniferous and broadleaved woodland, immediately south of Tunbridge Wells, Kent. Apart from the main public entrance off Broadwater Down (in Tunbridge Wells, Kent), the wood lies within the Wealden District of East Sussex and is also within the High Weald Area of Outstanding Natural Beauty (AONB) and Natural Character Area (NCA). The NCA is characterised by east-west sandstone ridges and valleys covered by a mixture of fields, small woodlands and farmsteads connected by historic routeways. The underlying geology is Cretaceous Ashdown Beds which give rise to very acid, often waterlogged podzol soils. The site is very prominent in the landscape particularly from the south.

The site was acquired by The Woodland Trust in October 1996, having previously been part of the nearby Nevill Estate. The purchase was assisted by a grant from the Heritage Lottery Fund and a very successful local fund-raising campaign organised by the Friends of Hargate Forest.

The site is well documented, being historically part of Eridge Park and the wider Waterdown Forest which was one of the four Forests of the Weald, along with Ashdown, Worth and St Leonards. Map and other evidence suggest a history of open heath being enclosed piecemeal and 'improved' in the post-medieval period. The site was known as Hargate Forest and planted with conifers from the 1846 Tithe map. 'The Old Carriageway', a route between Eridge Castle and St Mark's church, also dates from this time. The ride was originally lined by exotic conifers (some of which are still in place) and rhododendrons which were cleared in 2009.

The Forest contains a variety of woodland types and other habitats. There are areas of semi-mature conifers (Scots and Corsican pine, western hemlock, larch and Douglas fir) planted in 1950 and 1960. The north-east of the site has a large area of younger mixed conifers (Corsican pine, Scots pine, Norway spruce, Japanese Larch) planted in 1986. The southern part of the wood south of Sprat's Brook is largely broadleaved, with part known as the Old Forest (Cpt 4c). This area along with the gills containing Sprat's Brook and its tributaries, contain a number of ancient woodland indicator species such as wood anemone and bluebell as well as coppiced trees although none of the site is designated as ancient woodland. There are 3 areas of mixed broadleaved re-stocking planted in 1993 and 1995 (Cpts 2b, 3e and 4a).

At the highest point of the site (c130m) is an area of open lowland heathland. This was created from areas of windblown and fire-damaged conifer plantations in 1998 and extended in 2009. The eastern part is known locally as Mount Nod and provides views across Broadwater Warren to Ashdown Forest. Ground flora includes heather (ling), cross-leaved heath, purple moor grass and dwarf gorse.

The site has a good network of wide rides and smaller paths which allow for high levels of public access. Some rides also have a high conservation value due to their ground flora and provide additional open habitat.

Since acquiring the site the Woodland Trust has undertaken extensive works including restoration conifer thinning, coppicing, ride management and extensive clearance of Rhododendron ponticum. The main access track and entrance from Broadwater Down was up-graded in 2022 and one of the main rides was regraded to improve public access.

# 3. LONG TERM POLICY

In 50 years' time Hargate Forest will be predominantly broadleaved woodland with areas of lowland heathland and acid grassland in the form of managed large clearings, glades and wide rides. Some mature conifers will be present across the site providing additional structural variety and aesthetic value as well as particular ecological niches.

In order to achieve this vision, a continuous-cover silvicultural approach will be continued to aid transformation of the areas that currently have a predominantly conifer canopy towards a predominantly broadleaved composition. Future canopy species are likely to be oak, birch, beech, rowan, yew and holly that are already present within the conifer stands. Mature specimens of Douglas fir, Scots pine and larch could make up 20% of the canopy.

The continuous-cover approach excludes clear-felling and uses targeted, selective thinning on a 5-10 year cycle to favour existing broadleaved trees, areas of natural regeneration as well as conifers that can be grown as a timber crop and some that will make long-term retentions. Existing veteran trees (mainly beech) will be retained as long as possible and the next cohort of veterans will emerge from current semi-mature oak and beech, mainly in the southern half of the site.

As conifer stands are thinned the existing heathy ground flora will continue to develop and natural regeneration of desirable tree species will be recruited into the understorey initially and into the canopy in the long term. The site will be free of damaging invasive species such as rhododendron.

There will continue to be an area maintained as open heathland with associated plant species and extensive external and internal views. Areas of broadleaved trees surrounding the open heath and along major ride edges will be managed to provide a buffer to the surrounding high forest. Coppicing small sections on a regular basis will provide a succession from temporary open ground, through dense scrub, to semi-mature trees. The older broadleaved areas along the gills and in the Old Forest will be allowed to develop naturally with minimum intervention and will continue to be of high biodiversity value.

The extensive network of paths and rides will be maintained to cater for high visitor numbers while retaining the site's natural appeal and tranquillity as far as is possible. The entrances will be maintained in good condition to provide a welcoming aspect to visitors, both local and from further afield.

# 4. KEY FEATURES

## 4.1 f1 Long Established Woodland of Plantation Origin

#### Description

This key feature covers the majority of the site which can be described as wooded heath. The site has an intermittent history of being wooded since at least the early 18th century (Roper, 2008) and with conifers being present since the mid-19th century (Bannister, 2011). It currently includes productive plantations of exotic and native conifers and younger plantations of native broadleaves. The ground flora is similar in composition throughout but varies greatly in quantity, influenced by the level of shading and previous invasion by Rhododendron ponticum. There is heather, bracken and bramble throughout with extensive areas of mosses, particularly in wet flushes and along stream-sides. The tributary gills are of very high biodiversity value containing extensive mosses, liverworts and ferns as well as native broadleaves. On the gill sides are occasional bluebells.

There are 2 distinct age-classes of conifer present. The central part of the wood, mainly between Broadview ride and Sprat's Brook gill, contains mature (P50) Douglas fir, Scots and Corsican pine with a few remaining Sitka spruce on the edges of the tributary streams. Within the conifers are broadleaves typical of the wet, acidic soils of this area: oak; birch; rowan; holly; yew. In the north-west of the site western hemlock, Japanese larch and Corsican pine (P60) dominate while again there are a few broadleaves including oak, beech, birch and rowan. The north-east section of the wood is largely younger mixed conifers (P86), mainly Corsican pine with some Scots pine and Japanese larch and Norway spruce.

The mature conifers have been thinned at intervals over the last 20 years, with the younger conifers having their first thin in 2013. All areas of rhododendron have been cut and an annual programme of control by herbicide application has been in place subsequently.

There are 3 main areas of broadleaved planting (Subcpts 2d, 3e and 4a). These were established in 1993 and 1995 at 1100 trees/ha. There is now extensive natural regeneration of birch and goat willow in these areas. In areas where conifer crops have been removed or failed there are naturally regenerated birch stands, particularly along Broadview. Small sections of these birch stands have been coppiced periodically since 2012.

#### Significance

Long established secondary woodland can be a very biodiverse habitat, supporting a large range of species. Hargate Forest lies within the diverse landscape of the High Weald which includes extensive woodland, restored heathland and farmland, providing a habitat network beyond the boundaries of the site.

Its documented history suggests that it originated from 'waste', both heath and wood, and has had little if any agricultural improvement that has substantially altered the soils.

Within the plantations are areas of semi-natural habitat such as heathland and sphagnum bog. The wood currently

contains a good range of tree species and age-classes and a varied ground flora for the soil types present. Regular thinning of conifers has allowed continued growth of existing broadleaves, the development of natural regeneration and the re-emergence of the heathy ground flora.

#### **Opportunities & Constraints**

**Opportunities:-**

To realise the potential timber income from thinning to subsidise other habitat management within the site.

Constraints:-

Steep slopes, gills and soils prone to waterlogging limit access by harvesting machinery.

#### Factors Causing Change

Invasive rhododendron.

Natural regeneration of birch, Scots pine, oak, western hemlock, Douglas fir etc. Changes in species composition due to disease eg Dothistroma needle blight on pine spp. Deer browsing on natural regeneration of desirable tree species.

#### Long term Objective (50 years+)

Conifers will no longer dominate the canopy although scattered specimen trees including Douglas fir and Scots pine will be retained as part of the woodland matrix. The conifer canopy will be replaced by young and maturing native broadleaved trees with an associated wide range of flora and fauna typical of heathy High Weald woodland. Oak and birch will be the main canopy species alongside beech, rowan, holly, willow and yew.

In places the high forest woodland will grade into scrub, heathland and, in the wetter areas, bog. There will be a full range of age-classes from saplings to veteran trees and the proportion of standing and fallen deadwood will have increased. Invasive species such as rhododendron will not be a threat to any components of the habitat.

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

During the plan period 2023-28 thinning will continue in both the younger and older conifer stands, rhododendron regrowth and seedlings will be controlled and structural diversity will be increased by managing stands of birch and ride edges. This will be achieved by the following:-

- Selective thinning of approx 12.5ha of mixed conifers (CP, SP, JL, NS) in Subcpts 2b and 3g in 2023. Removal of approx 25% conifers to favour broadleaved trees, ride-edges and patches of natural regeneration.

- Selective thinning of approx 4.5ha mixed conifers (WH, JL, CP) in Subcpt 1b in 2024. Removal of approx 25% conifers to favour broadleaved trees, ride-edges, mature SP and patches of natural regeneration.

- Coppice approx 1ha birch in total in Subcpts 2a and 3b over the period 2023-28. Subsequent regrowth should be a minimum of 1.5m in height before adjacent areas are coppiced.

- Annual control of rhododendron regrowth and seedlings by pulling and herbicide application only where necessary. Net area to control approx 0.1ha distributed across the site.

- Undertake herbivore impact assessment ('lite') winter 2023/24.

- Undertake 5-yearly Ancient Woodland Restoration (AWR) assessment of conifer areas across the site. Next due spring 2028.

# 4.2 f2 Natural Secondary Woodland

#### Description

This key feature relates to The Old Forest (Subcpt 4c) and to the Sprat's Brook gill area (Subcpt 3f). As with the rest of the site, this area has an intermittent history of being woodland although the steep sides of the gill have probably always been wooded. Over the last 100 years or so the Old Forest has developed into a 2-storey, semi-natural broadleaved woodland with a canopy dominated by pedunculate oak. The understorey contains much birch, planted oak (P95) and some sweet chestnut coppice. Towards the southern end the oak is replaced by more open, mature birch. The Old Forest also contains some of the largest and oldest trees on the site, mainly beeches approximately 200 years old.

Ground flora is typical of long-established woodland on more base-poor soils in the High Weald. Woodland plants including bluebell, yellow pimpernel and lily of the valley are present although not in the abundance that would be expected in ancient woodland. Bramble becomes extensive where light levels are higher.

Sprat's Brook rises in the east of the site from a sphagnum bog and flows westwards, with the valley narrowing in places to form a typical Wealden gill. This has small cascades, waterfalls, sandrock exposures and much coarse woody debris. The warm and humid microclimate of the gill makes it a haven for mosses, liverworts and ferns. There is a recently created pond at the western end of the gill but its wildlife value is compromised by visitors' dogs using it on a regular basis. The tributary streams flowing in from the north have similarly wildlife-rich valleys and gills associated with them although previous conifer planting and rhododendron compromised them for decades.

Tree species along the stream include mature oak and beech (with some large veteran trees), birch, alder, willow, aspen and yew. Like the rest of the Forest this area had a major invasion of Rhododendron ponticum which has now been removed.

#### Significance

Both the woodland and gill habitats are important at a regional and national level. These areas also represent the most natural habitats on the site, having a long history as woodland and being dominated by native tree and ground flora species.

Previous management has removed the threat from invasive rhododendron and Himalayan balsam that was present along the stream. The heavy shade and needle litter from conifers, in and close to the gill, has also been removed gradually over the last 20 years of the Trust's ownership.

The Sprat's Brook gill is typical of deeply-incised, small stream valleys in the High Weald with their distinct geology and microclimate which supports regionally and internationally important lower plant floras.

#### **Opportunities & Constraints**

**Opportunities:-**

To use these areas as minimum intervention zones, buffering more actively managed conifer stands.

Constraints:-

Sensitive area for ground flora therefore any operations need careful planning and timing.

Steep slopes and soils prone to waterlogging restrict the use of machinery. Use of herbicides needs to be restricted due to proximity of water courses and important ground flora.

## **Factors Causing Change**

Invasive non-native species: rhododendron previously present. Natural regeneration of non-native species such as Douglas fir. Collapse of veteran trees and subsequent succession of gaps. Deer browsing of regeneration of desirable tree species.

## Long term Objective (50 years+)

In the long term these areas will be dominated by large, over-mature oaks which will be beginning to develop veteran characteristics. Another cohort of future veterans will begin to develop from species such as beech and yew. Shorter lived species such as birch and the current veteran beeches will collapse creating canopy gaps that will succeed through bramble and birch scrub to semi-mature mixed broadleaves. There will continue to be a range of other site-appropriate tree species present, in several age-classes, including rowan, alder, holly, aspen and willow.

Ground flora will continue to include woodland specialist species such as bluebell and lily-of-the-valley in the Old Forest and a wide range of ferns, mosses and liverworts in the gills.

Invasive non-native species such as rhododendron will not pose a threat to the overall biodiversity of the area.

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

During the plan period 2023-28 these areas will have minimum intervention except for monitoring.

- Monitor Sprats's Brook and The Old Forest (Subcpts 3f and 4c) for presence of rhododendron, conifer regen and condition of veteran beeches. 2026.

- Undertake herbivore impact assessment ('lite') winter 2023/24.

- 5-yearly woodland condition assessment. Next due May 2028.

## 4.3 f3 Semi Natural Open Ground Habitat

#### Description

Hargate Forest lies entirely on the Cretaceous Ashdown Beds which naturally give rise to highly acidic podzol soils that support lowland heathland habitat when unimproved and not heavily shaded. Historical evidence suggests Hargate Forest has never been extensively cultivated but has had a long history as 'waste', both as heath and woodland. Heather grows extensively on the site wherever light levels permit. The first areas of open habitat (west section of Subcpt 1c and most Subcpt 2d) were cleared of burnt conifers and birch scrub following a spate of fires in 1997. Heather regenerated well and the areas were subsequently managed as open lowland heathland under a Countryside Steward Scheme agreement from 1998 to 2008. The section linking these two areas was clearfelled of young pine in 2009 and the eastern area extended, creating a total area of approx 4 hectares.

At the western end the area slopes steeply down to the west from a high point of approx 130m from where there are extensive views to the west and south-west. This area is known locally as Mount Nod. The rest of the area is relatively level and poorly drained in places.

The area now contains a mix of heather (Calluna vulgaris), cross-leaved heath (Erica tetralix), bracken, purple moor grass (Molinia caerulea) and bramble. There is also a single plant of royal fern (Osmunda regalis). Common and dwarf gorse also occur occasionally. Natural regeneration of birch is frequent, along with Scots pine, rowan, goat willow and western hemlock. This was previously controlled by mowing and more recently by pulling seedlings. There are small clumps of pine and birch in Subcpt 2d and a fringe of mixed broadleaves around the boundaries with adjoining Montacute Field, which is outside of WT ownership.

The heathland area connects with wide rides known as The Link to the east and Broadview to the south. Both of these rides have a heathy ground flora including heather and Molinia. There is also a small (approx 0.25ha) area of acid grassland in the north-east corner of Subcpt 4a and a 20m-wide firebreak along the boundary with Strawberry Close (Subcpt 1a).

#### Significance

The area of lowland heath in southern England has declined drastically over the last 100 years due to lack of grazing, afforestation and development. It is a UK Biodiversity Action Plan (BAP) Priority Habitat and Sussex BAP habitat. It is also a man-made habitat that needs regular management to maintain its high biodiversity value. The area around Tunbridge Wells has many small scattered heathland fragments and to the south-west is the Ashdown Forest, the largest area of lowland heath in the country. The RSPB is also managing a significant area of heathland on their nearby Broadwater Warren reserve, 1.5km to the west.

Simple, regular management can now maintain this area of open habitat which supports locally important populations of heathland plants but is also subject to high levels of public access which have had a detrimental impact particularly on ground-nesting birds.

#### **Opportunities & Constraints**

#### Opportunities

To maintain an attractive, open area of internationally important lowland heathland within a large woodland. To maintain extensive external and internal views. To provide an area of habitat within a wider local network of similar habitat.

Constraints.

Steep slope in Subcpt 1c.

High fire risk.

High levels of public access exclude potential management by grazing and cause disturbance to ground-nesting birds.

# Factors Causing Change

Natural regeneration of birch, willow, pine etc Spread of bracken.

#### Long term Objective (50 years+)

In the long term the extent of open habitats, comprising managed heathland and grassland, wide rides and glades will total approximately 15% of the site. Key ground flora species will include heather, cross-leaved heath and purple moor grass, with common and dwarf gorse. The heathland area will be buffered by birch and willow scrub of various age-classes, both within the 2 subcpts and also in adjoining stands.

The main ride network will be maintained to a sufficient width to allow ground flora species to flourish and ride edges will be managed on a short rotation to create a graded structure.

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

During the plan period 2023-28 the open heathland area will be maintained at its current extent and the ride network will be managed, with a 2-zone system created where appropriate and possible. These objectives will be achieved through the following:-

- Annual bracken-rolling (August). Subcpts 1a, 1c, 2d. Approx 2ha.
- Annual control of scrub on heathland by pulling (September). Subcpts 1c, 2d. Approx 1ha
- Annual mowing of ride network (September). Approx 3250m.
- Ride-edge coppicing (Sept-Nov). Approx 1000m in total over the plan period.

#### 4.4 f4 Connecting People with woods & trees

#### Description

Hargate Forest is a Woodland Trust Access Category A site with more than 20 visitors per day using one entrance. The site lies on the southern edge of Tunbridge Wells, Kent (pop 59,947 in 2016) with approx 4,500 people living within 1km of the site. With its mature conifers, open heathland and extensive views across the High Weald, it provides a rural, semi-natural amenity very close to the town centre. It complements other publicly-accessible open space nearby such as RSPB Broadwater and Tunbridge Wells, Rusthall and Southborough Commons. There are also 3 smaller Woodland Trust woods within the town: Friezland Wood, Hurst Wood and Nellington Wood.

There are 2 entrances off Broadwater Down where there is on-street parking. The site provides a clear welcome with well-maintained entrances, signs, orientation panels and information posters. Both entrances have kissing gates suitable for disabled access with a RADAR key. At the western end of Broadwater Down the entrance leads onto a wide surfaced ride known as Hargate Strait which runs south into the wood for approx 800m. Permissive access has also been agreed with the Nevill Estate to provide a second access point 350m east along Broadwater Down through 'the Bunker Area'. From this entrance a surfaced path runs approx 200m to the start of the Trust's ownership.

The network of wide rides totals approx 3.5km and added to the narrower paths within the trees, allows for walks of various lengths and can take in a wide variety of woodland types and a selection of internal and external views. Other than Hargate Strait, no other rides are surfaced and conditions can be extremely wet underfoot in places. Site infrastructure includes footbridges over small streams, several benches and dog waste bins at both entrances.

#### Significance

Hargate Forest provides a large area of woodland and other habitats for informal recreation to a large local population. It is used by many people who arrive on foot and by car. It is a good example of woodland under active management for multiple objectives.

Although immediately adjacent to a large urban area the site has a very rural feel to it which is added to by extensive views over the surrounding heavily-wooded landscape, a designated Area of Outstanding Natural Beauty. The long period of use of the site by the public has led to an extensive knowledge of its history and wildlife.

#### **Opportunities & Constraints**

Opportunities To maintain the ride network for the benefit of both public access and biodiversity.

Constraints WT does not own the land at either entrance. Lack of car parking. Lack of links to the wider public rights of way network. Geology and soils lead to extensive waterlogging during wet weather. Potential conflict caused by high levels of public access (particularly dog-walkers) and nature conservation.

#### Factors Causing Change

Increasing development and population density in the immediate and wider urban and rural areas will put additional pressure on the site in terms of visitor numbers, increased anti-social behaviour and parking difficulties.

The RSPB has a 'dogs on leads' policy at Broadwater Warren from March-September. This causes a significant increase in dog-walkers to Hargate during this period, further adding to conflict with other users and wildlife.

#### Long term Objective (50 years+)

To provide a safe, enjoyable and varied woodland experience for visitors, with a good network of maintained routes, entrances and infrastructure in line with the site's Category 1 status.

The site should be well-liked, used and respected by the local community who will play some part in its upkeep such as by litter-picking, recording wildlife or acting as 'ears and eyes' for the Trust.

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

Over the plan period 2023-28 the entrances and ride and path network will be maintained annually. Visitor infrastructure and tree safety along maintained routes will be inspected and remedial work undertaken as necessary.

- Annual path maintenance programme (June and September) on approx 3500m of wide ride + 2000m of minor rides and paths.

- Annual inspection of footbridges, culverts and benches.

- Undertake approx 1000m of ride-side coppicing during the plan period – see semi-natural open ground habitat KF.

# 5. WORK PROGRAMME

Year	Type Of Work	Description	Due Date			
2023	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	August			
2023	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			
2023	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	September			
2023	LC - Routine Litter Picks	Planned/routine litter picks using contractors				
2023	WMM - Coppice Management	Works associated with the management of coppice areas – such as coppicing, maintenance of protective fencing, etc				
2023	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	November			
2023	WMM - Ride Management	Works associated with the management of existing rides/open areas for biodiversity - ride edge coppicing and thinning programmes, ditch works	November			
2023	LC - Routine Litter Picks	Planned/routine litter picks using contractors	December			
2024	LC - Routine Litter Picks	e Litter Planned/routine litter picks using contractors				
2024	WMM - Invasive Plant Control	Works associated with the on-going management of invasive plants– such a repeat cutting and control treatments	March			
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,	June			

Year	Type Of Work	Description	Due Date		
2024	LC - Routine Litter Picks	Planned/routine litter picks using contractors	June		
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 - 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		
2024	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	September		
2024	24 LC - Routine Litter Planned/routine litter picks using contractors Picks				
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	November		
2024	WMM - Ride Management	Works associated with the management of existing rides/open areas for biodiversity - ride edge coppicing and thinning programmes, ditch works	November		
2024	LC - Routine Litter Picks	Planned/routine litter picks using contractors	December		
2025	LC - Routine Litter Picks	Planned/routine litter picks using contractors	March		
2025	WMM - Invasive Plant Control	Works associated with the on-going management of invasive plants- such a repeat cutting and control treatments	March		
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,	June		
2025	LC - Routine Litter Picks	Planned/routine litter picks using contractors	June		

Year	Type Of Work	Description	Due Date			
2025	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	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	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	September			
2025	LC - Routine Litter Planned/routine litter picks using contractors   Picks Planned/routine litter picks using contractors					
2025	25 WMM - Ride Management Works associated with the management of existing rides/open areas for biodiversity - ride edge coppicing and thinning programmes, ditch works					
2025	LC - Routine Litter Picks	ne Litter Planned/routine litter picks using contractors				
2026	LC - Routine Litter Picks	Planned/routine litter picks using contractors	March			
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,	June			
2026	LC - Routine Litter Picks	Planned/routine litter picks using contractors	June			
2026	26   NWH - Maintenance   Works associated with the maintenance of non-woodland habitats –     Work   mechanical management, hay cutting, fence and wall maintenance etc		August			
2026	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	September			
2026	LC - Routine Litter Picks	Planned/routine litter picks using contractors	September			
2026	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing	September			

Year	Type Of Work	Description	Due Date				
		pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,					
2026	WMM - Coppice Management	Works associated with the management of coppice areas – such as coppicing, maintenance of protective fencing, etc	November				
2026	WMM - Ride Management	Works associated with the management of existing rides/open areas for biodiversity - ride edge coppicing and thinning programmes, ditch works	November				
2026	LC - Routine Litter Picks	Planned/routine litter picks using contractors	December				
2027	LC - Routine Litter Picks	, , , , , , , , , , , , , , , , , , , ,					
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,	June				
2027	LC - Routine Litter Picks	Planned/routine litter picks using contractors	June				
2027	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	August				
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,	September				
2027	NWH - Maintenance Work	Works associated with the maintenance of non-woodland habitats – mechanical management, hay cutting, fence and wall maintenance etc	September				
2027	LC - Routine Litter Picks	Planned/routine litter picks using contractors	September				
2027	WMM - Ride Management	Works associated with the management of existing rides/open areas for biodiversity - ride edge coppicing and thinning programmes, ditch works	November				
2027	LC - Routine Litter Picks	Planned/routine litter picks using contractors	December				

Year	Type Of Work	Description	Due Date
2028	LC - Routine Litter Picks	Planned/routine litter picks using contractors	March
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,	June
2028	LC - Routine Litter Picks	Planned/routine litter picks using contractors	June

# APPENDIX 1 : COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
1a	1.15	Birch (downy/silver)	1950	Min- intervention	Very steep slope/cliff/quarry/mine shafts/sink holes etc	Area of Outstanding Natural Beauty
with a gr manager gate. Thi to the bo	round flora i ment and pu is area is ow	including heather, ublic entrance off E med by Nevill Estat consists of mature	bracken and Broadwater I e. Managen	l bramble. Also NV Down. WT owners nent track upgrade	Le. This area is partly open g W finger of woodland leadin Ship stops approx 20m from ed 2001. W of the track the oak. This also extends upslo	g to the main the management wood slopes steeply
1b	5.38	Western hemlock	1960	PAWS restoration	Landscape factors, Very steep slope/cliff/quarry/mine shafts/sink holes etc	Area of Outstanding Natural Beauty
and broa track wa lapanese	adleaved reg s restocked e larch with	generation (oak, bi with WH and beed	rch, beech, r h in 1995. T cover. East	rowan) in gaps and he level area east of the larch, to the	as last thinned in 2016. Incl d on edges. A small area (0 of the hemlock comprises a e boundary with Montacute e Subcpt.	4ha) west of the approx 1ha of
1c	2.69	Open ground		Non-wood habitat	Landscape factors, Sensitive habitats/species on or adjacent to site, Very steep slope/cliff/quarry/mine shafts/sink holes etc	Area of Outstanding Natural Beauty
					shafts/sink holes etc	fires in 1999 and

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
1d	1.17	Scots pine	1950	High forest		Area of Outstanding Natural Beauty
canopied and unde eastern h	l pine stand erstorey, Gro nalf is domir	there are mixed b ound flora is domin	roadleaves i nated by bra ng from a p	ncluding oak, birc acken with some h reviously failed SP	Subcpts 3a (N half) and 3b. Y h rowan, holly and yew bot heather where light levels ar plantation from the mid 19	h as canopy trees re higher. The
2a	11.1	Corsican pine	1986	PAWS restoration	Sensitive habitats/species on or adjacent to site	Area of Outstanding Natural Beauty
It also ind surround Broadvie the area	cludes birch led by and b w, to the E i which have	, oak, yew, willow bisected by wide rid is The Old Carriage	and rowan i des often wi way and thr cleaning ar	regeneration and th extensive heat ough the centre i nd brashing of the	30%); Norway spruce (5%); occasional semi-mature tree her cover. The ride to the S s The Link. There are also sr conifer crop for 5m on eacl a developing.	es. The subcpt is is known as naller rides within
2b	2.16	Oak (pedunculate)	1993	High forest		Area of Outstanding Natural Beauty
		/ ves: oak, sweet che articularly in N of s			g. Natural regeneration of t undary.	pirch, willow etc.
2c	0.59	Scots pine	1930	High forest	Very steep slope/cliff/quarry/mine shafts/sink holes etc	Area of Outstanding Natural Beauty
E bounda	aries are ma		nd wire fend	e in poor conditio	up to 4m deep and with ste on. Previously heavily infest arriageway.	•
2d	2.9	Open ground		Non-wood habitat		Area of Outstanding Natural Beauty

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
as lowlar heather ( mowing,	d heath sin Calluna vulg bracken rol	ce. The area of ext garis), purple mooi ling and more rece	ended to th grass, brac ently weedw	e E to join up with ken and one roya riping scrub. There	ers in 1998 following severa n The Link ride in c2012. The l fern plant. Management h e are 2 clumps of predomina l mixed broadleaves includin	e area has extensive as been by a mix of antly pine on the NW
3a	1.73	Scots pine	1950	PAWS restoration		Area of Outstanding Natural Beauty
n north o small por	of subcpt an nd fed by a c	d Douglas fir in so	uth with occ	casional oak, larch	e and boundary to W with f , birch, rowan. In the north ; the edge of subcpt 1c. Gro	of the subcpt is a
ßb	5.72	Scots pine	1950	PAWS restoration	Mostly wet ground/exposed site, Very steep slope/cliff/quarry/mine shafts/sink holes etc	Area of Outstanding Natural Beauty
due to th open are ferns and oart of th	e severity o as. The stan I mosses alc ie northern 2014-17.	f the rhododendro d also contains oa ongside flows south boundary with Bro	n invasion. k, birch, row n out of the padview ride	Ground flora is no van, holly and yew subcpt and under e is a strip of birch	ern end of the subcpt is of p ow dominated by bracken w v of various age classes. A sr the main ride (Ridgeback) t up to 40m wide, sections o	rith heather in more nall stream with to the south. Along f which have been
3c	5.02	Douglas fir	1950	PAWS restoration	Archaeological features, Gullies/Deep Valleys/Uneven/Rocky ground	Area of Outstanding Natural Beauty
species in ghyll with ground a	nclude rowa n extensive i	n, holly, yew, Scot mosses, ferns and vers due to shading	s pine and la bluebells un	arch. The subcpt o der alder, birch, a	semi-mature oak and freque contains a tributary stream t and willow. The stand is pre enetrate ground flora inclue	to Sprats Brook in a edominantly clear of

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
3d	4.57	Scots pine	1950	PAWS restoration	Mostly wet ground/exposed site	Area of Outstanding Natural Beauty
with mos bracken	st of previou with some h	ıs rhododendron ir	nvasion now et flushes w	removed and reg	corner. Well thinned stand rowth controlled. Ground f . Tributary ghyll with seaso	lora dominated by
Зе	1.58	Mixed native broadleaves	1995	High forest		Area of Outstanding Natural Beauty
	-	P95] - Oak 50%; Sv c and extensive br			ry 10%; MB 10%. Also natu at 3m spacing.	ral regeneration of
3f	4.73	Mixed native broadleaves	1900	Min- intervention	Gullies/Deep Valleys/Uneven/Rocky ground, Sensitive habitats/species on or adjacent to site	Area of Outstanding Natural Beauty
beech ar oak and species. western several s	nd yew with beech with Other groun end of the s mall inform	understorey of alc occasional yew and d flora species inc ubcpt, south of the	ler, goat wil d rowan. Gro lude bluebe e stream the pridges. Inva	low, birch, rowan ound flora throug II, yellow pimpern ere is a small ponc sive Himalayan ba	In the western part there and holly. In the east there hout includes many fern, m el, lesser celandine and wo d. The western half of the su alsam has been present in t	e are mature birch, oss and liverwort od sorrel. At the ubcpt is crossed by
3g	3.32	Corsican pine	1986	PAWS restoration		Area of Outstanding Natural Beauty
Cpt 2a to semi-ma	the north c ture oak. Th	of Broadview ride. e main part of the	There are so subcpt has	ome stands of cop been cleaned and	way spruce. This is a contin piced birch along the ride a brashed but not thinned. 1 has been largely eradicatec	nd the occasional here is extensive

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations		
4a	2.54	Mixed native broadleaves	1993	High forest	Archaeological features, Sensitive habitats/species on or adjacent to site	Area of Outstanding Natural Beauty		
old conif and grass northern valley (Co An area o	Oak & wild cherry planted in 1993 with abundant birch and goat willow natural regeneration. The subcpt contains old conifer stumps and appears to have been ploughed. Ground flora is dominated by bramble with some rushes and grasses. The western boundary has a fringe of mature birch, willow and oak along a boundary bank. The northern edge of the subcpt is the edge of the ghyll and in the north eastern corner is a notable colony of lily of the valley (Convallaria majalis). Theeastern boundary is formed by a woodbank with some mature oak, beech and yew. An area of approx 0.4ha of the planting has been cleared in the north east and kept open by annual mowing. This is a damp ridge & furrow rushy grassland named West Rough which is particularly good for invertebrates.							
4b	1.27	Mixed broadleaves	1970	High forest	Archaeological features	Area of Outstanding Natural Beauty		
and sycal ferns. Th there is a	more (appro e southern k manageme	ox P70). No unders boundary is a wood	torey prese dbank runni no legal man	nt. Ground flora c ng parallel to the agement access a	s, occasional Norway spruce onsists mainly of mosses, bu road (Bunny Lane). In the so t this point. Access is by per ank. Sensitive habitats/species on or adjacent to site	ramble and some outh western corner		
occasion coppice, up and d invaded from 198	al beech. Ur yew, rowan ecay. To the by rhododer 7 along the	nderstorey of plant , beech and holly. south the canopy ndron until clearan southern edge. Th	ed oak [P95 There are 3 is dominate ce during th ere is anoth	) (0.9ha), abundar very large over-m ed more by matur he winter of 01/02 her large colony of	high forest with an open can nt birch regeneration, occas ature beech trees which are birch. This southern area . The clearance revealed ex lily of the valley in this area various sedges, rushes and	ional chestnut e beginning to break was extensively tensive windblow a. Ground flora in the		

# 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.

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