

Gorse Covert Mounds

Management Plan 2016-2021

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 Mixed Habitat Mosaic
 - 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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 <u>www.woodlandtrust.org.uk</u> 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 <u>www.woodlandtrust.org.uk</u>. 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.
- 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: | Gorse Covert Mounds |
|-----------------|---------------------------------------|
| Location: | Warrington |
| Grid reference: | SJ665928, OS 1:50,000 Sheet No. 109 |
| Area: | 19.59 hectares (48.41 acres) |
| Designations: | Community Forest, Local Wildlife Site |

2.0 SITE DESCRIPTION

2.1 Summary Description

This suburban site is a delightful mix of woodland, scrub, grassland, ponds and a remnant of peat bog. This mosaic of habitats supports a diverse variety of plants and wildlife and the site is designated as a Local Wildlife Site. There is approximately 3km of surfaced and unsurfaced paths across the site with the highest point, Pestfurlong Hill, offering far reaching views towards Manchester, the Pennines and Winter Hill.

2.2 Extended Description

Gorse Covert Mounds is located in Birchwood about 2 miles to the east of Warrington in North Cheshire. It is situated on the eastern edge of Birchwood adjacent to the A574 (Birchwood Way) and M62 motorway, a housing estate, and arable farmland to the east.

The site is a narrow, linear man-made mound, approximately 1000 metres in length, with the ground rising up gradually from west to east to the highest point, Pestfurlong Hill, approximately 90 feet above sea level. The site varies from a few metres wide at the western end and is only approximately 100m wide in most of the western half, but then widens to between 300-400m wide in the eastern half around the ponds and Pestfurlong Moss. Birchwood Way runs adjacent to the north of the site, Gorse Covert housing estate to the south, Moss Gate Road abuts the western tip of the site and Silver Lane and farmland lies to the east.

The surrounding landscape is flat and only 100 years ago was mostly a large expanse of lowland peat bog, known locally as mossland. During the Second World War, much of the moss was drained and a huge bomb factory built on the land employing 30,000 workers and produced over a million mines and high explosive shells. The mounds are man-made and were created from spoil heaps formed when the bomb factory was demolished in the 1960's. They were landscaped in the 1970's and early 1980's as part of the development of the Birchwood New Town and are now an attractive mixture of woodland, meadows and ponds with a remnant of mossland. The site was gifted to the Woodland Trust in 1995 by the Commission for New Towns.

Gorse Covert Mounds is approximately 20 hectares in size with a mosaic of habitats including approximately 10ha of secondary woodland (mainly native broadleaves with some Corsican and Scots pines), areas of scrub, meadows and glades, ponds and a small remnant of lowland raised peat bog, Pestfurlong Moss on the eastern edge of the site. It supports a diverse range of flora and fauna and is designated as a Site of Importance for Nature Conservation or Local Wildlife Site. This mosaic of mixed habitats is a key feature for the site.

The highest point on site is Pestfurlong Hill which offers far reaching views to the east towards Manchester and the Pennines. The site sits within the Greater Manchester Wetlands area which includes other remnants of low lying mosslands (which once covered large parts of South Lancashire and North Cheshire) at Risley Moss SSSI (less than a mile to the south of Gorse Covert Mounds) and Holcroft Moss (about a mile to the north east).

Public access is a second key feature of the site with approximately 3km of permissive footpaths that link the adjoining housing estates, business parks and other nearby open spaces (mostly council owned green space). The site is well used by local people, particularly dog walkers and families.

There is an active local volunteer group, the Friends of Gorse Covert Mounds, who have been helping the Trust to manage the site since 2009. The group help with practical management work including woodland task days and clean up days, fundraising and promotional activities for the site.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

By bus:

The number 25 bus runs from Warrington and stops on Gorse Covert Road. There is a bus stop close to the main entrance.

By train:

The nearest train station is Birchwood (4.8km/three miles). For up-to-date information on public transport, visit traveline.org.uk.

By car:

From Warrington, take the A574 eastwards, towards Birchwood. At the roundabout after Birchwood Forest Park, take the third exit onto Moss Gate. At the next roundabout, take the first exit onto Fisherfield Drive, and then turn left onto Gorse Covert Road, where the car park is located.

3.2 Access / Walks

The main entrance and car park is off Gorse Covert Road. The site is relatively flat and accessible, and has 3km (1.9 miles) of paths, most of which are stone surfaced, with access through kissing gates. The main path runs along a ridge so requires some up and downhill walking. Cycling is allowed along marked permissive routes.

The paths link to a wider network of footpaths and bridleways connecting the site to Birchwood Forest Park, and the Woodland Trust-owned Pestfurlong Moss, a small woodland that contains remnants of the original peat moss land that once covered the area. This is easily visible from the path in the eastern section of Gorse Covert Mounds although access into Pestfurlong Moss itself is limited. Risley Moss, a nature reserve and SSSI managed by Warrington Council ranger service is worth a visit and is less than a mile away.

Popular walks include:

1. Gorse Covert Mounds linear walk (around 1.6km/one mile; 50 minutes, one steep slope and some steps). This pleasant walk takes you through young woodland and open meadows to Pestfurlong Hill, from where you can enjoy some excellent views.

Pestfurlong Hill loop (0.4km/0.25 miles, 20 minutes; moderately steep slope). This is a delightful summer circuit, perfect for wildflower and butterfly spotting, and views over Pestfurlong Moss.
The Ponds loop (0.3km/0.2 miles; 15 minutes; gentle slopes) is a peaceful waterside walk through meadows and woodland.

4.0 LONG TERM POLICY

The long term policy for Gorse Covert Mounds is to maintain a mosaic of habitats including secondary broadleaf woodland, areas of scrub, meadows, open ground, ponds, wetlands and lowland peat bog.

Guided by the Woodland Trust's woodland management approach, conservation and access policies long term management will aim to seek a balance between conservation and public enjoyment. The wood and other habitats will be managed to ensure that it is as robust as possible to future threats such as climate change, pests and tree disease. Mature trees will be retained for as long as safe to do so and natural regeneration will be promoted. The woodland will be regularly monitored for long term threats from tree diseases, pests, non-native species, human impacts and the long term sustainability of the woodland.

Public access, safety and long term stand stability will be key drivers for woodland management operations. Silvicultural management will aim to maintain a diverse woodland structure and mix of species, particularly focusing on areas bordering houses, roads and footpaths. Areas along path edges and boundaries will be managed to retain a varied woodland edge structure and to maintain wide open sight lines.

The meadow and open ground habitats will be managed to maintain their biodiversity value, with some areas left to develop into scrub habitat. The ponds will be subject to minimal intervention, unless management is required to retain areas of open water which may involve periodic coppicing of bank-side vegetation and control/ removal of invasive or dominant pond vegetation.

Pestfurlong Moss will be managed to restore this remnant of low lying peat mossland back to more favourable condition. Rhododendron will be removed, trees growing on the moss will be cleared and some ditches blocked to retain water and stop the moss from drying out.

Informal public access will be retained at the site in perpetuity with approximately 3km of footpaths and ten entrances maintained for visitor access. The Trust's duty of care to neighbours and visitors will continue to be addressed through on-going tree safety and site risk assessment inspections. The local community will be encouraged to help care for and manage the site through the involvement of the Friends of Gorse Covert Mounds volunteer group.

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 Mixed Habitat Mosaic

Description

The site comprises a mosaic of habitats including mixed woodland, scrub, grassland, ponds and ditches, transitional zones and a small remnant of low lying raised peat bog on the eastern edge of Pestfurlong Hill. There is approximately 11 hectares of mixed mostly broadleaf woodland, 1 hectare of thorn spinney and the remaining 7.4 hectares is a mixture of managed and un-managed grassland, ponds and transitional zones. Pestfurlong Moss covers approximately 3 hectares of the site along the eastern boundary next to Silver Lane, and is a remnant of the low-lying peat mosses that once covered large areas of South Lancashire and North Cheshire.

Significance

The site is designated as a Local Wildlife Site due to its mix of different habitats that provides for a wide range of invertebrates, birds, animals and plants. Species lists collected on the site over the past decade have observed the following: 25 species of tree and shrub; 70 other plant species (including 3 types of orchid): 28 species of birds breading: 12 types of dragon and damsel fly: 250 species of moth and 19 types of butterfly: 4 amphibians including GCN and 1 species of reptile. There is a small area of remnant low lying peat bog at Pestfurlong Moss which is now a rare habitat and 5 different types of sphagnum have been found growing here still. This type of habitat is now rare in the UK making it particularly important for biodiversity. Gorse Covert and Pestfurlong Moss is connected by green corridors with other nearby semi-natural green spaces including Risley Moss Local Nature Reserve and SSSI and Birchwood Forest Park.

Opportunities & Constraints

The high usage of the site by informed local interest groups provides opportunities to involve the local community in the management of the site. Although the site is located in a built environment with the M62 motorway nearby there are good links to nearby green spaces (Risley Moss, Birchwood Forest Park) and the wider countryside which provides opportunities for flora and fauna to spread easily onto the site.

A large part of the site borders onto domestic properties (approx. 1km of boundary and 60+ homes) giving rise to a range of boundary and neighbour related issues.

Factors Causing Change

Fly tipping (particularly along Silver Lane) is an on-going issue which damages flora and is dangerous to wildlife and visitors. It may also lead to the spread of invasive non-native plants such as Japanese Knotweed which has been found in a small area along the edge of Silver Lane. Damage on site from fires and vandalism is an on-going issue, but is not having a significant impact at present.

Pestfurlong Moss has been degraded as a peat moss over many years through drainage and encroachment by scrub including rhododendron. To retain this important habitat needs the invasive rhododendron removing along with some Silver birch and drains blocking up to keep water on the moss.

Some of the ponds are becoming silted/shaded and have invasive water plants which are impacting on the biodiversity of these habitats resulting in the ponds drying out, silting up or becoming taken over by invasive pond plants.

Long term Objective (50 years+)

In the long term Gorse Covert Mounds will be managed to maintain the rich mosaic of habitats, including woodland, scrub, open areas of grassland, transitional zones, mossland/peat bog, ditches and ponds. The woodland areas should be predominantly mixed native broadleaves with a diverse structure, species and age composition. Natural regeneration should be occurring across the site and there should be an increasing volume of both fallen and standing deadwood. Rhododendron will have been removed or reduced to a rare component on site.

Pestfurlong Moss will be managed to restore and enhance the mossland area.

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

During the plan period the main short term objectives are to:

1. to monitor the health and resilience of the woodland by carrying out a woodland condition

assessment to monitor levels of natural regeneration, identify any threats from tree disease, pests or non-native invasive species, and take appropriate action where necessary.

2. to undertake tree safety inspections as part of the site risk assessment regime for public safety in high risk zones (i.e. by houses, footpaths and roads) and carry out any remedial work identified.

3. to carry out selective thinning operations focusing in areas bordering houses, footpaths and roads for long term stand stability and tree safety.

4. to maintain and enhance (subject to funding) the peat bog on Pestfurlong Moss in partnership with the Carbon Landscape partners (Lancashire Wildlife Trust, Natural England and Warrington BC) and the Friends of Gorse Covert Mounds. This work will include the removal of any rhododendron, removal of trees that are encroaching on the core mossland area, blocking ditches to retain water on the mossland and the creation of shallow wetland scrapes. A separate Management Plan guidance document exists for Pestfurlong Moss which details the objectives for this part of the site.

5.2 Connecting People with woods & trees

Description

Gorse Covert Mounds has approximately 2700m of surfaced paths with approx. a further 300m of unsurfaced paths around Pestfurlong Moss. The site has 10 pedestrian entrances with welcome signs from the neighbouring housing estates, roads and other areas of green space. The main path runs west-east from Moss Gate to Pestfurlong Hill and down onto Silver Lane and also acts as a management access track through the site. There is a small car park for approximately 5 cars at the main entrance to the wood on Gorse Covert Road. The site is well used for dog walking and jogging. The Trust has given the site an access category A designation which is the highest level, and this equates to a wood which is 'regularly used at all times of year, with more than 15 - 20 people using one entrance every day'.

Significance

Increasing enjoyment of woodland is one of the Woodland Trust's key outcomes. Gorse Covert Mounds is highly valued and well used by the local community because of it's location in the urban area of Birchwood. It offers views from the top of Pestfurlong Hill over the surrounding landscape towards Manchester, the Pennines and Winter Hill TV mast.

The site is within the Mersey Forest and provides the local community with easily accessible green space to visit and enjoy nature.

Opportunities & Constraints

Constraints: waterlogged ground particularly in the eastern part of the site known as Pestfurlong Moss, means that access is more limited especially in winter.

Opportunities: There is a small Friends of Gorse Covert Mounds group consisting of local residents who help the Trust to look after the site and carry out some management work. This provides an ongoing opportunity to engage with local people in the management and promotion of the site.

Factors Causing Change

Fly tipping is an on-going problem particularly along the boundaries with Silver Lane. Occasional anti-social issues occur from time to time including small fires, vandalism of access furniture and off road motorbikes riding on the paths.

Long term Objective (50 years+)

Gorse Covert Mounds should offer a high quality visitor experience in line with a category A access designation. Public access will be retained in perpetuity with a well-managed network of paths around the site which are easy and obvious to follow. Many of the trees along the edges of the main surfaced paths will be managed to provide wide sunny rides for visitors to enjoy, as well as benefiting woodland edge wildlife and flora. Prominent signage and information will be made available at the main entrances to enable visitors to explore the site and to appreciate its inherent qualities and wildlife. The wood will be made as safe as practicable through regular safety inspections of trees in high risk zones and inspections of access furniture.

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

During this plan period the short term objectives will be

1. to carry out annual maintenance of the entrances, signs, cut back any vegetation encroaching on the footpaths, and remove litter/ fly tipping as necessary.

2. to carry out regular safety inspections of trees in high risk zones (i.e. next to buildings, roads and footpaths) and site hazards as per the Trust's safety inspection regime to ensure safety of visitors and neighbours, and undertaking any remedial safety work identified.

3. to improve public access along paths by undertaking a programme of coppicing along path and woodland edges to improve sight lines as well as enhancing the rides for wildlife.

4. to monitor public use of the site to review the current standard of access provision and identify if there are any issues/ threats to the wood from public usage, taking appropriate action to address them if necessary.

| 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 | 2.70 | Mixed native broadlea ves | 1975 | Coppice | ground/exposed site, Very steep slope/cliff/quarry/ | , | Community Forest, Local Wildlife Site |

This sub-compartment occupies the high ground and north-west facing slopes of the sites western ridge. It stretches east from the roundabout at Birchwood Way and Moss Gate to the footbridge over Birchwood Way. The northern boundary abuts the grass strip alongside Birchwood way, and is defined by wooden marker posts. The southern boundary is the northern edge of the internal footpath. The compartment is 88% tree cover with two medium sized ponds and areas of rough grass sward. The young-mature canopy is dominated by pine, birch, oak and ash with beech, lime, aspen, field maple, cherry, crack willow, goat willow, and alder. A dense understory and woodland edge comprise of hawthorn. blackthorn, bramble, elder, dogwood, rose, and viburnum. The woodland herb layer is suppressed by the dense canopy and shrub layer, but becomes more varied in the woodland edge to grassland transitional zones

| 1b | 0.70 | Mixed | 1975 | High forest | Very steep | Connecting | Community |
|----|------|----------|------|-------------|---------------------|----------------|---------------|
| | | native | | | slope/cliff/quarry/ | People with | Forest, Local |
| | | broadlea | | | mine shafts/sink | woods & trees, | Wildlife Site |
| | | ves | | | holes etc | Mixed Habitat | |
| | | | | | | Mosaic | |

Formed by the lower southern facing slopes of the sites western ridge, this compartment stretches eastwards from the bottom of the steps near the roundabout at Birchwood Way and Moss Gate to the path descending from the footbridge over Birchwood Way. The northern boundary is defined by the internal footpath and the southern boundary by the fence lines of domestic properties in Bramshill Close and Applecross Closes. The compartment is approximately 400m long but only 30m across at its widest point. It comprises of two blocks of young-mature woodland with dense canopies comprising of a mixture of pine, birch, oak, and ash, with lime, field maple, cherry, aspen, rowan and alder. The understory and dense edge zone consist primarily of hawthorn, hazel, field maple, holly, viburnum, elder, and rose.

| 2a 1.32 Hawthor 1975 Coppice n species | Mostly wet ground/exposed site Connecting People with woods & trees, Mixed Habitat Mosaic Community Forest, Local Wildlife Site |
|--|---|
|--|---|

A freestanding mound with a plateau top, this compartment abuts the garden fences of properties in Hamsterley Close on its southwest facing. The northern and eastern boundaries are defined by internal tracks. The compartment has 95% tree cover with two distinct areas of woodland - a plateau area (0.6ha) that was planted in the winter 1999-2000, and the slopes of the mound which where planted during the original landscaping works. The species mix of the new planting is oak and ash at 3m spacing with hawthorn and hazel. The slopes of the mound have a high percentage of thorn especially along the western boundary with oak, ash, field maple, birch, pine, and aspen. A dense canopy on the sloping ground has suppressed the development of a herb layer, whilst the plateau has a planted hay meadow with species including vetch and some orchids.

| 2b | 4.11 | Open | 1975 | Non-wood | Mostly wet | Connecting | Community |
|----|------|--------|------|----------|-------------------|----------------|---------------|
| | | ground | | habitat | ground/exposed | People with | Forest, Local |
| | | | | | site, Sensitive | woods & trees, | Wildlife Site |
| | | | | | habitats/species | Mixed Habitat | |
| | | | | | on or adjacent to | Mosaic | |
| | | | | | site | | |

This compartment is a mosaic of planted mixed native trees, scrub, areas of grassland and several ponds linked by a network of ditches. It stretches from Gorse Covert Road along the southern boundary to the western boundary of sub-comp. 4A. The bulk of the eastern boundary abuts properties on Inglewood Close with a short section defied by the track alongside Pestfurlong Moss (Comp 4). The western and northern boundaries are defined by internal tracks and compartments 2A and 3A respectively. A small man-made mound forms the southern third of the area. North and east of this is lower land with a network of ponds running from the northern boundary south east to the junction of Gorse Covert Road and Inglewood Close. The land in the northern corner of the compartment has a south eastern aspect with drainage into another pond then eastwards via a ditch to Pestfurlong Moss (Comp 4). The compartment has 51% woodland cover, of which 0.66ha (the southern mound) is mature and developing hawthorn, rose and briar spinney. The block of wood to the east and north has young-mature stands of birch, willow (goat, white, and crack) with oak, ash, cherry, field maple, rowan and lime.

| 3a | 6.86 | Mixed broadlea ves | 1975 | High forest | ground/exposed | People with woods & trees, Mixed Habitat | Community Forest, Local Wildlife Site |
|----|------|--------------------------|------|-------------|----------------|--|---|
|----|------|--------------------------|------|-------------|----------------|--|---|

Running from the footbridge over Birchwood Way in the west, to Silver Lane in the east, this compartment follows the man made ridge for approximately 800m. It is relatively narrow for two thirds of its length (40 to 70m wide) then broadens out in the east to occupy the sites highest and largest mound, Pestfurlong Hill. The ground along the northern boundary is defined by marker posts from the footbridge to boundary point 'R' (see legal map). From point 'R' to 'Q' it follows the bottom of the motorway junction batter (bank). The remainder of the northern and eastern boundary are defined by Silver Lane. The southern boundary follows the bottom of Pestfurlong Hill from where it joins Pestfurlong Moss (Comp 4A) at Silver Lane to the main site management track which defines the remainder of the southern boundary. The whole northern boundary has a north to north west aspect with medium to steep gradient, the remainder of the site is either flat or has a south to south east aspect the steeper ground being the east and southern slopes of Pestfurlong Hill. The compartment has 51% woodland cover, some of which is hawthorn spinney and scrub. The main blocks of woodland are a complex mixture of oak, ash, field maple, pine, birch, aspen, cherry, hybrid black poplar (N boundary), lime, rowan with an understory and woodland edge of hawthorn, blackthorn, elm, (north boundary), dogwood, holly, elder, viburnum, bramble, and rose. The woodland blocks and spinneys have dense canopies and do not support an extensive ground flora. The open spaces have a more interesting ground flora having originally been planted with a variety of grass types and herbs such as cowslip, orchids, and vetches.

| 3b | 0.35 | Mixed | 1975 | High forest | Connecting | Community |
|----|------|----------|------|-------------|----------------|---------------|
| | | broadlea | | | People with | Forest, Local |
| | | ves | | | woods & trees, | Wildlife Site |
| | | | | | Mixed Habitat | |
| | | | | | Mosaic | |

Small block of woodland at the south western corner of compartment 3 has a south facing aspect and moderate slope. It is sandwiched between the sites main east/west track to the north, and properties in Aldewood and Hamsterley Closes to the south. The canopy is a mixture of ash, cherry, birch, aspen, horse chestnut, field maple, and whitebeam. With an understory and woodland edge of hawthorn, blackthorn, dogwood, elder, hazel, holy, rowan and rose. A dense canopy and shrub layer has restricted the development of a varied ground flora.

| 4a | 3.48 | Open ground | 1975 | Non-wood habitat | 10 | | Community Forest, Local Wildlife Site |
|----|------|----------------|------|---------------------|----|--|---|
|----|------|----------------|------|---------------------|----|--|---|

Compartment 4A is known as Pestfurlong Moss and consists of two distinct areas: 1/ a remnant of Pestfurlong Moss peat bog which lies to the south of Pestfurlong Hill, bounded to the east by Silver Lane and to the west by a ditch and scrub woodland forming the boundary with compartment 2 and 3. The southwest boundary is defined by the northern edge of an old drainage ditch. The compartment has approximately 60-70% woodland cover, mostly naturally regenerating birch, with some oak and rowan. The shrub layer previously comprised rhododendron, but this has been cleared although some regrowth still occurs. It now mainly consists of holly with the ground flora dominated by bramble and bracken apart from the open ground which is mostly purple moor grass with some isolated heather.

2/ a thin belt of secondary woodland forming the eastern site boundary to the east of Silver Lane. The boundaries are denoted in the north by marker posts and to the middle and south by the centre of the drainage ditch, and the westward boundary is the edge of Silver Lane.

Appendix 2: Harvesting operations (20 years)

| Forecast Year | Cpt | Operation Type | Work Area (ha) | Estimated vol/ha | Estimated total vol. |
|------------------|-----|-------------------|-------------------|---------------------|----------------------|
| 2016 | 3b | Selective Fell | 0.05 | 80 | 4 |
| 2016 | 3b | Ride edge Coppice | 0.05 | 40 | 2 |
| 2017 | 2b | Ride edge Coppice | 0.05 | 40 | 2 |
| 2018 | 2b | Ride edge Coppice | 0.10 | 10 | 1 |
| 2018 | 3b | Thin | 0.35 | 29 | 10 |
| 2019 | 4a | Selective Fell | 0.20 | 75 | 15 |
| 2020 | 1a | Ride edge Coppice | 0.20 | 15 | 3 |
| 2021 | 1a | Thin | 0.50 | 20 | 10 |
| 2022 | 1a | Ride edge Coppice | 0.20 | 15 | 3 |
| 2024 | 1a | Ride edge Coppice | 0.20 | 15 | 3 |
| 2027 | 1a | Ride edge Coppice | 0.20 | 15 | 3 |
| 2031 | 1a | Thin | 0.50 | 20 | 10 |

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.

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.