

# Brook Wood, Runcorn

# Management Plan 2018-2023

#### MANAGEMENT PLAN - CONTENTS PAGE

ITEM Page No.

Introduction

Plan review and updating

Woodland Management Approach

Summary

- 1.0 Site details
- 2.0 Site description
  - 2.1 Summary Description
  - 2.2 Extended Description
- 3.0 Public access information
  - 3.1 Getting there
  - 3.2 Access / Walks
- 4.0 Long term policy
- 5.0 Key Features
  - 5.1 Secondary Woodland
  - 5.2 Informal Public Access
- 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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 <a href="www.woodlandtrust.org.uk">www.woodlandtrust.org.uk</a> 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 <a href="www.woodlandtrust.org.uk">www.woodlandtrust.org.uk</a>. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

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

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

The following guidelines help to direct our woodland management:

- 1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
- 2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
- 3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
- 4. The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
- 5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
- 6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
- 7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
- 8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
- 9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
- 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: Brook Wood, Runcorn

Location: Runcorn

**Grid reference:** SJ564830, OS 1:50,000 Sheet No. 108

Area: 0.61 hectares (1.51 acres)

**Designations:** Community Forest

# 2.0 SITE DESCRIPTION

#### 2.1 Summary Description

Brook Wood is a small broadleaf woodland in the Sandymoor Valley. The area is becoming increasingly urbanised with new housing, roads and facilities being built. The wood has a nice mix of mature broadleaves including lime, oak, hornbeam, sweet and horse chestnut and there is a pond in the western half. There are several other Woodland Trust woodlands nearby and a surfaced footpath passes through the wood linking it to the wider network of open spaces and woodlands in the area.

#### 2.2 Extended Description

Brook Wood is a small broadleaved woodland in the parish of Sandymoor, about 4 miles to the east of Runcorn town centre. The surrounding land use is becoming increasingly urbanised with the building of new houses, schools and other facilities as part of the growth of the Sandymoor district. The area was previously countryside, predominantly farmland for grazing with grassland, wooded copses, hedgerows, ponds and ditches.

The local landscape is low-lying and flat within the Sandymoor Valley, with higher ground to the west towards Windmill Hill and to the east towards Daresbury village. A small river, called Keckwick Brook, flows south to north through the valley and the river level can rise rapidly after heavy rain causing flash flooding. The local water table is high resulting in wet ground conditions in some areas, although there is a network of drainage ditches across the valley. The soils are mainly silty-loam with pockets of clay and peat.

Brook Wood was formerly part of the Brooke Family estate (centred around nearby Norton Priory) and was purchased by the Runcorn New Town Development Corporation in the mid-1970's as part of the future development of Runcorn New Town. The Development Corporation subsequently installed surfaced paths and footbridges for access and carried out under storey planting in the 1980's. The wood along with several others in the local area was gifted to the Woodland Trust in 1995.

It is secondary woodland with a canopy of mature broadleaves, comprising mainly oak, sycamore, alder, Silver birch, lime and occasional horse chestnut, beech and hornbeam. Some of these are now over-mature and could be classified as veteran trees. The under storey contains mixed broadleaves including oak, rowan, cherry, hawthorn, hazel, elder, and willow planted by the Development Corporation. The under storey used to contain rhododendron, but this has been largely cleared in recent years. The ground layer is quite sparse and dominated by bare ground, with occasional patches of woodland flora including bluebell. There is a pond in the western half of the wood with an outfall ditch flowing to the east into Keckwick Brook. In the middle of the pond is a small island which still has rhododendron on it, although it is planned to be removed to prevent it spreading.

Public access is available to the woodland via an entrance on the western boundary from the adjoining new housing development and via a footpath passing through the eastern edge of the wood (part of a multi-user trail through the Sandymoor valley). Visitor numbers to the wood are fairly low and it is mainly used by local dog walkers, but as the area is being developing with more houses the number of people using the site is increasing.

#### 3.0 PUBLIC ACCESS INFORMATION

#### 3.1 Getting there

There are three public entrances into Brook Wood from adjoining land. A surfaced footpath enters the wood near to new houses on the western boundary passing a pond and crossing over a ditch via a footbridge, before joining with a surfaced footpath near the eastern edge of the wood close to Keckwick Brook. This surfaced path is part of a multi-user trail which runs roughly north to south close to Keckwick Brook and links the wood to other nearby woods, semi-natural green spaces and residential areas in the Sandymoor Valley.

By car: From Runcorn, head east along the Daresbury Expressway (A558) towards Manor Park and Warrington. At the end of the dual carriageway section of the expressway is a roundabout. Take the exit for Sandymoor onto Pitts Heath Lane and follow this road for about a 1/4 mile before taking a left turn onto Wharford Lane. Follow this road to a mini-roundabout and bear slightly to the right to head towards Sandymoor Community School. Brook Wood is located just after the school to the south with some new houses in front of the wood. There is an entrance into the wood located along the road to the right of these houses. Limited parking may be available on the housing estate road.

By bus: There is a bus stop on Wharford Lane (approximately 0.5km walk from the wood).

By train: The nearest train station is Runcorn East station (approx. 3.2km/ 2.0 miles).

For up-to-date information on public transport, visit traveline.org.uk.

#### 3.2 Access / Walks

There are three public entrances into the wood from adjoining land. An unsurfaced footpath enters the wood on the western boundary passing a pond and crossing over a ditch via a footbridge, before joining with a surfaced footpath near the eastern edge of the wood close to Keckwick Brook. This surfaced path is a linear route which runs north to south alongside the Keckwick Brook through the Sandymoor Valley.

# 4.0 LONG TERM POLICY

The long term intention for Brook Wood is to maintain a high forest of mixed native broadleaves with oak, sycamore, alder, birch and occasional hornbeam, beech and lime. It will primarily be managed as a recreational and landscape feature providing an important woodland habitat for wildlife and people to enjoy.

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 will be managed to maintain a diverse structure and mix of species to ensure that it is as resilient 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 encouraged. The key drivers for management operations will be for public access, safety and long term stand stability.

Open public access will be retained at the wood in perpetuity and the current level of access infrastructure will be maintained with approximately 200 metres of footpath and three entrance points. The Trust's duty of care to neighbours and visitors will continue to be addressed through ongoing tree safety and site risk assessment inspections.

The woodland will be regularly monitored for threats from tree diseases, pests, non-native species, human impacts and for the long term sustainability of the woodland.

#### 5.0 KEY FEATURES

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

#### 5.1 Secondary Woodland

#### Description

Brook Wood is a small secondary mixed broadleaved woodland lying within the Sandymoor Valley. The woodland consists of mature and over mature oak, sycamore, lime, alder, birch with occasional horse chestnut and hornbeam. The understorey is quite sparse and contains hawthorn, hazel and elder.

The site was under planted with mixed broadleaves including hazel, hawthorn, rowan and cherry. The ground flora is sparse and is largely dominated by bramble with pockets of bluebell. There is a large pond and associated outfall ditch that runs west to east into Keckwick Brook. There is a small island in the middle of the pond which is covered with rhododendron.

#### Significance

Brook Wood is a significant woodland feature in the landscape of the Sandymoor Valley and forms part of the local ecological network alongside the Keckwick Brook with other woodlands, grasslands, ponds and ditches. The woodland provides an important wildlife habitat, food source and nesting sites for a variety of birds and small mammals. The pond and ditch in the wood are of significant value for local biodiversity.

#### **Opportunities & Constraints**

The opportunity exists to enhance the woodland through natural processes to develop old trees as veterans. Tree safety work will provide opportunities to create gaps in the canopy to allow natural regeneration to develop and enhance levels of deadwood in the wood.

The development of the adjoining land next to the site constrains any possible expansion to the size of the woodland and puts a greater pressure on management for tree safety along boundaries.

# **Factors Causing Change**

Over mature trees and dense canopy shading is preventing sufficient levels of natural regeneration and may result in the canopy being dominated by one or two species over time.

Invasive non-native rhododendron is regenerating in places and will spread if not controlled which will impact on natural regeneration and ground flora.

Himalayan balsam is spreading into the wood from the adjoining river course.

The proximity of new properties with gardens mean that fly tipping, particularly of garden waste may increase leading to non-native garden species spreading in the woodland.

# Long term Objective (50 years+)

The long-term objective for the wood is to maintain a high forest, continuous canopy cover of native broadleaves with mixed structure, species and age composition, diverse shrub layer and ground flora. The wood will be left to develop largely through natural process with mature and over mature trees, standing and fallen deadwood retained where safe to do so and succession promoted through natural regeneration. Due to its urban location, tree safety work may be required for public safety which will create gaps in the canopy to promote natural regeneration. Threats to the wood from pests, invasive species and tree disease will be monitored and where necessary appropriate action taken to control them.

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

During the plan period the aim will be to undertake silvicultural tree safety work to maintain a diverse woodland structure (in terms of age and species) to make it more robust for the future. The short term objectives are to:

- 1. carry out selective felling in 2018-19 for long term stand stability and tree safety in areas bordering the houses and footpaths.
- 2. monitor the health of the woodland at least once during the plan period and identify any threats from tree disease, pests, non-native invasive species, human impacts, and take appropriate action where necessary.
- 3. remove any remaining rhododendron and control the spread of Himalayan balsam in the wood by the end of the plan period.

#### 5.2 Informal Public Access

#### Description

Informal public access is available to Brook Wood with an access point from the neighbouring land on the western boundary and another two access points near the eastern boundary. A permissive surfaced footpath runs from the western boundary for approximately 150m, past a pond and crossing over a ditch via a wooden footbridge before it joins with another surfaced footpath that passes through the wood (and crosses over the ditch via a second wooden footbridge) near to the eastern boundary next to Keckwick Brook. At present the number of visitors to the wood is fairly low, but is likely to increase as more houses are built in the surrounding area. The only parking for the wood is on nearby local roads.

#### Significance

Increasing enjoyment of woodland is one of the Woodland Trust's key outcomes and Brook Wood provides local people with the opportunity to access and enjoy woodland and nature close to where they live. As the local surrounding area has been developed the woodland provides an amenity feature and helps to soften the increasingly urban landscape. The wood is linked to other nearby areas of woodland, semi-natural habitat and green space by a linear multi-user recreational route (Sandymoor Greenway) which passes through the eastern edge of the wood and makes it accessible to the growing residential population in Sandymoor.

#### **Opportunities & Constraints**

The development of much of the surrounding land for new houses will lead to more people using the site and this provides an opportunity to raise local awareness of the Woodland Trust and to promote this woodland to local people. However conversely the growing local population means that the wood will be subject to greater potential misuse (fires, den building, vandalism, litter and fly tipping) and will need to be monitored and any new threats dealt with.

The small size of the wood limits the opportunity to increase public access other than to maintain the present footpath and infrastructure.

# **Factors Causing Change**

New housing development near the woodland will lead to increased visitor usage of the wood and could lead to more litter, fly tipping, vandalism, fires, etc.

# Long term Objective (50 years+)

The long-term intention is to maintain the present levels of open public access. Guided by the parameters set out in the Woodland Trust's woodland management principles and access policy, management will continue to seek a balance between conservation and public enjoyment. The site will be made as safe as practicable for visitors and neighbours through regular safety inspections of trees in high risk zones, site hazards and access furniture. Any threats to the wood arising from public recreation or misuse will be monitored and appropriate measures taken if necessary.

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

During the plan period the aim is to maintain the current level of public access to the site. To achieve this the short term objectives are to:

- 1. carry out annual maintenance of all entrances, signage, footbridges and footpaths to ensure they remain easy to use. Any vegetation encroaching on footpaths will be cut back and litter/ fly tipping removed as necessary.
- 2. undertake regular safety inspections of trees in high risk zones (i.e. next to houses, roads and footpaths) and site hazards (as per the Trust's safety inspection regimes) to ensure safety of visitors and neighbours, and undertaking any remedial safety work identified.
- 3. carry out monitoring at least once during the plan period to assess whether the current access provision is adequate for the level of public use, to identify if there are any people issues/ threats to the wood, and taking appropriate action to address them if necessary.

# 6.0 WORK PROGRAMME

Year Type of Work Description Due By

#### APPENDIX 1: COMPARTMENT DESCRIPTIONS

| Cpt<br>No. | Area<br>(ha) | Main<br>Species                    | Year | Management<br>Regime | Major<br>Management<br>Constraints | Key Features<br>Present                             | Designations        |
|------------|--------------|------------------------------------|------|----------------------|------------------------------------|-----------------------------------------------------|---------------------|
| 1a         | 0.61         | Mixed<br>native<br>broadlea<br>ves | 1920 | High forest          | l .                                | Informal Public<br>Access,<br>Secondary<br>Woodland | Community<br>Forest |

This roughly rectangular shaped compartment occupies low lying flat ground on the flood plain of the Keckwick Brook. Until recently (2017/18) the surrounding land was mostly unmanaged grassland, but is now being developed for new houses which will border the northern and southern boundaries to the wood. The western boundary is abutted by a new access road and the eastern boundary is next to Keckwick Brook.

A pond (approx. 0.1ha) occupies the western part of the compartment connected by a drainage ditch to the Keckwick Brook.

The woodland canopy contains oak, sycamore, alder, silver birch with occasional hornbeam, beech and lime. The understorey consists mostly of rowan, silver birch, cherry and oak which was under planted by the Commission for New Town in the 1980's, along with the shrub layer consisting of hazel, holly, hawthorn, elder which was also largely planted at the same time. It used to contain rhododendron although this has now been removed apart from some that remains growing on the island in the pond. The ground flora is sparse due to the dense canopy, and the woodland flora comprises mainly bramble, bluebell and red campion. There is a short section of surfaced footpath with two wooden bridges that traverse the pond outfall ditch and that connect the woodland to footpaths in the Sandymoor Valley.

# Appendix 2: Harvesting operations (20 years)

| Forecast<br>Year | Cpt | Operation Type    | Work Area<br>(ha) | Estimated<br>vol/ha | Estimated total vol. |
|------------------|-----|-------------------|-------------------|---------------------|----------------------|
| 2020             | 1a  | Ride edge Coppice | 0.10              | 20                  | 2                    |
| 2025             | 1a  | Ride edge Coppice | 0.10              | 20                  | 2                    |

#### **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.