



Floodbrook Clough

Management Plan 2016-2021

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THE WOODLAND TRUST

INTRODUCTION

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

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

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

PLAN REVIEW AND UPDATING

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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

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

WOODLAND MANAGEMENT APPROACH

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

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

All our sites have a management plan which is freely accessible via our website www.woodlandtrust.org.uk. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

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

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

The following guidelines help to direct our woodland management:

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

SUMMARY

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

1.0 SITE DETAILS

Site name:	Floodbrook Clough
Location:	Runcorn
Grid reference:	SJ532800, OS 1:50,000 Sheet No. 108
Area:	5.35 hectares (13.22 acres)
Designations:	Ancient Semi Natural Woodland, Community Forest, Site of Special Scientific Interest

2.0 SITE DESCRIPTION

2.1 Summary Description

Floodbrook Clough is an Ancient Semi-Natural Woodland and Site of Special Scientific Interest located in the Beechwood area of Runcorn. It is a mixed broadleaved woodland in a long, deep steep-sided clough with Flood Brook running through the bottom. It has been relatively undisturbed due to the steep slopes and is one of the best examples in Cheshire of clough woodland on keuper marl. It has rich assemblages of wet woodland plants including two nationally rare species (thin spined wood sedge and wood barley). There is no public access allowed and footpaths in the wood due to sheer cliff faces and unfavourable wet ground conditions, however it can be viewed from a public footpath that runs around the outside of the wood.

2.2 Extended Description

Floodbrook Clough is an Ancient Semi-Natural Woodland (ASNW) and Site of Special Scientific Interest (SSSI) in the Beechwood area of Runcorn in north Cheshire. The woodland is 5.3 hectares and is in a long, deep-sided ravine or clough with the Flood Brook flowing through the site from north to south. It is surrounded by housing estates built in the 1980s on the plateau around the clough, a main road and a railway line.

The primary reason for it being designated a SSSI is because it one of the best examples in Cheshire of clough woodland on keuper marl and has been relatively undisturbed due to the steep slopes. It exhibits rich assemblages of wet woodland plants including two nationally rare species (thin spiked wood sedge and wood barley).

The main trees species are ash, oak, small leaved lime, sycamore with wych elm, wild cherry and whitebeam. The canopy was dominated by wych elm until the 1970s when the impact of Dutch elm disease led to the death of a significant amount of the wych elm resulting in a significant amount of dead wood within the site. Natural regeneration has flourished where gaps were created in the canopy from the loss of elm and consists of ash, wych elm, cherry and sycamore. The understorey contains elder, elm, hawthorn and hazel and the ground flora has a number of ASNW indicator species including ramsons, bluebells, wood anemone and lesser celandine.

There is no public access within the site due to very steep slopes and cliff faces and very wet ground conditions. In the past the site has suffered from large quantities of fly tipping from neighbouring gardens and vandalism although this has reduced significantly in recent years.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

The wood is located in the Beechwood area of Runcorn and the nearest road is Beechwood Avenue which passes along the southern boundary of the site.

There are no public access points and no footpaths within the wood due to the steep slopes, although a surfaced public footpath runs around the outside of the wood.

3.2 Access / Walks

There is no public access into this site although a public footpath follows the boundary and offers views into the woodland. The footpath links with the adjoining housing estates and Beechwood Avenue.

4.0 LONG TERM POLICY

The long term intention for Floodbrook Clough Wood is to maintain it as high forest of mixed broadleaves with a diverse structure, species and age composition. It will be managed primarily as a landscape feature and wildlife refuge in this urban setting.

This will be achieved by minimal management intervention, allowing mature and veteran trees to thrive and young trees to regenerate where there are losses, and retaining fallen and standing deadwood if safe to do so. The rare Ancient Woodland ground flora will be conserved and we will work with Natural England to maintain the SSSI status for the site in a favourable condition.

The main driver for management operations will be tree safety due to the close proximity of houses and a surfaced footpath around the wood, and to make it more resilient to cope with future pressures from climate change, pests and tree diseases.

Fly tipping will be removed to prevent the introduction of exotic plants from garden waste tipping.

No public access will be allowed in the wood due to the steep slopes and cliff faces, the large amounts of deadwood, both fallen and standing and the fragile rare ground flora. Boundary fencing and signage around the perimeter will be maintained to deter public access and fly tipping.

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 Ancient Semi Natural Woodland

Description

Ancient Semi Natural Woodland SSSI, in a long steep-sided clough with a stream, Flood Brook, running through the bottom of the valley. It contains a mix of broadleaved species, predominantly ash with oak, wild cherry, small leaved lime, wych elm and sycamore and an understorey of elder, elm, hawthorn, hazel and natural regeneration. There is no public access allowed within the wood due to the steep slopes and fragile ground flora, however there is a surfaced public footpath that runs around the outside of the wood on land owned by Halton Council. There is approximately 1.8km of post and rail fence around the wood to prevent public access.

Significance

It has been designated as a SSSI primarily because it is a fine example of a Cheshire clough woodland on keuper marl. The inaccessibility and steep slopes on site means that it has been relatively undisturbed and exhibits some of the richest assemblages of wet woodland plants to be found in Cheshire including two nationally rare species which are found within the wood - thin spiked wood sedge and wood barley.

The site is Ancient Semi Natural Woodland (ASNW) which is locally and nationally rare with less than 2% of woodland cover in England is classed as ASNW.

Opportunities & Constraints

The restriction of not allowing public access in the wood provides a good opportunity to avoid disturbance and potential damaging activities resulting from public access to the ASNW ground flora found within the site.

The close proximity of houses and well used footpath around the outside of the wood means that opportunistic tree safety work could provide gaps in the canopy to encourage natural regeneration. There is no vehicle access possible within the wood and undertaking management operations is difficult due to the steep slopes and cliff faces in the wood.

Factors Causing Change

Invasive non-native garden escapes could spread and out compete ASNW ground flora. Sycamore spreading in the wood could out compete other species and impact on natural regeneration and ground flora composition.

Fly tipping of household and garden waste from nearby houses is a recurring problem.

Long term Objective (50 years+)

To maintain a high forest of mixed native broadleaves (diversely structured in terms of species composition, age/size classes) with minimum intervention other than for public safety or to maintain the resilience of the wood. It will maintain "favourable" SSSI status. Non-native garden escapes and fly tipping will be controlled to protect the Ancient Semi Natural Woodland ground flora indicator species.

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

During the plan period the level of sycamore will be assessed to ensure it does not dominate the species composition.

Fly tipping of waste and garden escapes will be monitored annually and any dumped rubbish / garden escapes removed as part of the EMC.

Tree safety inspections will be carried out biannually in high risk zones (along boundary next to footpath and houses) as part of the site risk assessment process for public safety.

The boundary fencing will be inspected once during the plan period and maintained to prevent unauthorised public access to the wood.

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
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APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	5.35	Oak (pedunculate)	1900	High forest	Gullies/Deep Valleys/Uneven/Rocky ground, No/poor vehicular access within the site, People issues (+tve & -tve), Sensitive habitats/species on or adjacent to site	Ancient Semi Natural Woodland	Ancient Semi Natural Woodland, Community Forest, Site of Special Scientific Interest

The compartment is a long, deep steep-sided clough running roughly north to south. The height of the clough varies from 40ft at the northern end to 80ft at the southern end, with the steepest slopes including some almost vertical cliffs on the eastern bank. A stream, Flood Brook runs through the bottom of the clough from north to south.

It is bounded by housing estates on the east and west sides, a railway line to the north and a road (Beechwood Avenue) to the south. There is no public access allowed within the compartment due to the steep slopes and cliffs. All boundaries have post and rail fencing to prevent access.

The trees are mixed native broadleaves, mainly ash (approx 30%), pedunculate oak, wild cherry, small leaved lime, whitebeam, sycamore and wych elm. The understorey comprises elder, hazel, hawthorn, blackthorn, willow, alder and wych elm, sycamore and ash regeneration. Wych elm was dominant in the canopy prior to Dutch elm disease hitting the wood in the 1970's.

The ground flora is varied and quite diverse and includes bluebell, wild garlic, wood anemone and lesser celandine. Three rare species are found within Floodbrook Clough, these are softshield fern, thin spiked wood sedge and wood barley. There is a substantial amount of fallen deadwood, mainly wych elm, within the bottom of the clough.

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.