



Tattershall Carrs

Management Plan 2015-2020

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Tattershall Carrs
Location:	Tattershall
Grid reference:	TF216589, OS 1:50,000 Sheet No. 122
Area:	29.00 hectares (71.66 acres)
Designations:	Ancient Semi Natural Woodland, Ancient Woodland Site, Coningsby Airfield Safeguard Area, Site of Special Scientific Interest, Tree Preservation Order

2.0 SITE DESCRIPTION

2.1 Summary Description

Tattershall Carrs forms the last remaining remnants of ancient, wet, alder-dominated woodland that once ringed the margins of the Fens. It also boasts a fascinating history - the wood was part of RAF Woodhall Spa during the Second World War, and was home to the famous 617 'Dambusters' squadron.

2.2 Extended Description

Tattershall Carrs comprises two district strips of woodland: Tattershall Thorpe Carr (11.99 hectares) and Tattershall Carr (16.95 hectares) lying less than 0.5 km from one another and linked by a narrow green lane crossing open arable farmland. They are located immediately to the west of the small hamlet of Tattershall Thorpe and approximately 1km north of Tattershall and Coningsby on the B1192. They are entirely surrounded by tenanted arable farmland mostly belonging to CEMEX, who currently operate a sand quarry 0.5km to the north. The North east corner of the woodland borders Thorpe Camp visitor centre and there is a small housing estate to the south with several access points into the wood. Both the Carrs are designated Sites Of Special Scientific Interest (notified 1968), Ancient Woodland Sites (pre-1600) and the trees are protected by a Tree Preservation Order. The woodlands form the most extensive examples in Lincolnshire of ancient woodlands on fen edge sands and gravels dominated by alder.

The woodlands are freely open to walkers and there are a number of access points into both woodlands from the B1192 and the housing estate to the south. Access points are all kissing gates to prevent motorcycles and the paths themselves can be very muddy, but are fairly level and well defined.

Little is known of the site's history from before 1940, although it can be assumed that as drainage provision around the villages of Tattershall and Tattershall Thorpe improved, the woodlands have become drier. As a result the species composition of the woodlands has changed from pure alder/willow 'carr' woodland to a more intimate mixture of broadleaved woodland with patchy wet areas dominated by relic alder stands.

The history of the woodland during and since World War II is well documented however. The woods were used as part of RAF Woodhall Spa, and housed the famous 617 (Dambusters) squadron for most of the war along with several other RAF regiments. Many remnants from this period are clearly visible in the wood, including Air-raid shelters, sewerage ejector houses, fire ponds, tracks and transformer bases. Part of the war time base has been restored by the Thorpe Camp Preservation Trust and is a museum open weekends and bank holidays between Easter and the end of summer holidays.

Of the many tree species present, alder, ash, sycamore and birches (*B. pendula* and *B. pubescens*) are abundant with oak (*Quercus robur*), rowan, holly, field maple and hazel, locally common. Grey willow (*Salix cinerea*) is found in the wettest areas associated with a shrub layer which includes typical alder carr species of raspberry (*Rubus idaeus*) and red currant (*Ribes rubrum*).

The key features for this site are:

- Ancient Semi-natural woodland
- Informal public access

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

The wood can be located on Thorpe road B1192. The woodlands are freely open to walkers and there are a number of access points into both woodlands from the south. Entrances onto the site are open therefore access can be made suitable for wheelchair users. The Trust maintains a network of permissive paths throughout both woodlands and along the green lane running between the two blocks. The southern half of this green lane is a public right of way. Permissive footpaths in the wood are well defined and comprise of natural unmodified surfaces these can be quite muddy and rutted in wet conditions. The terrain of the site is fairly flat. There is no car park at the site, however there is car parking close by.

There are no public toilets within walking distance of the woods.

The nearest bus stop is situated on Tattershall High street A153 approximately 1 mile to the south of the woods. For bus information and timetables please access the traveline web link for further information contact 0871 200 22 33

3.2 Access / Walks

4.0 LONG TERM POLICY

Tattershall Carrs should remain a diverse, mixed aged native forest, retaining and enhancing the botanical, faunal and historic interest of the site for regular enjoyment by the public. Management will support natural processes wherever possible, with intervention to control invasive species (eg bracken), to encourage diverse range of native species to regenerate and protection of important historical features. Soil moisture within the woods will be retained as much as possible by the clearing of feeder ditches and, in the case of Thorpe Carr, manipulating the two small dams. Paths and entrance points will be maintained to ensure visitors can enjoy using the site.

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

The whole site is a complex matrix of semi natural ancient woodland communities. The variation due to the pattern of underlying glacio-fluvial deposits, their drainage patterns and degrees of flushing from ground water and internal and external ditches.

Both sites are the most extensive examples of ancient woodland on fen edge sands and gravels in Lincolnshire (SSSI Notification).

The woods are notable for the alder dominated areas on wet ground. There is one important conservation feature within this Key Feature:

C1 - The stream sides and banks of the internal stream running through Tattershall Thorpe Carr. This area is characterised in some areas by a carpet of opposite and alternate leaved golden saxifrage (*Chrysplenium oppositifolium*/*C.alternifolium*) on the wet bank sides.

Historical features consist of the scattered remnants of the world war 2, RAF Woodhall Spa accommodation areas - the base for the famous 617 (Dambusters) Squadron of RAF Bomber Command for much of the war, along with a number of other regiments. What remains is now largely the more permanent brick/concrete structures such as transformer houses, stanton shelters and sewage infrastructure.

Significance

Ancient semi natural woodland is important in its own right as a conservation and heritage resource: given its scarcity, the preservation of surviving wet woodlands is even more critical. These woods are important habitats for a number of species. Their high humidity favours bryophyte growth and there are numerous invertebrates associated with wet woodlands, particularly beetles and craneflies. Many such alder woods have a long history of coppice management which has determined their structure and ecology. Wet woodlands are therefore important not just as repositories of biodiversity, but also as cultural habitats, reflecting the traditional management techniques employed in these ancient woodlands over the centuries.

The wood lies within a predominantly intensively farmed landscape (although just outside a local concentration of ancient woodland as identified by the Woodland Trust) which is further prone to gravel and sand extraction and as such its preservation is that more important.

The wood is also home to at least 8 recorded species of Bat, including 4 UKBAP species:

- Common pipistrelle
- Soprano pipistrelle (UKBAP)
- Nathusius' pipistrelle
- Brown Long-eared (UKBAP)
- Noctule (UKBAP)
- Daubenton's bat
- Natterer's
- Barbastelle (UKBAP)

Opportunities & Constraints

Opportunities:

The field separating the two woods came on the market in late 2014. The price was prohibitive, but the new owners may be more open to collaborative working and increasing permeability of wildlife between the two carrs and buffering the existing stand from agricultural "edge effects".

Constraints:

Much of the woodland has a high water table which in its turn creates a high windblow risk, particularly in the Tattershall Thorpe Carr. This precludes felling of canopy trees on anything but the smallest scale. The almost permanently wet conditions make timber extraction impractical for most of the year and there is very limited site access within either wood.

Factors Causing Change

Natural regeneration of sycamore and native species, Deer browsing, Invasive Rhododendron, Windblow, changes in drainage patterns, changes to level of bracken coverage, tree disease (chalara -confirmed to be present in the woodland in spring 2014)

Long term Objective (50 years+)

A well structured fen edge wet woodland habitat dominated by Alder, but with a significant proportion of other native broadleaved species appropriate for the conditions.

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

Encourage regeneration of native broadleaved tree species and ground flora by the control of bracken in selected areas identified and implemented as needed following annual inspection. Also inspect canopy cover in ash dominated areas to check for natural regeneration of at least two broadleaves species. Under planting may be required where disease related canopy dieback is occurring more rapidly than regrowth can develop, leading to an influx in less desirable coarse vegetation (bramble, bracken or nettle) Action to be undertaken as appropriate and in agreement with Natural England (SSSi). Deadwood will be retained as long as possible wherever it is does not pose significant risk to people or property.

Management works to be undertaken to ensure resilient woodland canopy with diverse species mix and in response to ash dieback. Hence silvicultural works to be targeted towards thinning of ash dominated stands for stability and thinning of heavily dominated sycamore areas to introduce variety.

5.2 Informal Public Access

Description

There are extensive networks of permissive paths throughout the Carrs and the two woods are linked by a green lane over which the Trust has rights of management and pedestrian access. Most of the tracks and paths are well used by the local population and visitors each year. There appears to be only limited use of the woodland away from the paths due to the wet conditions underfoot.

Significance

Increasing enjoyment of woodland is one of the Trust key objectives. Encouraging access to Tattershall Carrs is particularly important given the paucity of broadleaved woodland sites open to the public in Lincolnshire. The wood lies within a primarily intensively farmed landscape and any woodland based recreation facilities are more important as a result.

Opportunities & Constraints

Opportunities:

Bluebell and snow drop displays prove a popular attractant to visitors throughout the spring.

WWII buildings also provide a unique point of interest to attract visitors, making this relatively small site more of a destination

CEMEX land may be restored to conservation with public access once quarried.

Constraints:

paths often very muddy. wellies are a must for much of the year.

Very little car parking available nearby and limited population within walking distance.

Factors Causing Change

Gradual decay of structures within the woodlands, seasonal waterlogging, changes to drainage patterns affecting paths, redevelopment of nearby housing estate

Long term Objective (50 years+)

Both woodlands regularly enjoyed and valued by local people for quiet informal recreation.

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

Maintain the present pattern of tracks and paths by cutting back overhanging vegetation at least once per year to a width of 3 meters. Signs will kept in good condition at all times repaired, cleaned or replaced as necessary following biennial inspection, or whenever the need becomes apparent.

Discourage the occasional misuse of the woods by motor-cyclists by the maintenance of exclusion methods at vulnerable entrances and liaison with the local Police.

Encourage the use of the woods by a broader spectrum of visitors eg. The Forest School Initiative, the Lincolnshire Bat Group and other wildlife and historical interest groups.

Make bridges safer by covering them with netting in 2015

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	11.99	Alder species		High forest	Mostly wet ground/exposed site, No/poor vehicular access within the site	Ancient Semi Natural Woodland, Informal Public Access	Ancient Semi Natural Woodland, Ancient Woodland Site, Site of Special Scientific Interest, Tree Preservation Order

The whole of the northern wood, Tattershall Thorpe Carr, has been incorporated into a single management unit although there is some notable variation of woodland type. The variation in both stand type and ground flora appears largely determined by localised soil moisture levels which in their turn have a considerable influence on soil type. The east and west extremities where Sycamore is co-dominant with Alder, Oak, Birch and Rowan have base-poor soils whereas the north and south edges have dry but acid soils where Alder, Ash, Oak and Birch are more numerous and Sycamore sub-dominant. In the central core, particularly on the ditch margins, where the soils are damp and base rich then Alder and Ash are dominant and Sycamore only occasional. In order to ensure that the soils of the core area maintain the necessary moisture levels the central ditch has been dammed in two locations. These structures were built and are monitored by the Witham Internal Drainage Board.

The major thrust of the silvicultural management of the wood within the last 10 years has been to reduce the dominance of Sycamore in those areas where it was perceived to be a limiting factor in the regeneration of native broadleaves and threatened its status as a Site of Special Scientific Interest as designated by English Nature. The invasion of sycamore however is more symptomatic of the drying soils, and so Silvicultural intervention in this way is not really sustainable longer term.

The western section of the sub-compartment contains the greatest concentration of World War 2, RAF buildings: mostly Stanton shelters, sewerage ejector houses and transformer houses. The shelters have been converted into hibernaculum for the 8 resident species (including 4 UKBAP species) of Bats regularly monitored by the Lincolnshire Bat group, with survey details stored in the site file.

1b	16.95	Alder species		High forest	Mostly wet ground/exposed site, No/poor vehicular access within the site, Site structure, location, natural features & vegetation	Ancient Semi Natural Woodland, Informal Public Access	Ancient Semi Natural Woodland, Ancient Woodland Site, Site of Special Scientific Interest, Tree Preservation Order
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The entirety of the south wood (Tattershall Carr) is treated as a single management unit. As in the case of Tattershall Thorpe Carr to the north the tree species distribution appears very much determined by the variations in soil type and soil moisture. Consequently on the drier soils particularly in the northern and central sectors Sycamore has a significant presence in the mix of Oak, Alder, Birch and Ash. However on the wetter soils in the eastern and western sections Sycamore is absent and Alder and Ash are predominant.

There is a small stand in the south of the central sector where Birch is dominant which also has significant areas of open ground. Although in summer it is covered by bracken in spring it forms the largest concentration of bluebells within the woods and is a focus for visitor activity. This wood also contains a large number of structures left over from WW2 the most obvious being the air-raid (Stanton) shelters, transformer bases and sewerage ejector houses. Where hazardous these have been made safe and in the case of the shelters, have been identified as bat roosting and hibernation sites and are monitored by the Lincolnshire Bat Group.

Both woodlands are located within the Lincoln Clay Vale of the Upper Jurassic series which extends from the Humber in the north to the Fenlands in the south. Both morphologically and stratigraphically the clay vale lies between the older rocks of the Middle Jurassic of the Lincoln Edge to the west and the younger Cretaceous rocks of the Lincolnshire Wolds to the east. The soils of the area very much reflect the drift geology of glacio-fluvial derivations. A basal area survey carried out in 2001 indicated a species distribution for both woods combined as follows; alder 34%, ash 30%, sycamore 14%, oak 11%, birch spp. 7%, rowan 3% field maple 1% and both hazel and holly < 1%. A basal area survey of sycamore undertaken in 2009 indicated that the proportion of sycamore had been reduced to 13% of the total which is equivalent to a reduction of 7% in the basal area of sycamore across the two woods.

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.