



Tarn Wadling

Management Plan 2019-2024

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Tarn Wadling
Location:	High Heskett, Armathwaite
Grid reference:	NY486440, OS 1:50,000 Sheet No. 86
Area:	0.55 hectares (1.36 acres)
Designations:	Registered Common Land

2.0 SITE DESCRIPTION

2.1 Summary Description

This peaceful wood lies 10 miles north of Penrith, near the village of High Heskett. It is dominated by 120-year-old Scots pine and includes 60 to 70-year-old birch. It takes its name from the disappeared historic lake of Tarn Wadling, which features on the ancient Gough map and in an old poem on Arthurian legend.

2.2 Extended Description

The Woodland Trust purchased Tarn Wadling in 1997, and it is a small rectangular area of woodland on flat land located in a rural farming area. It is mainly mature woodland, although the area nearest the road was open ground and was planted by the Trust shortly after acquisition. The wood is accessed from an unclassified road leading from the A6 trunk road near the village of High Hesket (9 miles north of Penrith) towards Armathwaite. The woodland, extending to 0.55ha, is isolated from other natural habitats in the landscape, surrounded by improved grassland and although the adjacent layby is well used, the wood itself is not frequently used by visitors and there are no houses nearby.

The wood takes its name from the name of the general area where there used to be a sizable lake. The adjacent land to the south rises steadily to Blaze Fell whilst to the north and east it is generally flat. West, north west and south west of Tarn Wadling in the wider landscape there are extensively wooded areas along the Eden valley, much of which is coniferous in nature. The wood is enclosed mainly by post and wire fence though some remnant sections of dry stone wall form part of the enclosure along the north west and north east boundary. Pedestrian access is gained through a squeeze style in the south western corner, indicated by a Woodland Trust welcome sign. A gate for management access is adjacent, and here an informal track and path extend into the wood for about 100 metres leading and ending at an 8' gate in the boundary dry stone wall (which has fine sandstone ends called stoops) close to the north eastern tip of the woodland.

Two thirds of the woodland is made up of mature Scots pine planted around 1880. Birch have colonised areas where sufficient light exists to grow, mainly on the margins of the wood, and whilst most have grown from approximately 1950-60's there are a small number of younger trees. Additionally there are two areas of goat willow; one in the north west corner where there is damp ground and the remnants of an old pond, and one to the south east where a number of mature hawthorn and dog rose also grow. The remaining third of the wood, to the south, was planted in 1998 with a mixture of Scots pine, oak, ash and cherry and has around 30% ash (2017). The understory, despite the open canopy of the Scots pine, is very sparse with only an occasional hawthorn and some areas of gorse. Grasses and other common species dominate the ground flora, with bramble and bracken in areas.

The wood, though not designated as an Ancient Woodland on the NCC register, is in an area of considerable historical importance. It was originally part of a much larger woodland on the shores of a lake called Tarn Wadling, one of only two Cumbrian lakes (the other being Windermere) shown on the 14th century Gough map. Reference is also made to Tarn Wadling (the lake) in the Domesday Book, where it is one of the few features in the north-west that is recorded. It is also mentioned in the setting of a 15th century poem. It is thought that the Scots pine may have been used to denote the drover's route to the lake and are therefore historically important. Records make mention of the lake at Tarn Wadling up to the late 1850s when it is suggested that Lord Lonsdale drained the area to create a training ground for racehorses. The lake partially refilled as is evident from reports of winter skating in 1939. The final demise appears to have been in the 1940s when the lake was once again drained for agriculture.

Almost all the woods in the locality of Tarn Wadling are designated either as Ancient Semi Natural Woodland or Planted Ancient Woodland giving further credence to the wood's existence from at least the 1600s. It is also shown as wooded along with a large section of land to the east on a map dated 1867-1868.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Management and pedestrian access is direct from an unclassified road leading east from the A6 near the village of High Hesket towards Armathwaite. Approaching from this direction the woodland is on the left hand side, approximately ½ mile from the A6 junction and immediately after going beneath an overhead electricity line. In the south west corner of the wood is a squeeze style next to a management access gate and a Woodland Trust welcome sign, which provides pedestrian access to a 100 metre path into the wood. There is sufficient space at the edge of the road for parking of two vehicles in an informal layby. This pull-in is frequently used.

3.2 Access / Walks

4.0 LONG TERM POLICY

The Trust's long term vision is to conserve and enhance this woodland and its biodiversity and retain it as a landscape feature, by managing it as continuous cover high forest. The key aspects of this will be to ensure that there is successful regeneration, and that the stand of mature trees is stable, to avoid any major loss of canopy.

Over time the wood will continue to develop a greater age range of trees and deadwood, whilst retaining a species mix of native and non-native or naturalised trees and shrubs. The woodland's current composition is likely to change in the long term as some species e.g. Scot's pine, will probably not regenerate.

The Woodland Trust will maintain the informal access to the woodland with the provision of one entrance point and welcome sign in line with its relatively low level of use. Public information will be provided mainly through the Woodland Trust web site to inform and involve visitors with this wood and to enable them to gain a better understanding of the importance of woodland within the environment.

It is anticipated that this approach will ensure the conservation of the woodland and maintain the level of public involvement.

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 Informal Public Access

Description

The wood has a low level of use, due to its small size and the fact that it is isolated with no links to other footpaths or the nearby villages, and is not close to any houses. It does have roadside frontage, and there is a layby adjacent, which is a popular parking spot with space for two vehicles.

Significance

Tarn Wadling offers a small area of woodland for informal and peaceful recreation for locals and visitors to the area, which is one of the Trust's key outcomes, and has parking adjacent. Such activities promote the Woodland Trust's aims and objectives and also make people aware of woodland managed by the Trust thus encouraging use of even small woods.

Tarn Wadling is of great historical importance, as mentioned in the site description.

Opportunities & Constraints

The small size of the woodland and the lack of links to other footpaths are major constraints to extending public access. Opportunities exist to promote the historical importance of the woodland and surrounding area of Tarn Wadling through the web site, which could potentially engage more people.

Factors Causing Change

None.

Long term Objective (50 years+)

The Woodland Trust will maintain informal public access to the woodland through the provision and management of a pedestrian entrance with welcome sign in line with its low level of use. Public information will be provided and the wood promoted through the Woodland Trust's web site to engage people with the woodland and to promote greater understanding of its history and importance within the environment.

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

Public access will be maintained by managing the access with its pedestrian squeeze style and welcome sign, and cutting a permissive path to gain access into the wood for approximately 100m. The entrance and layby will be litter picked as necessary. These are both carried out annually.

5.2 Natural Secondary Woodland

Description

Tarn Wadling is a small rectangular wood, 0.55ha in size, surrounded by farmland on three sides and a road to the east. The land to the south rises steadily to Blaze Fell whilst to the north and east the land is farmed and generally flat. 1 mile to the west, north west and south west of Tarn Wadling there are extensively wooded areas along the Eden valley, much of which is coniferous in nature.

The woods current composition can be split into two parts: the main area of the woodland to the west is 50% Scots pine dating from around 1880, 30% birch dating from about 1950-60s, and 20% younger. The eastern area closest the road was planted in 1998 with a mix of native broadleaves with 30% each of oak, ash and 30% Scot's pine, to reflect the current character and history of the rest of the wood, and 10% mixed species. The ground flora is dominated by grasses, common grassland and woodland plants including much bramble.

Significance

Originally Tarn Wadling was part of a much larger woodland and this area along with the woodland located immediately to the north east (designated as Ancient Semi-Natural Woodland) are perhaps the last remnants of the forest shown on a map from the 1850's. It is important that such woodlands are protected from potential conversion and whilst over time it may be desirable to increase the amount of native broadleaved species this should not be to the detriment of the all the Scots pine which is near native, and once possibly lined a Drover's route to the Lake and as such is historically significant. The immediate locality is intensively farmed and sparsely wooded and Tarn Wadling is an important habitat providing for a variety of flora and fauna, plus it is also a landscape feature, adding height and structure.

Opportunities & Constraints

The Scots pine is unlikely to regenerate, and so there is a natural opportunity to revert the woodland to mainly native species. This will occur over a long period of time, providing gradual change, as the older trees naturally senesce and hence maintain continuous cover. Having planted a section of the wood with native species in 1998, natural regeneration should provide sustainable future colonisation of open areas as they occur. Some landscape and historical characteristics of the woodland could be retained by continuing to manage some small amounts of Scots pine. It should be possible to retain the existing old pine and birch trees to overmaturity and senescence and have large standing deadwood, as management is only slightly constrained by safety needs with the low level of use. If an opportunity arose to increase the size of the woodland it would be of benefit to the diversity and sustainability of Tarn Wadling, which is currently constrained by its small size. This makes the sustainability of the woodland and its biodiversity vulnerable. Ash dieback visible in the area from 2017, but not yet significant.

Factors Causing Change

Natural senescence of even-aged stand of mature trees. Ash dieback will affect the area of trees planted 1998 adjacent to the road.

Long term Objective (50 years+)

The aim is to conserve and enhance the biodiversity of the wood by retaining a continuous cover of trees, ensuring succession (by natural regeneration where possible), developing an uneven age structure and increasing the amount and variety of deadwood. The woodland composition and natural succession within it will be monitored to ensure continuity of woodland cover continues. It is anticipated that the species make-up will alter over time. Both non-native and native regeneration will be accepted, in accordance to Trust policy on native species. Where appropriate, Scots pine will be retained within the mix mainly for historical reasons.

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

The wood will be managed to ensure the retention of the existing mature trees, including deadwood both standing and fallen. The planted area will be thinned again within the next 5 years (planned for 2021) to ensure that the species mix remains diverse, (with a range of native trees that will regenerate here and throughout the rest of the wood), smaintain stand stability and reduce future tree safety needs adjacent to the road. Boundaries will be maintained to ensure they are stockproof and no encroachments occur, by inspecting every 5 years, and repair carried out if required, working with neighbouring owners as appropriate.

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	0.55	Scots pine	1890	High forest	Site structure, location, natural features & vegetation	Informal Public Access, Natural Secondary Woodland	Registered Common Land

The wood is all managed as one compartment although currently there are two different aspects to it. The majority of the wood to the west is composed of an even-aged stand of mature trees, mainly Scots pine, with some broadleaves and a very limited shrub layer. The rest of the wood, to the east, was replanted with native broadleaf trees and shrubs, together with some Scots pine, in 1998 and these are now established. The ground flora is mainly of common grassland and woodland species. Regeneration of broadleaves is good where light allows. Ash dieback visible in the area from 2017, but not yet significant. Rookery in the mature trees.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2021	1a	Thin	0.18	6	1

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.