WOODLAND TRUST

Owlet

Management Plan 2017-2022

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MAPS

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Owlet
Location:	Blyton
Grid reference:	SK830952, OS 1:50,000 Sheet No. 112
Area:	50.41 hectares (124.57 acres)
Designations:	Ancient Semi Natural Woodland, County Wildlife Site (includes SNCI, SINC etc)

2.0 SITE DESCRIPTION

2.1 Summary Description

Owlet forms part of the Coversands Heathland that once covered large parts of northern Lincolnshire, however in more recent times natural birch colonisation has developed on the site.

Existing remnants of the heathland can still be seen from the circular surfaced path, which makes it suitable for visitors of all abilities. Visit in summer to see lots of butterflies, including purple hairstreak, small copper and brimstone.

2.2 Extended Description

Owlet Plantation is over 50 hectares and was purchased by the Woodland Trust in September 1997, via a private sale which was supported by Lincolnshire County Council. It is located approximately 2 miles from the villages of Blyton and Laughton, and 4 miles from the town of Gainsborough in Lincolnshire. Access is via a minor public road along the western boundary. The woodland is close to a much larger area of woodland (mainly coniferous) to the north and west, known as Laughton Forest and Laughton Common. Owlet is linked to Laughton Common by a thin strip of privately owned woodland along the roadside, approximately 200m in length.
Owlet, together with these areas, was formerly part of a large complex of common land on the Coversands Heath. The wood itself is designated as a Site of Nature Conservation Importance

(SNCI) by Lincolnshire County Council and a Local Nature Reserve (neither of these designations is statutory).

The site is relatively flat (mean elevation of 4 metres above ordnance datum) but does contain a number of depressions, hollows and what appears to be old dune systems along the northern part of the site. Surface geology is made up of free draining, alluvial gravel overlain by acidic coversand deposits forming a low ridge to the east of the River Trent floodplain. There are some peaty soils in the limited wetter depressions (pH 4.5), but the soils are mostly sandy with acid upper horizons (pH 4.2). The wood was formerly drained in wetter areas by a number of shallow ditches now largely overgrown and redundant, which drain into deeper ditches around the perimeter. These perimeter drains empty into the steep sided dyke, known as the Ten Foot Drain, which bisects the wood north-south.

Historically Owlet was common land and part of 'Morton Carr' a very extensive area (3-4000acres) of heaths, wastes, marshes and pockets of ancient woodland, with records dating to the 14th century. During this time the commoners would have been grazing animals, and cutting wood and peat for fuel. The land was eventually enclosed in 1805 and attempts were made to modify and 'improve it', including replanting with conifer trees and an attempt to cultivate the eastern part of the site. This was only partially successful due to the challenging soil conditions. More extensive historical background is held in the Woodland Trust reference files for this wood.

Overall the wood is dominated by birch and oak, which mostly forms an open structure over this redundant heathland habitat. There is a scattering of older (veteran) Scots pine trees which pre-date enclosure of the site and are thought to be over 250 years old; they create an attractive visual element to the site. Parts of the wood however have a different structure. An area of wetter 'carr' woodland exists in the northwest quadrant, covering 7% of the site, and here we find a large concentration of alder in addition to the birch and oak, and many of the trees here have been coppiced. Approximately 10% of the wood is covered by younger Scots pine plantations (in 3 main blocks) where the trees are less than 50 years old. There are also younger 'thickets' of birch woodland on more recent heathland, mostly notably to the east of the large dyke and in the centre of the wood. Recent sycamore regeneration is also now appearing in parts of the wood.

Heather is still present in the more open areas of the site, together with other heathland flora such as sheep's sorrel, heath bedstraw, and various mosses and grasses typical of acidic ground. Ground cover overall though is dominated by bracken and bramble. Rabbits are very common and do have a grazing impact on the woodland. Other mammals, such as fox and deer species, are not often seen (most likely due to visitor numbers). Common woodland birds such as nuthatch and greater spotted woodpecker can be seen. 16 species of butterfly have been recorded and the large dyke is a very good habitat for damselflies.

There is good public access over most of the site due to an extensive footpath network which is dry all year round due to the sandy soil. There is also a surfaced path in the western part of the site, although the dry and flat site conditions would probably allow good access for many less-abled users. There is a small car park for around 10 cars adjacent to the public road.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

By bus:
The 100 Scunthorpe-Gainsborough bus service (Monday to Saturday) stops at Blyton. It is then a 1.2-mile (2km) walk to Owlet.

By train:
Gainsborough Lea Road station is about five miles (8km) south of Owlet.

For further information on public transport visit traveline.org.uk or ‘phone 0871 200 22 33.

By car:
Take the A159 between Scunthorpe and Gainsborough. Leave the A159 just north of Blyton following road signs for Laughton. At Laughton take the first turning on the right and then the third left, which is Morton Road. Continue on this road until you leave Laughton, where you take the next left onto Laughton Road. Owlet is located approximately two miles (3.2km) further on, where there is a car park for around 10 cars.

3.2 Access / Walks

Visitors can explore the wood using its network of footpaths, which are dry all year round thanks to the sandy soil. Owlet is largely flat and there are no steps or other obstructions, except for bracken and bramble growth in the summer months.

The site also has a circular, all-ability path. It can be accessed via a motorbike-proof chicane from the car park at the main entrance, which is off Laughton Road, the wood’s western boundary. The car park has space for around 10 cars.

You can also get to Owlet on foot via a track that runs along the southern boundary. It links to a public footpath from the village of Blyton.

4.0 LONG TERM POLICY

Maintaining the heathland in perpetuity without consistent significant intervention has not been viable and therefore the area of open heath will be allowed to naturally colonise to secondary woodland. The secondary woodland, which is the major part of the site, will be managed so it is as resilient as possible to future changes. Hence, the wood will be as diverse as possible in species and in tree age class. Parts of the wood, which were formerly conifer-dominated plantations, will be composed of mainly native broadleaves, with conifers making up no more than 20% of the tree species mix.
There will be a network of wide sunny rides and open woodland through parts of the former heathland, which will conserve populations of flora found in these areas. Woodland management will be carried out to ensure that a light canopy cover of no more than 50% is created in these parts of the former heathland.

The ancient woodland area (compartment 1a) will be maintained with minimal intervention, allowing natural processes to shape it.

The veteran trees (both oak and pine) will be retained for as long as naturally possible, and a sustainable succession of future veterans will be promoted.

Open access will be retained at the wood in perpetuity. A high standard of access provision and visitor facilities will be provided at the wood, which acknowledges the high level of use. There will be a good network of well-managed paths for pedestrian access and more popular paths will be made open and sunny in parts, to enhance visitor enjoyment. Good information and signage will be made available at the car-park to enable visitors to explore and navigate around the wood and to appreciate its inherent qualities. Continued investment in visitor facilities will be made at Owlet to ensure the wood is welcoming, and this will especially include the car park which is the main entry point.
The wood will be made as safe as practicable through regular safety inspections of high-risk tree zones and access infrastructure.

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

Although not shown on any mapping data, compartment 1a is considered to be a relic area of ancient semi-natural woodland (ASNW) as described in historic records. This area covers approx 7% of the total woodland area. It lies in a peaty wet hollow on the north side of the wood. It is roughly split equally between alder, birch with slightly less oak. The stand has been coppiced in the past (alder and oak) and many of the single stems have developed from singling out of multi-stemmed large stools. There are signs that sycamore is starting to regenerate into the area from adjacent stands, particularly to the west.
Ground flora is dominated by broad buckler fern with honeysuckle and a mossy ground layer and generally equates to National Vegetation Classification (NVC) W6 alder-nettle woodland with a downy birch sub-community. On the drier slopes this grades into a NVC W10: oak-bracken-bramble woodland.
This type of woodland would once have been more widespread in this locality, on the wet and peaty low-lying areas within the former heathland common.

Significance

It is important as part of the natural habitat that formed the historic heath on Morton and Laughton Commons, and is probably the least modified example of natural woodland in the whole area. This type of woodland cannot be extended as it is limited by soil type and water table levels, being on a low lying area on the northern boundary.

Opportunities & Constraints

Silvicultural management will be difficult and potentially damaging in this wet area of the wood.

Factors Causing Change

Changes in drainage patterns,
sycamore regeneration,
tree disease and senescence (eg acute oak decline).

Long term Objective (50 years+)

Maintain the current area of ancient woodland as native high forest. Continued care of the alder coppice stools must be considered with regular monitoring and re-coppicing when required.

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

Intervention to the alder and respacing of the birch and sycamore favouring the limited oak should be the priority for this area. The alder coppice stools should be recut where there has been evidence of failure resulting in the stools being damaged, due to the age of the coppice stools care should be taken to fell and remove the latest growth before any further damage occurs and any further non action results in losses.

5.2 Natural Secondary Woodland

Description

The majority of the woodland area of Owlet is ‘secondary’ in nature, being woodland that has developed from the more open structure of an historic heathland/common. It is mixture of trees (mainly birch and oak) which have grown naturally on the former heathland, supplemented by the planting of pine, sycamore and oak during the 20th century.

Heathland management with grazing animals was still being carried out up to the end of the 20th century, and hence there are areas of young birch woodland (for example in the centre of the site and to the east of Ten Foot Drain) which have developed since the cessation of grazing. Elsewhere there are more mature areas of birch woodland, sprinkled with oak, which have an open canopy structure. The largely broadleaved woodland is interspersed with blocks of pine planting (40-50 years old) which also contain some sycamore. Hence the woodland overall is quite narrow in its range of tree species. The conifer blocks now make up approx. 5ha of the wood.

There are scattered veteran trees of oak and (especially) pine throughout the wood. Many of the oaks have been coppiced or ‘stubbed’ in the past. The veteran trees almost certainly date back to when the wood was common land.

The more established areas of oak/birch woodland approximate to a National Vegetation classification (NVC) of W10: oak-bracken-bramble woodland. Hence, the ground flora tends to be dominated by bracken, other ferns (eg broad buckler fern) and mosses under the canopy woodland. The pine plantations contain dense area of bramble.
In areas of younger woodland, which are in the transition stage from the former heathland, the ground flora is more diverse. Hence in the centre of the site we find acid-loving flora such heather, sheep's sorrel, heath bedstraw and mosses (such as Campylopus introflexus). Some of the former-heathland areas are more grassy and contain sheep’s fescue and bent, together with sand sedge and field woodrush. (see ecological survey of 1998 for more information of species found at Owlet).

Rabbits were formerly abundant and have had a major influence on the ecology of the wooded and non-wooded areas, through their grazing. There is evidence of fox, deer species are scarce at Owlet due to disturbance by people and dogs. A badger skull was found during the ecological survey in 1998, although no evidence of a living colony has been found.

Bird species of note include nuthatch, treecreeper, woodcock, green and greater-spotted woodpecker. The rare woodlark has bred in the area to the north and sometimes visits the site to feed, however dog disturbance is a hindrance to the successful breeding of ground nesting birds such as woodlark and nightjar (which also occurs locally but not in Owlet). Along with the commoner woodland birds, buzzard is sometimes seen hunting over the area.

The open areas of the site appear to be of considerable interest to invertebrates, and there is scope for more research into the species using the site. The dyke ‘Ten Foot drain’ has been found to be a good habitat for damselfly species. 16 butterfly species have been recorded at the wood including the purple hairstreak.

Significance

An important woodland and semi-natural habitat in a relatively intensively-managed landscape, with low woodland cover. Owlet has historical and ecological links to Laughton Forest to the north.

Opportunities & Constraints

- The range of tree species is currently quite narrow: oak, birch and Scots pine with an increasing component of sycamore. There is the opportunity to increase this range through the planting of other appropriate species for the site including rowan, hawthorn and hazel.
- There is the opportunity to manage wide rides and to create open canopy woodland, in order to conserve relict populations of heathland flora and also to benefit invertebrates and birds.
- Dense thickets of young naturally-regenerated birch trees could be managed to establish better stands of trees for the future.
- The blocks of conifer plantation could be made more diverse in species through silvicultural thinning and the establishment of more native broadleaves.

Factors Causing Change

- Cessation of grazing leading to a succession from heathland to woodland,
- Sycamore regeneration,
- Tree disease leading to senescence of oak (Acute oak decline).

Long term Objective (50 years+)

The secondary woodland, which is the major part of the site, will be managed so it is as resilient as possible to future changes. Hence, the wood will be as diverse as possible in species and in tree age class. This will involve some planting of broadleaved trees to extend the species range.
Parts of the wood which were formerly planted with a high proportion of conifers (compartments 1d, 1g & 1i) will be more diverse in species and be largely composed of native broadleaves. The conifer component will be no more than 20%.
There will be a network of wide sunny rides and open canopy woodland through the former heathland in the centre of the wood, which will conserve populations of remnant heathland flora found in these areas. Overall the aim is to create open woodland with no more than 50% canopy cover, over approx. 7ha of the former heathland (compartments 1b, 1e, 1i & 1l).
Sycamore regeneration will be tolerated and accepted as a component of the tree matrix. It will only be silviculturally managed when/if it dominates the species composition.

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

During this plan period the short term objective is to carry out management to diversify the tree species range and age class, and to maintain open woodland conditions along important parts of the former heathland. This will be done by the following operations:

- Re-spacing (thinning) of dense birch regeneration will take place within compartments 1b, 1e, 1i and 1l, an area of approximately 7 hectares. The whole of this area will be thinned progressively and a number of times over the plan period to maintain a tree spacing of approximately 3m. This will help to establish and develop a stand of high quality silver birch, as well as creating more open woodland to conserve relict heathland flora. The materials released from the site will be utilised by local horse racing courses, to build jumps. Additionally, birch trees along ride edges in these areas will be felled, to create sinuous open rides of 6-10m width.
- Restocking of gaps in the woodland created by acute oak decline will take place (compartment 1h) where mature oaks have died. A total of 300 trees will be planted in 2017 and these will be a mixture of rowan, hawthorn and hazel. The planted trees will diversify the species mix currently found in the wood. The trees will be planted in 30 groups of 10 trees. Manual clearance of competing vegetation (eg bracken) will take place annually around all the planted trees. This will continue for at least 3 years or until the trees are established.
- Thinning the Scots pine plantation in compartment 1k by approximately 20% in 2018. The priority for the thinning will be to release and create greater growing space for developing broadleaved trees in the stand.

5.3 Veteran Trees

Description

Owlet contains a scattering of mature oak trees that predate enclosure of the land and many exhibit veteran characteristics. The form of the trees gives evidence of past coppicing/pollarding, which in many cases appears to have been carried out at an intermediate height to create ‘stubs’. There are also veteran Scots pine trees over the wood which have been shown to predate enclosure of the land also. An old pine stump on the side of the Ten Foot drain had a ring count in excess of 260 years, and there is documentary evidence to support the theory that pine has existed on this site for several centuries. A few of the old trees are dead or in the advance stages of senescence, which further adds to the quality of the habitat. The old Scots pine trees may be native to the site (ie. not planted).

Significance

Veteran trees are a scarce and important conservation resource and are more important when they occur in large numbers on semi natural habitat - because this creates ‘old growth’ conditions and the opportunity of habitat continuity for scarce invertebrate, fungal and epiphytic plant communities to survive.

Opportunities & Constraints

The main opportunity is to create a continuity of veteran trees and deadwood habitat into the future. There are a number of smaller oaks which can be usefully grown on into veterans although the very youngest age classes are not present in most of the site. Recruitment is also a problem with the scots pine if it is proved that the veterans on site are site native, as the recent plantings may not be appropriate as replacements, and natural regeneration from the current veterans is not occurring. Given the longevity of both species it should be possible to adequately address this continuity issue in future years.

Factors Causing Change

Over-shading and competition from younger more vigorous trees.
There is natural senescence of the old trees, compounded by ‘acute oak decline’ (AOD) which has led to oak death in the southern portion of the wood. A number of old pine trees have also split and died.

Long term Objective (50 years+)

Maintain existing veteran trees for as long as naturally possible and manage a sustainable succession of potential veterans into the future. Threats to the survival of veteran trees will be managed if this is practical, and any remedial tree surgery will only be carried out if there are risks to public safety.

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

The short term objectives during this plan period will be to monitor the threats to the veteran trees and to start to look at recruitment of future veterans:

- Monitoring of the mature oak trees within the southern portion of the wood will be carried out to establish whether AOD is spreading or restricted to that area. Observations are planned for 2016 and 2019 in this plan period. Repeat photographs of several trees affected by the disease should be taken for comparison. Forest Research will be informed of the results, so this monitoring inputs into National data on AOD.
- An assessment of the quantity and location of veteran trees on the site will be carried out in 2017, and 30 mature trees with potential for veteran status will be identified and marked.
- An assessment of the competition threat from younger trees will be undertaken in 2019 to make sure veterans are not being crowded and over-topped by more vigorous younger trees. If necessary halo thinning around the trees will be undertaken.
- Research will be carried out to ascertain whether the veteran Scots pine trees on the site are native to the area, or whether they have been planted. Following this, the breeding of new pine trees may be carried out to create a succession.

5.4 Connecting People with woods & trees

Description

The site is extremely well used by mainly local people with a small car park and main entrance on the western (road) boundary, plus two other access points on the southern boundary. The car park holds approximately 10 cars. There is good network of permissive (pedestrian only) paths across Owlet Plantation and one circular surfaced track of approximately 900m. In total there are over 3km of paths for visitors to enjoy. The mostly sandy soils and flat ground ensure the paths are all well drained and mostly dry throughout the year. It is known that people travel regularly from up to 15 miles away to walk around the site. The Trust has given Owlet an access category A designation which is the highest level, and this equates to a wood which is 'regularly used at all times of year, with more than 15 - 20 people using one entrance every day'.

Significance

Increasing enjoyment of woodland is one of the Woodland Trust's key outcomes. Encouraging access to Owlet is particularly important given the paucity of woodland sites open to the public in Lincolnshire, and this is borne out by the high level of usage of this rural site.

Opportunities & Constraints

Constraints: There are occasional anti-social problems, especially close to the car park, such as fly-tipping and vandalism. Illegal fires have occurred recently during the summer months. The size of the car park limits wider promotion of the site to visitors from further afield.

Factors Causing Change

The high volume of dog-walkers may be having a detrimental effect on wildlife, in particular disturbance to ground nesting birds. Dense birch regeneration throughout the central area is causing the footpaths to close over and become darker.

Long term Objective (50 years+)

Owlet should offer a high quality visitor experience in line with a category A Access designation. Pedestrian only access will be retained at the wood in perpetuity. There will be a well-managed network of paths around the wood which are easy and obvious to follow. The car park will be maintained to a high standard and should feel welcoming and safe when visitors arrive. Prominent signage and information will be made available at the car park entrance to enable visitors to explore the site and to appreciate its inherent qualities and wildlife; the objective is that visitors should leave with some understanding of the value of native woodlands and other wildlife habitats, and a clear knowledge of The Woodland Trust.
Well used paths will be kept open and sunny in parts to add variety and interest for the visitor, as well as benefitting woodland edge wildlife and flora. The wood will be made as safe as practicable through regular safety inspections of trees in high risk zones and inspections of access furniture.

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

During this plan period the short term objective is to provide a high quality experience for a range of pedestrian visitors which is safe and enjoyable. This will be achieved by:
- An input of investment in 2017 to the car park, to improve its appearance and the quality of provision. This investment will include improving the surface and replacing the boundary fencing and gates. All historic signage will be replaced and new signage installed which will be visible from the road. Appropriate tree works will be carried out to ensure the car park is open and visible from the road. An information and noticeboard will be provided.
- Annual management of approximately 3km of paths and all entrances (including the car park) to ensure they are kept open for use. All signage and information boards will remain clean and visible, and replaced if they deteriorate.
- Annual safety inspections of trees in high risk zones (eg. the roadside), to ensure the wood is as safe as possible for visitors, neighbours and road users.
- Continuing to provide bins for dog waste and litter, including their regular emptying, to ensure waste and litter don't become a problem at the wood.
- Undertaking monitoring during this plan period to assess any threats occurring as a result of public access, such as fire damage or vandalism.
- Monitoring will also be carried out once during this plan period to assess whether the access provision is still adequate for the level of use of the site.
- A security barrier and height barrier will be installed at the entrance to the car park (from the road) in 2016 to increase security of the site and to deter anti-social activities.
- The eastern part of the site, beyond Ten Foot drain will receive some restrictions to dogwalking during the spring and summer months to enhance the opportunities for birds to nest and breed, especially those that do so close to the ground.

Opportunities for further public engagement will be sought when possible. Achieved by:
5. Encouraging schools to use the site more for educational purposes, by contacting very local schools to promote the area for outdoor learning – sharing WT outdoor learning pack, free trees for schools and communities, nature detectives and other outdoor learning resources (every 3 years).
6. Holding public events (at least one community / school event every 2 years).
7. Ensuring the site is visited regularly by local volunteers who act as our eyes and ears, reporting back anything that needs attention, and carrying out minor tasks.

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	6.11	Alder species	1900	Min-intervention	Mostly wet ground/exposed site	Connecting People with woods & trees	
A relic area of ASNW but not formally recognised. Wet (carr) woodland of alder, birch and oak carr woodland, lying in a peaty wet hollow on the north side of the wood. Roughly split equally between alder, birch with a small percentage of oak. The stand has been coppiced in the past (alder and oak) and many of the single stems are developed from singling out of multi-stemmed coppice stools. Sycamore is starting to regenerate into the area from adjacent stands - particularly to the west.							
1b	0.76	Birch (downy/silver)	2010	High forest		Connecting People with woods & trees	
Former area of heathland, which has been colonised with young birch. The birch has been recently thinned (2016).							
1c	1.45	Birch (downy/silver)	1980	High forest		Connecting People with woods & trees	
A mature stand of predominantly birch woodland, with a small amount of oak and sycamore (particularly on the eastern boundary).							
1d	2.27	Scots pine	1970	High forest		Connecting People with woods & trees	County Wildlife Site (includes SNCI, SINC etc)
Plantation of Scots pine approximately 40 years old. Recently thinned in 2014. Some natural regeneration of birch, sycamore and oak is occurring within the stand, with regeneration of pine noted on the east side (next to the dyke). There is a scattering of veteran pines within the stand.							
1e	2.41	Birch (downy/silver)	2010	High forest		Connecting People with woods & trees	
Former heathland habitat, which has subsequently been colonised with young birch. Heathland flora is still evident, particularly along ride edges. The birch was thinned/re-spaced in 2016.							
1f	6.88	Birch (downy/silver)	2000	High forest		Connecting People with woods & trees	

Former heathland, now colonised with mainly young birch. Minority of oak also present.							
1g	0.60	Scots pine	1970	High forest		Connecting People with woods & trees	
A plantation of Scots pine approximately 40 years of age. Recently thinned in 2014. Minor component of birch and oak present.							
1h	7.15	Birch (downy/silver)	1900	High forest	Diseases	Connecting People with woods & trees	County Wildlife Site (includes SNCI, SINC etc)
A stand of mainly mature oak and birch. Some of the oaks are of veteran status and are open grown, from being part of an historic wood pasture and common. Other oaks have been coppiced or pollarded low down. Acute oak decline (AOD) is affecting the oaks in this part of the wood.							
1i	1.86	Birch (downy/silver)	2010	High forest		Connecting People with woods & trees	
Part of the former area of heathland, which has been colonised with young birch. There is a large pond present on the eastern spur.							
1j	4.91	Birch (downy/silver)	1900	High forest		Connecting People with woods & trees	
Mature oak and birch, with an open canopy. The oaks are open grown and would have formed part of a wood pasture habitat in the past.							
1k	1.07	Scots pine	1970	High forest		Connecting People with woods & trees	
A plantation of Scots pine approximately 40 years old. Recently thinned in 2014. There is a scattering of older veteran pines present. Some regeneration of native broadleaves is occurring, with birch, sycamore and oak present.							
1l	1.71	Birch (downy/silver)	2010	High forest		Connecting People with woods & trees	
Former area of heathland, which has been colonised with young birch.							
1m	13.22	Birch (downy/silver)	1980	High forest		Connecting People with woods & trees	

Mainly birch woodland which has colonised a former heathland habitat. The woodland to the south and east of the compartment is mature and contains a scattering of oak. The woodland to the north is much more recent, and contains predominantly young birch. There is a pond present towards the northern boundary.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2017	1b	Thin	0.75	1	1
2017	1e	Thin	2.50	2	4
2019	1a	Thin	6.00	33	200
2019	1b	Thin	0.75	1	1
2019	1d	Selective Fell	2.20	23	50
2019	1e	Thin	2.50	2	4
2019	1i	Thin	2.00	1	2
2019	1k	Thin	1.00	100	100
2019	1l	Thin	2.50	2	4
2021	1b	Thin	0.75	1	1
2021	1e	Thin	2.50	2	4

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.