WOODLAND TRUST

Credenhill Park Wood

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Credenhill Park Wood
Location:	Credenhill
Grid reference:	SO450446, OS 1:50,000 Sheet No. 149
Area:	90.68 hectares (224.08 acres)
Designations:	Ancient Semi Natural Woodland, Ancient Woodland Site, Planted Ancient Woodland Site, Scheduled Ancient Monument

2.0 SITE DESCRIPTION

2.1 Summary Description

Once the site of a busy Iron Age tribal capital, Credenhill Park Wood has also been a Roman army depot and a medieval deer park. Today, the wood is a peaceful place for a walk, to enjoy terrific views and to let all that history capture your imagination.

2.2 Extended Description

Credenhill Park Wood is located within the Hereford Hills major ancient woodland concentration. The site lies within the Herefordshire Lowlands (100) –National Character Area, and, consisting of woodland lying on the steep hill tops forming a significant landscape feature, is typical of the NCA. A nationally important scheduled ancient monument Iron Age Hill Fort enclosure crowns the top of the site with oval shaped ramparts roughly following the 600' contour.

With the exception of the designated scheduled monument area, (Cpt. 3) the site is an ancient woodland site, although much of the present woodland is made up of plantation on ancient woodland (PAWS); some areas of ancient Oak woodland remain at the north of site and extend north outside of WT ownership. The ancient woodland is comprised mostly of uneven-aged oak, ash and hazel, the PAWS area is predominantly even- aged Douglas fir, Norway spruce and European larch plantation dating from the 1960s with frequent naturally regenerating mixed broadleaves notably ash. The scheduled monument area is largely open ground/grass/scrub to the north with patches of willow and birch, and in the south a mixture of Norway spruce and beech plantation interspersed with regenerating broadleaves, again notably ash, with an area of sweet chestnut.

Credenhill Park Wood supports a valuable habitat associated with ancient woodland however is considered under threat due to the heavy shading from the conifer plantation. Trees like small leaved lime and plants like Herb Paris are of particular interest as they are strongly indicative of ancient woodland sites.

The site is well visited by members of the public; access is provided through a network of both dedicated public rights of way and permissive tracks and footpaths. There is a large car park to the south of the site.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Credenhill Park Wood is located between the villages of Credenhill and Tillington Common, about eight kilometres (five miles) north west of Hereford.

By bus:
Buses run from Hereford to Credenhill each day, except Sundays, as below:

Service Number 71 stops at Credenhill, Station Road, Credenhill, opposite the Post Office. Provider: First Midland Red Buses Ltd.
Service Number 461 stops at Credenhill, A480/Station Road T-junction, adjacent to Station Road. Provider: Sargeants Bros., Kington

By train:
The nearest train station is Hereford (about eight kilometres/five miles from Credenhill Park Wood).

For further information on public transport contact Traveline on 0871 200 2233 or visit traveline.org.uk

By bike:
If you are arriving by bicycle, there are bike posts in the car park that you can use.

By car:
From Hereford, take the A438 and turn right onto the A480, shortly after the Wyevale nursery. Go straight on at a roundabout and then take the second turning on the right. The Credenhill Park Wood car park (grid ref. SO454440) is on the left, just off the Credenhill-Tillington road near Tillington, and holds between 10 and 12 cars. It can be busy in good weather.

Ordnance Survey Explorer 189; Landranger 149.

3.2 Access / Walks

Credenhill Park Wood is due to close for a short period from mid-September 2018 for tree thinning work as part of an ongoing programme of ancient woodland restoration. This important work will continue to restore the ancient semi-natural woodland to its former glory, by thinning conifers planted in the 1960s that are presently shading out many important native trees and woodland plants.

Credenhill Park Wood sits just a kilometre from the centre of Credenhill village to the west of Hereford. The woodland is formed on a rounded knoll of land so all of the paths have steep sections, even those that follow contours. The main lower routes that do follow contours fairly well are stoned but all other paths are not surfaced. Steps and hand rails are installed at very steep points as the ground is often wet and slippery. There are just two access points for pedestrians (both towards the South of the site) and horse riding along a designated route is available through license agreement. The internal path network does not link with the well represented public right of way network in the wider landscape.

The wood's main entrance is at the car park just off the Credenhill-Tillington road. There is an information board and there are other interpretation boards elsewhere in the wood too. Also, look out for a celebratory sculpture (and interpretation board) in the cherry plantation above the car park area, which depicts a scaled version of the hill fort's earthworks.

A short path leads from the car park to a kissing gate, which is suitable for pushchair access. There is a second entrance point to the wood along its southern boundary via a public footpath.

Several paths lead to the top of the hill, where there are stunning views over the hilly, border landscape. The woodland has a network of paths, rides and tracks, including 2.75km (1.7 miles) of improved, surfaced paths.

Two waymarked routes offer circular walks, but visitors are free to explore the whole path network. Many visitors climb to the hill fort and follow the walkway along its ramparts.

Wear sturdy shoes and be prepared for a climb on the way to the top of the hill. In places the paths are steep and surfaces are sometimes uneven, which means that they are unsuitable for wheelchair users. Lots of work has been carried out recently to improve paths, but some routes remain unsurfaced, including a waymarked section of around 280m around the hill fort.

4.0 LONG TERM POLICY

The Ancient Woodland Site will be restored to a predominantly mixed native broadleaved canopy with a rich understorey of native trees, shrubs and frequent natural regeneration broadly in line with NVC W10. While conifer trees will remain part of the overall long term composition this will not be to the detriment of ancient woodland remnants, notably flora and regenerating broadleaves. The highly diverse structure of the woodland will support a healthy ground flora and remnant ancient woodland characteristics evident throughout the wood. The woodland's irregular structure will be maintained via a low intensity continuous cover forestry approach through selective thinning/felling, coppicing and ride management.

The Welcoming Site Programme will lead to a series of lasting upgrades that will improve the visitor experience and will likely increase the number and range of visitors to the wood. An attractive and serviceable network of tracks and paths will further encourage the appreciation of the woodland both on the site and in the locality. The site will be managed to meet the required high standards of the Welcoming Site Programme and will provide a clear welcome; well-maintained car park, entrances, furniture, signs and other infrastructure as well as sustainable path and track surfaces across the variable ground conditions. Access will better facilitate use by a wider range of visitors potentially including those with mobility constraints and/or those with young children using off road pushchairs. Paths will also continue to provide more abled bodied visitors with access to the wider and wilder areas of the wood. An engagement plan will set out a developed programme of engagement activities and events further enhancing people's visit to the site. The site will be a truly valued resource in the local community and well respected.

The Credenhill hillfort Scheduled Monument will be removed from the Heritage at Risk database and thereafter its archaeological and historical features will be maintained in a favourable condition. This will largely be achieved through grazing the scheduled monument area to arrest woodland succession where trees have been cleared (likely supplemented through mechanical/manual clearance of scrub and young tree growth). Areas of retained woodland will be selectively thinned to progressively open the canopy and promote stability, working towards a long-term conversion to a predominately broadleaved canopy of open-grown trees that will protect underlying archaeology from root plate lifting. Access routes will be rationalised to best protect archaeological features from erosion and damage. Burrowing animals will be controlled where they threaten the fabric of the archaeology. The monument's wider historical interpretation will be promoted through sustainable public access and understanding of the site, as well as through site interpretation and engagement activity developed to complement the welcoming sites programme.

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 Woodland Site

Description

With the exception of the Scheduled Ancient Monument area (cpt 2) the whole site is an Ancient Woodland Site. Ancient woodland (ASNW) remains within sub-compartment 1C at the north of the site, while the remainder comprises later planted ancient woodland (PAWS).

The ASNW is located within sub-compartment 1C, an area of freer draining soils in the north western corner of the wood. The woodland resembles that described as NVC W10 a lowland mixed broadleaved woodland characterised by oak, bracken and bramble. The stands are now predominantly oak high forest with mature hazel understory, with significant growth of birch and ash. Since WT ownership management has been predominantly minimum intervention.

The PAWS area (sub-cpts 1a, 1b and 2a) is made up of variously European larch and Douglas fir mixture; and Norway spruce or Douglas fir in pure blocks. While outside of the PAWS classification, the scheduled monument area (cpt 3) was predominantly planted with a mixture of beech and Norway Spruce. Norway Maple is occasional on the southern slopes (cpt2) and present as semi mature ride side trees – no natural regeneration has been noted. Rhododendron and laurel is present in small numbers on the southern slopes as well as encroaching from neighbouring properties. There are a number of managed rides maintained alongside the main track routes on the southern slopes.

Ground flora present on site includes bluebells, dogs mercury, wild garlic, primrose, wood spurge, lesser celandine, spurge-laurel, yellow archangel and wood sorrel although none are abundant. In 2017 a number of ecological surveys were commissioned to establish a baseline and inform on-going management of the woodland including bats, dormice and reptiles.

Caves located in the NW quarter near the old quarry workings are an important bat roost; Herefordshire Mammal Group members currently carry out emergence surveys.

Management access is good along the stoned surfaced tracks but restricted along much of the remaining tracks where the bearing capacity of the un-surfaced tracks is poor. This is particularly notable for the NE area of the site (between cpt 1 and 2) and is severely limiting forestry management.

Restorative thinning to open-up the dense canopy to increase light reaching the ground and thus promote shaded ancient woodland flora, has been undertaken across the majority of the PAWs area since acquisition in 2003. For the most part this has resulted in a lighter canopy but has enabled bramble to dominate the ground to the point where it likely to be inhibiting the natural regeneration processes. The impact from deer browsing is also likely to have facilitated this process; high levels of browsing are clearly evident on the bramble as well as saplings. Roe, muntjac and fallow are all present. Previously small deer exclosures were established to monitor the impact of browsing; however these have not been well maintained and are now compromised in terms of excluding deer. Squirrel damage can be seen on sycamore throughout.

Significance

Credenhill Park Wood represents a considerable reserve of Ancient Woodland communities and features. These include flora, with significant areas of broadleaf ancient woodland and extensive Planted Ancient Woodland. It reflects the wider landscape context of hilltop ancient woodland, much of it PAWS, and is within the Hereford Hills major concentration of ancient woodland.

Continued resilience, continuity and expansion of ancient woodland communities at Credenhill Park Wood can help the Trust deliver its aim to protect ancient woodland sites and restore planted ancient woodland sites.

Herefordshire's local Biodiversity Action Plan has developed a specific action plan for mixed deciduous woodland. This includes a number of objectives (A-H) all of which complement the core policies of the WT and our woodland management approach; the objectives include PAWS restoration as well as appropriate management of deer, squirrels and boar.

Opportunities & Constraints

Opportunities:
-Increase deadwood abundance, variety and distribution during ongoing PAWS restoration harvesting activities;
-Increase structural diversity in ASNW area;
-Increase field layer abundance and species diversity across the site;
-Upgrading of management tracks in NE of site to facilitate appropriate access for forestry machinery required as part of long term PAWS restoration management;
-To intervene where site factors such as dense bramble and/or deer browsing prevent adequate regeneration of woody species;
-Create new deer exclosures, clear bramble and monitor regeneration levels to understand impact of deer browsing;
-Eradicate rhododendron and Laurel from the site;
-Find and mark the irregular boundary with adjacent landowner to the north;
-Commission (European Protected Species) EPS survey to inform future management.

Constraints:
-Uneven and steep topography;
-Impact from deer, squirrel and rabbits;
-Archaeological and historical features;
-Poor soil bearing capacity for forest machinery off surfaced tracks;
-Insufficient track infrastructure at northern end of the woodland for timber extraction;
-Vigorous bramble limiting natural regeneration.

Factors Causing Change

-Impact from deer, squirrels and rabbits notably on natural regeneration;
-Disturbance from unauthorised cycling activity (building jumps and erosion scars);
-Increase in visitor numbers and potential increase in 'desire lines' to the detriment of ASNW flora and vegetation as well as natural regeneration;
-Pests and diseases, notably ash dieback and Phytophthora ramorum;
-Windblow from further opening of canopy trees;
-Potential impact of escaped livestock from grazed area (cpt 3).

Long term Objective (50 years+)

The Ancient Woodland Site will be restored to a predominantly mixed native broadleaved canopy with a rich understorey of native trees, shrubs and frequent natural regeneration broadly in line with NVC W10. While conifer trees will remain part of the overall long term composition this will not be to the detriment of ancient woodland remnants, notably flora and regenerating broadleaves. The highly diverse structure of the woodland will support a healthy ground flora and remnant ancient woodland characteristics evident throughout the wood. The woodland's irregular structure will be maintained via a low intensity continuous cover forestry approach through selective thinning/felling, coppicing and ride management; enrichment planting may be required where natural regeneration is unable to successfully establish and form part of the canopy.

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

-Maintain programme of selective thinning/felling of the PAWS area to gradually restore broadleaved composition and promote ancient woodland features (cpts 1, 2 and 3) as well as increasing levels of standing and fallen deadwood.
-Initiate thinning within ASNW area (1C) to diversify structure, promote natural regeneration and increase light levels reaching ground favouring native ancient woodland flora.
-Promote broadleaved natural regeneration in PAWS area by clearing areas of dominant bramble and monitoring change. If unsuccessful, consider enrichment planting of broadleaved species (such as oak, lime, hornbeam, beech) in areas of open canopy.
-Maintain programme of ride management alongside all major tracks to create and maintain temporary open and edge habitat.
-Upgrade existing tracks in NE of the site to enable forestry machinery management access to facilitate PAWS restoration management.
-Creation and maintenance of new deer exclosures and clearance of areas of bramble within compartments 1 and 3 to monitor deer impact.
-To carry out a deer impact assessment and maintain programme of deer control accordingly.
-Maintain programme of rhododendron and laurel control with the aim of eradication by the end of the plan period.
-Mark irregular boundary of 1c in the north of the site to ensure compliance with UKWAS requirements (1.1) associated with boundaries.
-Commission (European Protected Species) EPS survey to inform future management.
-Ensure livestock are excluded from AWS area (cpt 1 and 2).

5.2 Connecting People with woods & trees

Description

Access/ Infrastructure:
The site is signposted via a brown tourist sign off the A480; the site entrance is clearly shown beyond this junction with a large type A signage board. There is a car park for 10-12 cars surrounded by a grassy area as well as a number of bike poles. There is a fence preventing vehicular access into the site with a kissing gate as the main pedestrian access. To the left there is a management gate entrance with possible access for horses (under licence only). There is another pedestrian entry point to the south of the site along a public right of way (PROW). This is signposted from the village side but ownership only begins further along the route after a steep muddy incline; this entrance is widely used by local villagers.

Access around the site is variable; there is an extensive access network of both public and permissive rights of way. There is approximately 4.3km of surfaced well maintained management tracks that run along the contour lines climbing towards the summit of the hill; these are suitable for all weather access. The remainder is a mix of narrow footpaths and un-stoned rides that follow and dissect steep contours. These can often become very muddy, limiting accessibility. Two way-marked routes set out desirable circular walks but visitors are open to choose from a myriad of tracks, paths and walkways. There are extensive views from the top of the hillfort.

The main orientation point is currently on the edge of the car park. There is a glass fronted display cabinet (for formal use), an information board and an open oak wooden notice board for informal use. Further interpretation boards are located just above the car park and in two locations on the hillfort. These describe largely archaeological and woodland management work previously funded via an HLF project. A celebratory sculpture and accompanying interpretation has been installed within the cherry plantation above the car park area. This depicts a scaled version of the monument's earthworks with the summit of the site being represented by a large stone table. An additional celtic inspired sculpture is also located to the east of the site.

Much of the site infrastructure largely dates back to the previous HLF project and now showing clear signs of deterioration. Waymarked routes might not be the most appropriate routes to promote and there is considerable variability throughout their duration in terms of surface and accessibility.

This is a reasonably large and very accessible woodland. The woodland has inherent interest being an ancient woodland site, and the scheduled monument Iron Age hillfort enclosure is of national significance; it is also very accessible by road and internally accessible to wide range of users. It is thus a major local attraction for the adjacent village of Credenhill and other settlements beyond including the major county town of Hereford (approximately 3 miles away) and a nearby military camp.

Estimated visitor numbers are thought to be around 40,000 visits a year, although no accurate data is currently available. Visitors vary from local dog walkers, keep fit/runners, those interested I the local wildlife and/or history of the site as well as families with children. Anti-social behaviour does exist in the form of mountain bike users, as well as informal parties on the summit of the site.

Historically track and footpath surfaces were subject to poor drainage, erosion and poaching making the majority unpleasant for pedestrian access, even through summer periods. This has been greatly

alleviated through the previous HLF funded project work improving access for both visitors and management. The rampart walkway is the most vulnerable as it remains un-surfaced; previous solutions to create alternatives and improvements elsewhere have been effective however, as has maintaining/creating steps/boardwalks/handrails along its length. Since tree clearance within the hillfort's northern half, grasses and other vegetation have provided a stabilising effect on these open sections of the rampart walkway.

The Park Wood volunteer group, consisting of approximately 15 in number, are well established and have helped deliver a varied range of tasks, such as coppicing and glade creation. The group is active, capable and have a range of specialist expertise including ecological survey, wood crafts and other practical tasks and it is hoped that they will remain an important element of the site's management.

A woodland fete event has previously been run in association with the volunteer group which has typically attracted 300-500 visitors. A relaunch will take place I 2017 supported by 3 forest school groups and 2 community youth groups. The woodland is very well used by local people, including the army camp, schools and parish groups, as well as dog walkers and those glad to enjoy a quiet walk in the woods.

Significance

The wood is highly attractive given its inherent interest as ancient woodland in restoration and an important nationally significant historic monument with extensive views of this part of Herefordshire, at the same time as being very accessible to the local community. In 2017 it was selected as Welcoming Sites Programme site – one of the top 250 sites owned by the Woodland Trust.

Opportunities & Constraints

Opportunities:
-To upgrade large section of the current way-marked red route (circumnavigating the hillfort) to provide a significant all weather circular route and potentially reduce footfall on more sensitive paths within the fort.
-Redevelop way-marked routes to provide better consistency of surface, upgrading surface where required, as well as avoiding the most sensitive areas where possible.
-Develop an engagement plan as part of the welcome site programme to deliver brand moments and wider public engagement activities.
-Opportunity to engage directly with a wide range of local people through the development of events/posters/demonstrations, schools/interest groups/ forest schools led by an engagement plan to be developed during the plan period.
-To refresh interpretation to improve quality of visit.
-Potential funding opportunity to deliver wider variety of events linked to the restoration of the ancient woodland and the archaeological significance of the site.
-Explore provision of dog waste bin to prevent unsightly and unsanitary discarding of dog waste.

Constraints:
-Bearing capacity of internal routes for public access, damage to hill fort rampart walkway and general sensitivity of the scheduled monument.
-Unauthorised mountain bike use within the designated and legally protected Hill Fort area was inherited on acquisition and has been largely eradicated through consultation with youth groups. The construction of mountain bike courses continues outside of the Hill Fort however and causes an element of disturbance on the Ancient Woodland key feature.

Factors Causing Change

-Misuse of the site – cyclists disturbing the AW soils and/or scheduled monument for jumps;
-Increase in anti-social behaviour;
-Increase in visitor numbers resulting from selection as a WSP;
-Potential clash between user groups – uncontrolled dogs and grazing in the monument area;
-Possible increase in desire lines/erosion damage on informal paths.

Long term Objective (50 years+)

The Welcoming Site Programme will lead to a series of lasting upgrades that will improve the visitor experience and will likely increase the number and range of visitors to the wood. An attractive and serviceable network of tracks and paths will further encourage the appreciation of the woodland both on the site and in the locality. The site will be managed to meet the required high standards of the Welcoming Site Programme and will provide a clear welcome: well-maintained car park, entrances, furniture, signs and other infrastructure as well as sustainable path and track surfaces across the variable ground conditions. Access will better facilitate use by a wider range of visitors, potentially including those with mobility constraints and/or those with young children using off road pushchairs. Paths will also continue to provide more able-bodied visitors with access to the wider and wilder areas of the wood. An engagement plan will set out a developed programme of engagement activities and events further enhancing public visits to the site. The site will be a truly valued resource in the local community and well respected.

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

-Repair and improve car parking facilities, grading and filling potholes, improving water drainage and re-surfacing as necessary.
-Repair, renew and improve entrance gates/access points, associated fencing and install new signage at woodland entrances to meet the required WSP standard, including those in car park/orientation area, and installing steps at the chapel lane entrance subject to approval from adjacent landowner.
-Develop interpretation theme and associated infrastructure promoting use of enhanced access.
-Upgrade/refresh benches where appropriate.
-Grade, level, drain and improve selected track and path surfaces, and renew and repair steps and other infrastructure to enhance the visitor experience and provide greater levels of accessibility along main tracks and to maintain access along priority waymarked routes through the wood, including the upgrading of circa 850m in the NE section of the site as well as the stoning of a lorry hammerhead turning point midway along the western track.
-Maintain and improve trackside drainage/ditch systems.
-Manage track and path-side woodland to create structural diversity, reduce overhang, encroaching growth and shade etc. to help path surfaces dry more quickly and to create lighter and brighter and more attractive access routes.
-Seek to minimise erosion/damage to sensitive areas by promoting main routes and rationalising current access potentially reducing the number of informal permissive routes.
-Develop engagement plan setting out programme of people engagement activity and events within plan period.
-Encourage responsible use of site (including sticking to paths, taking home of litter, control and clearing up after dogs) through interpretation/engagement activities.
-Ensure visitor safety via ongoing tree and infrastructure monitoring regime and remedial works as necessary.
-Investigate options for installing and maintaining dog/litter bin.
-Continue to work with the local community to ensure anti-social behaviour is kept to a minimum.
-Development of annual work programme for volunteer work and organisational support as appropriate.
-Promote and support use of the site by forest schools.
-Redevelopment waymarked routes and promote through refreshed interpretation accordingly.
-Explore funding opportunities to implement further engagement activities in tandem with archaeological interpretation/activity.

5.3 Archaeological Feature

Description

Credenhill fort is a nationally important Iron Age fort enclosure and has been given scheduled monument (SM) status. The fort comprises a circuit of earthen ramparts enclosing a large sub-rectangular area and encircling a hilltop whose natural contours form an elongated oval hill oriented north-south. The area enclosed by the ramparts is 19.5 Ha. (50 acres). The defences broadly follow the 190m (600') contour. A massive continuous inner rampart is paired with a near continuous outer bank and ditch. The earthen banks are abrupt and steep, and in places the ditches are still deep. There are two definite original entrances, to the east and south-east, marked by inturned sections of bank flanking the entrance passage. Each of these entrances is approached by sunken holloways and these features, though excluded from the scheduled area, have been included within the key feature area as they are contemporary to the monument. There are six other breaks in the inner bank and a major interruption to the defences where there was a large quarry at the south-western angle of the defences. The archaeological interest comprises a number of different components:
• Pre-hillfort activity including woodland clearance, cultivation and established pasture;

• The hillfort itself an Iron Age hill-top enclosure surrounded by a series of defensive banks and ditches;

• The Roman military activity within the hillfort;

• Medieval use of the area as a deer park and warren, the latter perhaps utilising the ramparts as a warren enclosure;

• Medieval or post-medieval cultivation, resulting in the infill of the Iron Age quarry ditches and the creation of lynchets;

• Post-medieval activity in the form of landscape planting, quarrying, water management, coppiced woodland and associated charcoal burning evidenced by charcoal burning platforms and trackways.

Much recent survey work has been done on elements of the SM. Herefordshire Archaeology compiled a report in 2016, which continues to inform our management. A detailed survey of the ring of ancient yews along the rim of the ramparts was carried out in late 2016, including measuring girths and attempting to assess age.

Evidence suggests that during the 17th and 18th century much of the site remained open, likely of parkland character. During the 19th century much of the area seems to have become predominantly woodland, areas being referred to as 'Hill top plantation', 'Coppice wood' and 'Park'. The first half of the 20th Century saw the coppice management decline and the site developed a full cover of broadleaved woodland. The second half witnessed the felling of much of the broadleaved woodland and the establishment of largely conifer plantation.

Following acquisition by the Woodland Trust, a conservation management plan was produced in partnership with Herefordshire Archaeology (2003). Funded by a Heritage Lottery grant, excavations took place in 2007-09 and provided valuable insight into the construction of the rampart and the Roman use of the site in the first two centuries AD. The northern half of the enclosed area was cleared of mature larch and Douglas fir plantation in 2008 to prevent damage to underlying

archaeology through windblow and root-plate lifting. Extraction was by skyline to minimise risk of monument damage and the existing earth track was stoned providing good access. The plantation cover across the southern half, while of similar age was shorter and more sheltered and had not started to blow over; it was thought that stability could be increased through thinning operations negating the need for larger amounts of woodland clearance; stumps were mulched. A fence was erected around the fort in 2009 to enable grazing of the vegetation to prevent succession to scrub and woodland. Water for stock is provided through 3 small ponds located around the rampart's inner ditch; there is also a stand pipe from a mains supply located at the car park entrance for filling bowsers. While initial grazing seems to have been successful, anti-social activity eventually led to the suspension of grazing. The site has quickly scrubbed up and vegetation has had to be cleared through mechanical means (flailing) as well as targeted clearance of developing birch. A number of younger understorey trees were retained within the cleared half of the fort as permitting open grown tree development is desirable (open grown trees are stable, greatly reducing the risk of archaeological damage through wind blow).

The treed half of the fort is still dominated by a Norway Spruce / Beech plantation; the western half is well naturalised with ash and birch dominating the largely failed plantation. This area was thinned in 2010; ground flora throughout is dominated by locally typical species and includes Ancient Woodland Indicators.

An increase in visitor numbers to the hill fort has been the result of Woodland Trust ownership and brings with it the potential for damage through erosion. Mitigating methods have been employed; installing steps and other aids, creating alternative routes, improving alternative routes. The ramparts are the most susceptible as they are crowned by a narrow walkway and the sections under woodland cover are less protected than the open ramparts which are developing a protective layer of vegetation. Badgers have a large and long established sett in the NE corner of the ramparts. A small new sett of 3 holes has been established since 2010 on the mid-eastern ramparts (see Conservation Features map C1). Despite the change to open grass there has been no rabbit damage or signs observed.

Following some concern over the remaining threats to the scheduled monument, WT agreed to commission a further conservation plan/report with the assistance of Historic England and Herefordshire Archaeology. This document is available in the appendices and has been referenced throughout this plan review.

In addition to the SM, caves, located in the NW quarter now largely collapsed, are also an important historical feature in their own right having been used by the local defence services in World War II, it seems. Further information is currently being collated from local historians.

Significance

The hillfort's national importance is reflected in its designation as a scheduled monument. Historic England's guidance for assessing significance sets out the following areas:
Evidential value: The physical remains of the hillfort provide a strong visual link to the Iron Age in the present day. Excavation has demonstrated the potential of the site in terms of physical evidence relating to the Iron Age, the pre-hillfort environment, land use and human activity on the site. Excavations have led to finding of features, deposits and associated artefacts (pottery, metalwork etc.) which can add to our knowledge of the history of the monument itself and of the Iron Age in general. The site has potential to further understanding at local, regional, national and potentially international levels of specific periods of occupation and land use.

• Historical value: Credenhill is the largest hillfort in the county and one of the largest in Britain. Its prominent and strategic location overlooking the Wye / Lugg basin along with its proximity to the Roman town of Magna Castra (Kenchester) and the Saxon, Medieval and modern county town of Hereford, have led commentators to ascribe it the status of an Iron Age regional capital. Whether or not this is true the size of the site is impressive. This appreciation of the site however is to a large extent dependent on the knowledge of the visitor. A visit can therefore be enhanced by providing information either on or off site about some of the aspects that are not visible, for instance about the finds from excavation or information from environmental analysis. Links to specific events can also be made; an obvious link is to the Roman invasion and occupation of Britain between AD 43 and 410. The interpretation of the Roman activity as a military supply depot gives us links to the campaigns of the Roman army as it pushed west into what is now Wales and the resistance it encountered there.

• Aesthetic value:
Appreciation of the physical monument and its historical significance requires not only good visibility of earthworks and features such as entrances but also an understanding of what is being viewed. Some hillforts are also prominent sites in the wider landscape and can be appreciated from distance.

• Communal value:
There is a clear link through the name with the community of Credenhill at the foot of the hill. However the way people relate to and value landscapes or a monument or place is a very personal thing and is dependent on interests, knowledge, understanding, experience and experiences. Visitors can be encouraged and their experience enhanced by the provision of information. This can and should be made available in a variety of media, for example through leaflets, panels, guided walks and digital technology. Off-site information is particularly important in attracting non local visitors.

Opportunities & Constraints

Opportunities:
-Implement management proposals highlighted in the recent Conservation Report (2016) produced by Herefordshire Archaeology including:
-Measures to alleviate recreational erosion;
-Management of ground vegetation to facilitate identification and interpretation of features of the hill fort interior as well as to protect their long-term integrity from further root damage;
-Prevent erosion from burrowing animals (notably badgers);
-reduce tree cover on the south of the enclosure to protect the archaeology from windblow damage and also facilitate further site interpretation;
-Improve and enhance archaeological interpretation;
-Consider potential for further archaeological excavation works;
-Re-introduce grazing to maintain control of developing scrub and trees;
-Removal of shipping containers which affect aesthetic interpretation of hill fort.

Constraints:
-no works should be undertaken within the Scheduled Area without prior consultation with Historic England
-Potential damage to existing archaeology through management interventions/activities;
-Landscape impact of further tree removal;
-Loss of BAP woodland habitat;
-Location of Public Rights of Way through SM area;
-Availability of grazing animals to control tree/scrub development (considering public access and dogs);
-Lack of mains water supply for grazing animals;
-Thin soil cover over archaeology;
-Presence of badgers.

Factors Causing Change

-Wind blow in the southern half of the enclosure, as well as veteran yews, causing potential damage to archaeology through lifting of root plates;
-Senescence of yew trees and potential for them to collapse damaging the ramparts;
-Increase in visitor numbers and potentially increase in erosion on rampart paths;
-Development of trees and scrub if not managed potentially damaging archaeology long term;
-Damage from burrowing animals (notably badgers).

Long term Objective (50 years+)

The Credenhill hillfort Scheduled Monument's entry on the Heritage at Risk database will be downgraded from 'vulnerable' to 'low' and thereafter its archaeological and historical features will be maintained in a favourable condition. This will largely be achieved through grazing (where possible) the scheduled monument area to arrest woodland succession where trees have been cleared (likely supplemented through mechanical/manual clearance of scrub and young tree growth). Areas of retained woodland will be selectively thinned to progressively open the canopy and promote stability, working towards a long-term conversion to a predominately broadleaved canopy of open-grown trees that will protect underlying archaeology from root plate lifting. Access routes will be rationalised to best protect archaeological features from erosion and damage. Burrowing animals will be controlled where they threaten the fabric of the archaeology. The monument's wider historical interpretation will be promoted through sustainable public access and understanding of the site, as well as through site interpretation and engagement activity developed to complement the welcoming sites programme.

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

-Re-introduce grazing in SM area (cpt 3) to control growth of scrub and trees protecting integrity of archaeology long term from further root damage – flailing will be used to supplement impact from grazing where required or where grazing becomes impractical.
-Removal of shipping containers off site within the plan period to improve aesthetics of enclosure and enhance interpretation.
-Maintain programme of selective thinning of trees in southern half of enclosure to gradually open canopy and increase stability of remaining trees.
-Manage access erosion issues, upgrading surface pedestrian paths in areas highly sensitive to erosion subject to statutory consent, repair and maintain access steps onto ramparts, block with piled brash un-authorised access paths onto ramparts on north and east side and monitor rampart path and access points for evidence of excessive use and erosion.
-Explore potential to re-route PROW away from ramparts and provide alternative access route that doesn't damage the archaeology. In addition to consider re-designating the public footpath around the rampart to a permissive path in order that we can better control access to the vulnerable ramparts and respond to increased footpath erosion effectively.
-Implement annual programme of coppicing scrub on inner face of ramparts on west, east and north sides to protect integrity of archaeology and interpretation/views of structure.
-In tandem with Connecting People Key Feature, upgrade archaeological interpretation across the site integrating physical interpretation of landscape/views and consider specific archaeological dimension within development of future engagement plan, events and activities.
-Apply to Natural England and Historic England to fill in former badger setts to protect structure of ramparts and where appropriate to remove badgers from current setts under licence to prevent further damage through burrowing.
-Create report of veteran Yew trees to highlight remedial work required and where appropriate implement sensitive tree surgery operations to rebalance crowns and help prevent potential damage to ramparts through collapse.
-Explore funding opportunities to tie in enhanced interpretation with possible future excavation as highlighted in conservation report (2016).

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	3.75	Norway spruce	1968	PAWS restoration	No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Connecting People with woods & trees	Ancient Woodland Site
1A – Consists of former sub-compartments 1a, 1b, 1c, 1d, 4b, 4c and 4d from the previous plan. It forms the southern edge of the site and includes both of the site's public entrance points and the site car park. Adjacent to the car park is an area of grassland which contains information boards and a sculpture commemorating the Woodland Trust's purchase of the site. The rest of the sub-compartment consists of high forest which is classified as PAWS, though the proportion of conifers to broadleaf trees is variable. This consists mainly of Norway spruce plantings from the 1960s. A few remnant trees that predate the plantation can be found and natural regeneration of oak, ash, sycamore and wych elm occurs where light levels are higher. Ground flora is limited throughout and dominated by bramble where it does occur. Dogs mercury, bluebells, wild strawberry and lesser celandine also occur but far less frequently. This sub-compartment contains a number of archaeological features identified in the 2003 survey by Archaeological Investigation ltd. Steep slopes and historical quarrying affect the accessibility for management within the sub-compartment.							
1b	16.00	Douglas fir	1968	PAWS restoration	Gullies/Deep Valleys/Uneven/ Rocky ground, Mostly wet ground/exposed site, No/poor vehicular access to the site, No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Connecting People with woods & trees	Planted Ancient Woodland Site

1B – Consists of former sub-compartments 1h, 1i, 1j, 1l, 1m, 1n and parts of former sub-compartments 1g and 1k from the previous plan. It includes the majority of the site's western boundary and is an area of PAWS high forest. This was planted in the mid to late 1960s and is most frequently douglas fir, with areas of European larch and Norway spruce. At the time of the planting some broadleaved trees were retained, particularly sweet chestnut, and there is also regeneration of ash, field maple and silver birch in places. A historic boundary hedge ran along much of the woodland edge in this sub-compartment and is still a source of species and structural diversity. Ground flora is sparse due to the shade from conifers, with bramble occurring most frequently. However some remnant ancient woodland species remain, including bluebells, dogs mercury and wood sorrel; and there is some growth of native species such as elder and hazel in the shrub layer.

A small area around caves (which are thought to be man-made as associated spoil heaps are nearby) shows distinct character, not having been planted with conifers. Here ash and field maple regeneration and coppice dominate the canopy with hazel, hawthorn, holly and wych elm also present. The ground flora also includes spurge laurel, possibly due to different soil ph where excavation has taken place.

The slope is moderate throughout most of the sub-compartment, meaning operations need to be planned with some care. There is also a small area where caves and spoil heaps occur and archaeological features occur throughout the sub-compartment, these are detailed in the 2003 survey by Archaeological Investigations ltd.

1c	14.00	Oak (sessile)	1900	High forest	Gullies/Deep Valleys/Uneven/ Rocky ground, No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Connecting People with woods & trees	Ancient Woodland Site

1C – Consists of parts of former sub-compartments 1g and 1k from the previous plan. This comprises all of the site that is designated as ASNW. There are two distinct areas within this sub-compartment: a large, oak-dominated area to the north and a smaller area to the south dominated by ash.
The oak dominated area is now high forest, but shows signs of having historically been managed as coppice; probably last felled in the early twentieth century. Other broadleaved species occur throughout the canopy including beech, cherry, yew, sweet chestnut, lime and field maple. There is also a mixed broadleaf understorey below the main canopy. The field layer is dominated by bramble, though ancient woodland indicator species including dogs mercury, wood spurge, yellow archangel and bluebells are scattered throughout. In the area where ash dominates the canopy there is an understorey of old coppice stools, mainly hazel but also including sweet chestnut and oak.

Access into the oak dominated area is limited and the boundary between it and the neighbouring property (a continuation of the same ancient woodland) is poorly defined. Archaeological features have been recorded throughout this sub-compartment and are detailed in the 2003 report by Archaeological Investigation ltd.

2a	36.81	Norway spruce	1968	PAWS restoration	Gullies/Deep Valleys/Uneven/ Rocky ground, No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Connecting People with woods & trees	Planted Ancient Woodland Site, Scheduled Ancient Monument

2A – Consists of former sub-compartments 1e, 1f, 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h and 3i. This sub-compartment forms the entire eastern edge of the site and also curves round the southern end of the hill on the slopes above compartment 1. It surrounds the hillfort interior (compartment 3) entirely, with its inner boundary being formed by the ramparts. This sub-compartment was largely replanted with a mixture of douglas fir and Norway spruce in the late 1960s. It also includes some contemporary European larch and beech plantings, with the latter being around 50% of the planting on the southern slopes that are most visible from the nearby village. There are occasional remnants of the pre-plantation canopy as well as coppice regeneration and natural regeneration. This is most frequently ash, but also includes sweet chestnut, sycamore and wych elm.

The upper slopes of this compartment are part of the outer rampart of the scheduled ancient monument that forms the centre of Credenhill Park wood. These appear to have been cleared at the same time as the lower slopes, but not to have been planted. Instead they were allowed to regenerate naturally and have developed into young woodland with a species mix more reminiscent of nearby ASNW – including ash, hornbeam, holly, willow, cherry, silver birch and sycamore. Greater species diversity is also associated with some of the other archaeological features in this compartment.

Development of an understorey has been inhibited by light levels throughout most of this compartment, with regeneration occurring more frequently along ride edges and in other areas where the canopy has been broken. Light has also inhibited the ground flora, with bramble being the most common species and some other species, most notably bluebells and dogs mercury, being scattered throughout. The frequency and variety of ground flora does increase on the upper slopes where conifer planting was not carried out. Here bluebells and dogs mercury are joined by wood spurge, wood anemone, ramsons, lords and ladies and lesser celandine. Diversity is also higher on the eastern edge of the site as this borders a field and an historic boundary bank and hedge creates species and structural diversity.

The majority of this compartment is steep terrain, with occasional areas of highly uneven ground; the upper slopes are contained within the scheduled ancient monument, which is an additional consideration when planning operations.

Parts of this sub-compartment fall within the boundaries of the scheduled ancient monument and details of other archaeological features can be found in the 2003 Archaeological Investigation ltd. report.

3a	8.21	Open ground		Non-wood habitat	Archaeological features, Management factors (eg grazing etc), People issues (+tve & -tve)	Connecting People with woods & trees	Scheduled Ancient Monument

3A consists of former sub-compartment 2e. It encompasses the portion of the hill fort interior that was clear felled in 2008 and has since been managed largely as open grassland. Prior to felling, this sub-compartment contained a mixture of douglas fir and European larch. Since being cleared a combination of flailing, mowing and grazing has been used to prevent coarse and woody plants from dominating as bramble, willow and birch all germinate readily. A variety of herbaceous species occur among the grass and small pools; areas of damp ground; and scattered retained trees provide habitat diversity in this sub-compartment. This area is heavily visited by the public as it is distinct from the other parts of the wood and has the clearest views of the surrounding area. A stock fence surrounds both sub-compartments 3a and 3b enabling them to be grazed.

3b	11.82	Beech	1968	PAWS restoration	Gullies/Deep Valleys/Uneven/ Rocky ground, No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Connecting People with woods & trees	Planted Ancient Woodland Site, Scheduled Ancient Monument

3B consists of former sub-compartments 2a, 2b, 2c, 2d and 2f; the part of the hill fort interior that has not been clear felled. It consists mainly of a mixture of Norway spruce and beech planted in the late 1960s, though the beech has been badly squirrel damaged. In some areas this has been less successful and natural regeneration (particularly ash, but also sycamore, birch, hornbeam, wych elm and field maple) has filled the gaps in the canopy. There is also an area of sweet chestnut coppice regeneration and willow can be found around small ponds and springs where soil moisture is higher.

The sub-canopy is sparse throughout and there is limited ground flora due to limited light passing through the spruce/beech canopy. Where ground flora does occur bramble is the most frequent species, but bluebells and dogs mercury are also scattered throughout the sub-compartment. Tutsan, box and hard shield fern have been recorded, but are scarce and spurge laurel can also be found, usually associated with spoil heaps from historic quarrying where the soil ph is changed.

As well as being a part of the hill fort interior, sub-compartment 3B also contains a variety of quarrying and other topographical and archaeological features (identified in the 2003 Archaeological Investigation ltd. report) which affect its accessibility for management. With sub-compartment 3a, 3B forms part of the wood that has been fenced to enable grazing.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2018	2a	Thin	36.81	64	2340.44
2019	1a	Thin	3.75	13	50
2019	3b	Thin	11.82	28	330
2020	1b	Thin	16.00	30	480
2020	1c	Thin	14.00	21	300
2023	2a	Thin	36.81	27	1000
2023	3b	Thin	11.82	25	300
2026	1b	Thin	16.00	30	480
2028	1a	Thin	3.75	13	50
2028	2a	Thin	36.81	14	500
2028	3a	Thin	1.00	10	10
2028	3b	Thin	11.82	21	250
2029	1c	Thin	14.00	18	250
2031	1b	Thin	16.00	22	350
2033	1a	Thin	3.75	13	50
2033	2a	Thin	36.81	14	500
2033	3a	Thin	1.00	10	10
2033	3b	Thin	11.82	21	250
2034	1c	Thin	14.00	18	250
2036	1b	Thin	16.00	19	300

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.