WOODLAND TRUST

Coaley Wood

Management Plan 2020-2025

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Coaley Wood
Location:	Uley
Grid reference:	ST786998, OS 1:50,000 Sheet No. 162
Area:	22.14 hectares (54.71 acres)
Designations:	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, Cotswolds Way National Trail, Site of Special Scientific Interest

2.0 SITE DESCRIPTION

2.1 Summary Description

Coaley Wood is part of a cluster of Woodland Trust owned woods in close proximity on the Cotswold Scarp. The Woodland Trusts 'Cotswolds Woods' (Penn Wood, Stanley Wood, Coaley Wood, Laycombe Wood) are made up of 4 individual woods totalling 138.22 Ha. All 4 sites connect and link into the wider wooded landscape which defines the Cotswold scarps. The Cotswolds hosts a significant ancient woodland resource which strengthens ecological and landscape connectivity, with beech a nationally important feature, particularly along the scarp and incised valleys. The Woodland Trusts Cotswold Woods are managed with cohesive conservation and public access objectives that fit with those of the Cotswold landscape.

The Woodland Trust's sites are all part of the National Character Area 107: Cotswolds, and are all within the Cotswolds Area of Outstanding Natural Beauty (AONB). The woodlands on the Cotswold escarpment are identified as an important landscape feature in the Cotswolds AONB Management Strategy. The Cotswold beech woodlands are of high conservation value due to the landscape mosaic of deciduous woodland with rides and open semi-natural habitat and permanent pasture. All are within an area designated a Special Landscape Area and lie within the Greater Cotswolds Natural Area 69.

Coaley Wood is a 22 ha broadleaf Ancient Semi-Natural Woodland (ASNW) just north of the village of Uley, Gloucestershire. It is located just south west of Penn and Stanley Woods, and 2.5 km's north east of Laycombe Wood. Coaley Wood Quarries SSSI is located in compartment 1, covering 4.85 ha's of the site. The SSSI was designated for its abundance of fossils of Lower Jurassic age, in the stratum known as the Cephalopod bed. The geology of woodlands across the Cotswolds scarps is diverse, with a variety of geological horizons from the top to bottom and works within the woods including large scale quarrying, sunken tracks and lanes all exposing these variations.

Cotswolds bat populations are a particularly significant species group and are important in a national context. Of particular significance are the breeding and hibernating populations of greater horseshoe lesser horseshoe bats. The range of species also includes pipistrelle, Daubenton's, Brandt's, noctule, brown long-eared, Natterer's, and whiskered, and barbastelle. Coaley is an important haven for wildlife including the rare greater and lesser horseshoe bats.

The Woodland Trust's Cotswold Woods are not served by any official WT car parks, but as with much of the Cotswold ridges, parking is available in many formal and informal lay-bys and pull-ins directly connected to the sites. One large public car park at Coaley Peak Picnic Site, managed by Gloucestershire Wildlife Trust (formerly Glos Council), provides parking for much of the area and the network of recreational space along the Cotswold Scarp. The Cotswold Way, a National Trail, runs the length of Coaley Wood and crosses through various parts of Penn and Stanley Woods as part of the central Cotswolds region, and all woods are serviced by an extensive PROW and permissive path and bridleway network.

2.2 Extended Description

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3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Coaley Wood is adjacent to the B4066 just south west of Penn and Stanley Wood. Located just north of the village of Uley.
Parking is available in a large layby off of the B4066/Crawley Hill.

Public transport services currently link Stroud with Uley via the B4066 adjacent to the site. www.traveline.info

The entrances can be accessed from the B4066/Crawley Hill, or from the country lanes of Far Green village to the west.

The Cotswold Woods form part of the central Cotswolds in the AONB guide https://www.cotswoldsaonb.org.uk/wp-content/uploads/2018/12/Explore-Booklet-2018-web.pdf

There are no known public toilets close to the woods. Public toilets are located in Stroud, Stonehouse, and Wooton-under-Edge. Stroud District council publish a list of the services open to the public which can be accessed at https://www.stroud.gov.uk/community-and-living/public-toilets

3.2 Access / Walks

4.0 LONG TERM POLICY

In fifty years-
Ancient Woodland Site:
A diverse and continuous mixed broadleaf woodland canopy will exist across all of the ancient woodland and secondary woodland areas, broken occasionally by semi-natural glades, rides and open space to provide associated habitats. Areas of Plantation on Ancient Woodland (PAWS) will have been restored through a gradual restoration approach to a predominantly broadleaved composition. ASNW and PAWS areas will be managed seamlessly with good vehicle access through a Continuous Cover Forestry (CCF) approach, utilising selective thinning interventions to create and maintain an irregular woodland structure with a diverse range of predominantly native broadleaved species supporting the highest levels of biodiversity. Deer populations will be managed at levels enabling natural regeneration processes to occur unimpeded by browsing. Open space will be created and maintained through a network of rides and small glades promoting transitional woodland habitat and associated species. Both standing and fallen deadwood will provide a significant habitat. Existing and future veteran trees will be protected and actively managed for as part of the adopted silvicultural strategy, using halo and selective thinning as appropriate.

Connecting People:
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 this complex of outstanding woodland. An attractive and serviceable network of tracks, paths, and parking areas will further encourage the appreciation of the woodland complex both on the site and in the locality. The complex of sites will be managed to meet the required high standards of the Welcoming Site Programme and will provide welcoming, well-maintained entrances, access furniture, signage and other infrastructure to better facilitate use by a wider range of visitors. Interpretation will bring the sites together and promote the interests and key features of the complex as a whole and in context with the wider local landscape. The site will be a truly valued resource in the local community and well respected.

Geological Feature:
The Coaley Wood Quarries SSSI, Regionally Important Geological Sites (RIGS), and other important geological features within the Cotswold Woods will have been preserved and protected so they are open and visible for future generations. Access will be facilitated where it is safe to do so or otherwise remain protected from damage.

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

Coaley Wood (Cpts 1-2) is a 22 ha broadleaf Ancient Semi-Natural Woodland (ASNW). Coaley Quarry SSSI is located in compartment 1, covering 4.85 ha's of the site. It is located just 0.7 km's south west of Woodchester Park SSSI, which is a nationally important breeding site for the greater horseshoe. Four Scheduled Ancient Monument sites are found adjacent to Coaley Wood with Uley Barrow (NGR SO789000) and Hetty Pegler's Tump (SMR 61, SAM 22858), Uley Bury Camp (SMR 261, SAM GC54) and West Hill Romano-Celtic Temple (SMR 262, SAM GC 471) features adjoining the boundary.

The majority of the woodland across the 'Cotswold Woods' are ancient semi-natural in composition, with a good majority most closely resembling NVC W12 Fagus sylvatica – Mercurialis perennis (Beech- Dog's Mercury), with large areas of mainly secondary ash and sycamore developing where beech is lacking in dominance. This is largely interwoven with areas more closely resembling NVC W8 Fraxinus excelsior – Acer Campestre – Mercurialis perennis (Ash – Field Maple – Dogs Mercury), with ash, oak, elm, sycamore and whitebeam notably in Coaley Wood. Holly, field maple, Whitebeam and hazel are all present within the understorey. There are some large veteran beech coppice stools on the upper slopes of Coaley (1b). In some areas where larger trees have been felled and pioneer species such as birch and sallow have colonised well. Young beech, ash and sycamore are growing well almost everywhere and should ensure the woodland remains a broadleaf high forest. Small amounts of Norway maple are growing in the southern areas of Coaley Wood.

The ASNW, PAWS and Secondary woodland features throughout all four woods is intricately mixed as a result of the successes of the many management processes undertaken during the 1950s and 60s, including thinning, felling and restocking: in some areas this consisted of pure conifer planting; while in others cleared areas were restocked with beech in mixture probably with a pine or larch nurse crop. Some areas appear to have regenerated naturally, are the result of failed plantation, or suffered severe windblow during the Great Strom of 1987. Either-way, all have led to the current mixture of regenerating beech, ash and other native broadleaves. Native species have continued to regenerate resulting in a mosaic of non-native and native plantations, intermixed with semi-natural features and native broadleaved natural regeneration.

Seemingly, the ancient woodland inventory has struggled to cope with this complex array of historic plantings and coniferisation, and has for the most part classified much of the woodland incorporated within the management unit plan as Ancient Semi Natural Woodland (ASNW). ASNW covers the most of Coaley wood except 1b, which is a clear area of secondary woodland. The ASNW classification gives the false impression much of the area has never been cleared, and the majority is comprised of native broadleaved species, however some have remnant conifers and some have broadleaf nurse crops that have now naturalised.

Previous management has often resulted in an even age broadleaf structure, with tall, leggy stems particularly in secondary growth of ash. The shallow soils on the steep scarp slopes, cause shallow root systems and present a risk of windthrow. This is in stark contrast to mature trees (especially large beech) which likely grew in much more open conditions and thus have a far more developed root system anchoring themselves into the steep slopes. In 2017, ash dieback (ADB) was first reported across all 4 sites, and in 2019 was apparent in much of the ash across all four sites, particularly within the woodland centres. The speed of dieback in ash will dramatically affect much of the woodland composition over the coming years.

Open space
Open space is largely achieved through a network of narrow rides, tracks and their scalloped edges. Ride edge habitat has developed a mix of herb communities of locally typical ancient woodland indicators and species characteristic of limestone grassland. There is a viewpoint area with a bench at the main entrance to Coaley Wood maintained through coppicing, as well as an open corridor under power lines managed by Western Power that crosses the middle of the site; these provide a transitional open space habitat.

Species
-Woodland flora is abundant in many areas complementing the NVC type notably Ivy, Dogs mercury, Sweet woodruff, bluebell, spurge laurel, yellow archangel, sanicle, Herb Robert, hemp agrimony, wild strawberry, wood spurge as well as a number of ferns. Angular Solomon's Seal has been recorded at Coaley wood. Old records for Coaley Wood are notably strong – a survey in 1987 recorded 134 flora, shrub and tree species.
-Butterflies recorded at Coaley wood during the early 1990s include Pearl-bordered fritillary, Dingy and grizzled skippers (all no longer present), and scarlet tiger moth.
-Greater Horseshow bats are known to hibernate within the caves in the quarry at Coaley wood. The close by Woodchester Park SSSI is known to have a breeding roost.
-Dormice have historically been recorded within Coaley wood, although none recently, but may still be present throughout the woodland area.
-Deer are present across the woodland areas, notably roe and muntjac, and fallow are likely.

Management Access
In general management access by vehicle is poor due to the steep slopes, and is limited to the restricted byway (also SSSI), or the north west exit onto Knapp lane. The restricted byway, which is used regularly in the summer by a neighbouring farmer, is likely to be the suitable route for timber extraction. Two rights of management access are provided across fields to the lower slopes of the west of the site; these are not overly practical. Management access has also been carried out from the track off of Knapp Lane forming the compt. boundary. It is likely that the intensive historic use of this track is the reason that it is today in such a poor state. It is not suitable for vehicular access during the wetter months of the year and only 4wd access at other times.

Management history since WT ownership:
-Extensive windblow occurred across the Cotswold scarp during 1987 resulting in a dramatic increase in structural diversity. Regeneration has been prolific across some areas of the wood and does not show significant levels of browsing or squirrel damage.
-Silvicultural thinning has previously taken place within planted ash beech and cherry within Coaley Wood during 1983/4
-Coppicing beneath powerlines in Coaley Wood has previously occurred on a five year rotation by

Western Power.

Ash dieback is widespread within all four woods in 2019 with significant mortality. Along the Zone A boundaries, ash will need to be annually surveyed as part of site risk assessment, and resultant future safety felling will need to be managed carefully due to the high level of ash. The Zone B network of paths may need to be rationalised with restricted access on some, and safety felling on main paths, to avoid large scale safety felling due to dangerous trees, as the steep slopes and complex network of PROW running along the contours of the scarp mean many will be with reach of the tree safety zones.

Significance

The Woodland Trust is committed to the protection and restoration of ancient woodland sites and believes that semi natural ancient woodlands are irreplaceable.
-The woodlands making up the management unit form an important BAP habitat within the Cotswold area providing not only a refuge for wildlife but also facilitating wider ecologically functioning and connectivity within the landscape.
-The woodland forms an important landscape feature of the Cotswold escarpment within the Cotswold Area of Outstanding Natural Beauty (AONB)
-The woodland hosts a number of important Biodiversity Action Plan (BAP) and European Protected Species, notably Greater and Lesser Horseshoe bats and dormice.

Opportunities & Constraints

Opps:
-Restructure even-aged stands highly susceptible to windthrow in order to protect wider canopy cover both from a connectivity perspective as well as landscape
-Investigate significance of bat population throughout scarp woodlands (likely with other partners)
Opportunities of joint working with NT and GWT across Cotswolds woodlands and landscape.

Constraints:
Poor accessibility

Factors Causing Change

-Ash dieback is likely to have a major impact across the Cotswold woods. Much will depend on the required pre-emptive interventions required for health and safety purposes, which is likely to affect all roadside boundaries and public rights of way. This is likely to create an opportunity for alternative species to regenerate and create structural diversity, as long as the local deer population can be kept low enough to ensure natural regeneration opportunities can develop unhindered. There will likely be a major impact on species obligate to ash although this process will occur over time.
-Norway Maple is invading the southern areas of Coaley Wood.
-Deer browsing remains a threat to successful natural regeneration
-Windthrow is likely to become an increasing issue on shallow soils if stands are unthinned, this will increase notably if large areas of ash also start to fail.
-Squirrels damage on SY and BE will be a threat for young pole stage trees, becoming increasingly significant if the proportion of ash reduces over timer due to ash dieback.

Long term Objective (50 years+)

In fifty years-
Ancient Semi Natural Woodland:
A diverse and continuous mixed broadleaf woodland canopy will exist across all of the ancient woodland and secondary woodland areas, broken occasionally by semi-natural glades, rides and open space to provide associated habitats. Areas of Plantation on Ancient Woodland (PAWS) will have been restored through a gradual restoration approach to a predominantly broadleaved composition. ASNW and PAWS areas will be managed seamlessly with good vehicle access through a Continuous Cover Forestry (CCF) approach, utilising selective thinning interventions to create and maintain an irregular woodland structure with a diverse range of predominantly native broadleaved species supporting the highest levels of biodiversity. Deer populations will be managed at levels enabling natural regeneration processes to occur unimpeded by browsing. Open space will be created and maintained through a network of rides and small glades promoting transitional woodland habitat and associated species. Both standing and fallen deadwood will provide a significant habitat. Existing and future veteran trees will be protected and actively managed for as part of the adopted silvicultural strategy, using halo and selective thinning as appropriate.

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

- Initiate regeneration felling to widen main network of rides along PROW within ASNW and secondary wood areas to diversify structure (Cpts 1a, b, and c, 2a, b, c, d, e, and g), promote natural regeneration, maintain temporary open and edge habitat, and increase light levels reaching ground favouring native ancient woodland flora. To include halo thinning around veteran trees where accessible, and also to increase levels of standing and fallen deadwood.

- Ash dieback tree safety assessments and subsequent felling of dead or dangerous ash along Zone A and B areas as per WT ash dieback guidance on manging ash dieback on the estate. Annual inspections, and safety works with pro-active felling where necessary. Rationalisation of non-PROW permissive paths will also be needed with closure of some paths with high density of dangerous or dying ash trees.

- Creation and maintenance of new deer exclosures to monitor deer impact.

- To carry out a deer impact assessment and maintain programme of deer control accordingly.

- Commission European Protected Species(EPS) survey in Cotswold Woods to inform future management.

5.2 Connecting People with woods & trees

Description

Coaley Wood is adjacent to the B4066 just south west of Penn and Stanley Wood and Coaley Peak Picnic Site. Located just north of the village of Uley. Parking is available in a large layby off of the B4066/Crawley Hill where the main entrance is located. There is also access from the country lanes of Far Green and Coaley villages to the west, and by the Coaley Peak junction on the main B4066/ Frochester Hill junction. Public transport services currently link Stroud with Uley via the B4066 adjacent to the site. www.traveline.info

There are several PROWs throughout the woods, including the Cotswold Way National Trail. A permissive bridleway extends the length of the wood parallel to the public section of bridleway along most part of the north west boundary. Part of the permissive route underwent some resurfacing work in the summer of 2009. While the rest of the PROWs are not surfaced they are freely draining and naturally stony. PROW and permissive path entrances are either open or kissing gates. A restricted byway, upgraded from a bridleway runs through across the south of the wood, which is surfaced and drained. This links Uley and Far Green villages.

The Cotswold Woods form part of the central Cotswolds in the AONB guide https://www.cotswoldsaonb.org.uk/wp-content/uploads/2018/12/Explore-Booklet-2018-web.pdf

There are no known public toilets close to the woods. Public toilets are located in Stroud, Stonehouse, and Wooton-under-Edge. Stroud District council publish a list of the services open to the public which can be accessed at https://www.stroud.gov.uk/community-and-living/public-toilets Access/Infrastructure

The Woodland Trust's Cotswold Woods are not served by any official WT car parks, but as with much of the Cotswold ridges, parking is available in many formal and informal lay-bys and pull-ins directly connected to the sites. One large public car park at Coaley Peak Picnic Site, managed by Gloucestershire Wildlife Trust (formerly Glos Council), provides parking for much of the area and the network of recreational space along the Cotswold Scarp. The Cotswold Way, a National Trail, runs the length of Coaley Wood and crosses through various parts of Penn and Stanley Woods as part of the central Cotswolds region, and all woods are serviced by an extensive PROW and permissive path and bridleway network.

General Communication Drivers
The sites lend themselves to visits by both the local community and visitors to the area via the Cotswold Way. The local population is made up of several large and small towns in the immediate area including: Stroud, Cam & Dursley, Wooton-under-Edge, Stonehouse, and Nailsworth; and many other neighbouring villages, mean the sites are in easy reach of a relatively large population. The neighbouring Coaley Peak Picnic Site and Viewpoint is managed by Gloucestershire Wildlife Trust and provides a large free public car park and picnic site, and along with neighbouring Woodchester Park (National Trust) are both popular visitor attractions in the area.
The sites contain some of the best examples of publicly accessible woodland habitat available in the area, with many neighbouring woodlands in private ownership. Beech woods within the Cotswolds are nationally important feature which strengthens ecological and landscape connectivity, and the Cotswolds hosts a significant ancient woodland resource with beech especially a particularly distinct and prominent feature. There are several prominent viewpoints from the Cotswold scarp across the

area, notably at the popular GWT managed Coaley Peak. There are also quieter, but still great views across the landscape particularly at the Coaley Wood main entrance.

Current signage branding is a mixture of large and small di-bond welcome boards, and road-side signs installed in 2018 and 2019. There are no orientation boards onsite. Overall interpretation could be improved given the important habitat, and long distance trails running through 3 of the sites. Some of these contain wooden way-marker national trail posts, but many are now worn and weathered.

Events: There are currently no WT events operated within the site. It is likely that events would be popular especially in school holidays when families are likely to visit. Outside school holiday, local events may be popular for smaller interest groups, as will events on the Cotswold Way. External horse riding, cycling and running organisations run occasional events along the PROW network that pass through WT land, but are mainly coordinated from surrounding land. These are run under their own insurance and risk.

Welcome Sites: Current visitor numbers are unknown. There are no known current user groups other than the general public although the sites are likely to be interesting to conservationists, historians, geologists, walkers/ramblers and horse riders.
There are few barriers to access in general, although there is limited Woodland Trust parking and no clear way marked circular routes which may deter some visitors. Information on the terrain of walks is also limited and often many routes include long sections of steep paths/tracks, although a good network of linear tracks along the contours do provide good year round access.

Volunteering: There are currently no volunteers operating at these sites, except for several Parish Council tree wardens that help monitor the site, report fallen trees and access issues. The Cotswold Wardens have worked across the WT Cotswold Woods before.

Schools: There are some schools in the local area covering the complex of sites, predominantly based around Stroud, Dursley and Wooton-under-Edge. Currently there is no formal engagement between them and The Woodland Trust at these sites.

Forest Schools: None currently. There was a Forest School at Coaley Wood until 2016.

Wider Community Engagement: is currently minimal

Horseriders – Public and permissive bridleways cross the site. Horses can travel the southern Byway, and there is a narrow bridleway running along the west boundary from the byway to the NW entrance, and NE entrances. A permissive bridleway in Coaley Wood also runs along the highest contour from the Byway to the NW entrance, linking to the B4066. Entrances on the bridleway routes are open or with bridleway gates. Permissive bridleways at Coaley Woods underwent some re-surfacing work in 2009 thanks to grant aid from the Gloucestershire Environment Trust. The Byway (formerly Bridleway) across the southern end of Coaley Wood was resurfaced with drainage channels in 2016.

Cyclists – Increasing numbers of cyclists use the permissive as well as public bridleways within the woods, including during night-time.

Significance

The Woodland Trusts Cotswold Woods are all within the Cotswolds Area of Outstanding Natural Beauty (AONB), and connect and link into the wider wooded landscape which defines the scarps, Beech woods within the Cotswolds are a nationally important feature.
The Cotswold Woods provides a destination for a diverse visitor base throughout the year and is popular with local people from the surrounding towns and countryside. It provides several stretches of the Cotswold Way National Trail, and is utilised regularly by walkers, specialists, locals, forest schools and more.
The sites have been selected as one of the top 250 sites owned by the Woodland Trust which are likely to see further investment in the visitor experience in near the future.

Opportunities & Constraints

Opportunities:
- To engage with a large number of people across the Woodland Trusts Cotswolds Woods, which connect and link into the wider wooded landscape;
- Improve access infrastructure to provide year-round circular walk options, with areas accessible for buggies and off-road wheelchairs;
- To refresh the entrance configuration including new interpretation boards and associated signage;
- Wider partnership collaboration across whole of Cotswolds woods/AONB and partner NGO's.

Constraints:
- The steeper slopes across the sites restrict access to some areas by those people with mobility limitations;

Factors Causing Change

- Possible increase in anti-social behaviour with increasing visitor numbers.
- Illegal use of PROW by motorbikes
- Use of public footpaths by horse riders and cyclists
- Ash dieback and reconfiguration of permissive path routes.

Long term Objective (50 years+)

Connecting People:
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 this complex of outstanding woodland. An attractive and serviceable network of tracks, paths, and parking areas will further encourage the appreciation of the woodland complex both on the site and in the locality. The complex of sites will be managed to meet the required high standards of the Welcoming Site Programme and will provide welcoming, well-maintained entrances, access furniture, signage and other infrastructure to better facilitate use by a wider range of visitors. Interpretation will bring the sites together and promote the interests and key features of the complex as a whole and in context with the wider local landscape. 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)

- Improve the entrance configuration by installing new orientation boards and associated threshold signage that brings the sites together and promotes the interest and key features of the complex as a whole and in context with the wider local landscape;

- Maintain and improve the existing PROW and most used permissive path network, liaising with the Cotswold AONB, GCC PROW Team, and local volunteers;

-Explore funding opportunities to implement further engagement activities in tandem with geological interpretation/activity.

- Maintain the site as easily accessible, attractive, well maintained and safe woodland. The path network and entrances should remain in good condition and appropriate for level and type of use and in accordance with access categories.

- Ensure visitor safety via ongoing tree and infrastructure monitoring regime and remedial works as necessary.

5.3 Geological Feature

Description

All the woodlands on the Cotswold escarpment are identified as an important landscape feature in the Cotswolds AONB Management Plan. The geology of woodlands across the Cotswolds scarps is diverse, with a variety of geological horizons from the top to bottom and works within woods including large scale quarrying, sunken tracks and lanes all exposing these variations.

Coaley Wood contains a geological SSSI designation (Site of Special Scientific Interest) of some 4.85ha. The area has long been a famous geological site for abundant fossils, particularly rare ammonites of the Lower Jurassic age, occurring in the cephalopod bed. The sunken lane cuttings provide valuable exposures of the underlying Cotswold Sand Formation. A visually impressive quarry within the SSSI also has some geological interest, although less so than the sunken lane. It contains two caves covered by metal grilles to restrict access to people, there are records of greater and lesser horseshoe bats hibernating and roosting in the caves.

Most disused quarries need active management to maintain exposure of the important geological features. This is because erosion rates are usually too low to ensure that fresh geological exposures are maintained naturally. Management usually involves periodic clearance of vegetation and rock debris. Vegetation growth is a particular problem for geological conservation in many inland disused quarries. It may not be always practical or entirely necessary to maintain full exposure of the geological features on a site, but it is recommended to remove young growth whilst maintaining a canopy for protection. Similar principles apply to road and rail cuttings. Management of vegetation is often required to maintain the geological exposures. Any development or activity that leads to concealment of the interest features is likely to damage the site.

Significance

The Coaley Wood Quarries SSSI is a feature of national importance. And disused quarries and road and rail cuttings form a very important part of the geological resource of the UK.

Opportunities & Constraints

- Work with local geological interest groups to seek advice and possible management of key feature following consultation with NE.

Factors Causing Change

Damage to geological features through vandalism or fossil collecting.
Accidental damage to geological features through vehicles.

Long term Objective (50 years+)

In fifty years' time the Coaley Wood Quarries SSSI, Regionally Important Geological Sites (RIGS), and other important geological features within the Cotswold Woods will have been preserved and protected for future generations so they are open and visible. Access will be facilitated where it is safe to do so, or otherwise remain protected from damage.

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

Explore funding opportunities to implement further engagement activities in tandem with connecting people KF through interpretation/activity.

Site management will involve defining specific areas that need to be kept clear of vegetation through liasing with local interest groups – contact Gloucestershire Geology Trust.

Maintain the identified features of geological interest so they are open and visible through periodic vegetation removal of young trees maintaining canopy, and also protection of the key feature.

Periodic assessment of safety hazards of the features, and appropriate access, checks, or fencing through the Site Risk Assessment (SRA).

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
2020	WMM - Coppice Management	Coppice small ash trees from viewing area, brash to be mulched onsite and timber stacked safely	31/03/20

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	0.10	Mixed broadleaves	2014	Coppice	Very steep slope/cliff/quarry/mine shafts/sink holes etc	Ancient Woodland Site, Connecting People with woods & trees	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, Site of Special Scientific Interest
CW - A small entrance area outside of the ASNW with no mature beech canopy and the resulting regeneration is young mixed broadleaved coppice dominated by ash and including beech, sycamore, sallow with coarse ground flora of willow herb and bramble. Managed on a rotation of 2-3 years due to the landscape views from the prominent bench near the entrance. The nature of the vegetation that is growing as a result of cutting is floristically interesting and diverse attracting a lot of invertebrates and bird species. The main entrance is found in the SE corner with an area of roadside parking for 7 cars which is outside WT ownership. Field and pedestrian gate at start of ownership. The Cotswold Way and the Bridleway route run through compt.							
1b	4.47	Beech	1900	High forest	No/poor vehicular access within the site, Very steep slope/cliff/quarry/mine shafts/sink holes etc	Ancient Woodland Site, Connecting People with woods & trees	Area of Outstanding Natural Beauty, Site of Special Scientific Interest

CW - 1b forms a long stretch of the eastern boundary of the site and the sky line as viewed from the bottom of the Cotswold scarp. Most of Cpt is not designated as ASNW except the very north.
The external boundary is a mixture of properties to the south east, and permanent pasture to the east. Hetty Pegler's Tump (Uley Long Barrow) is contiguous with the northern external boundary of the compt.
The site runs steeply downhill from east to west with footpaths running along the scarp north to south, and a powerline crossing the Compt running east to west.
The tree cover is predominantly mature beech canopy with some ash and sycamore, however the beech is predominately mature coppice with some veteran stored coppice stools. It is exclusively mature beech coppice that forms the skyline of the site as viewed from the bottom of the Cotswold scarp.
The mature beech canopy is more variable towards the west areas, especially along the Cotswold Way National Trail where ash sometimes dominates. Where the canopy density is less dense or absent a variable structure of understorey derived from natural regeneration is developing. This ranges from between 10 and 40 years in age and is dominated by ash and hazel coppice. Despite the variable canopy the field layer is again dominated by ground ivy with some localised patches of locally typical AW flora such as bluebells, Dog's mercury, sweet woodruff, sanicle etc.
A quarry within the SSSI is found in the south of the compartment with some geological interest, although less so than the sunken lane. It contains two caves covered by metal grilles to restrict access to people, there are records of greater and lesser horseshoe bats hibernating and roosting in the caves.

1c	6.57	Mixed broadleaves	1950	High forest	No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Ancient Woodland Site, Connecting People with woods & trees	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, Site of Special Scientific Interest

CW - 1c forms the ASNW northern section of the site on the upper, very steep slopes. It hosts the north west access point for pedestrians, horses and management at the end of Knapp lane. A plethora of routes, permissive and PROW meander through, including part of the Cotswold Way National Trail.
The tree canopy is even aged semi-mature high forest beech and ash with some mature coppice estimated to have been established circa 1950/60 representing a NVC W12 vegetation community. Canopy coverage is even and high, estimated at 90%. Canopy density limits levels of understorey. Ground flora is dominated by ground ivy but locally typical ancient woodland indicators present such as sweet woodruff, spurge laurel, dog's mercury and bramble. Management access to and within the compartment is only possible via Knapp lane. The slopes are very steep throughout.

2a	1.75	Mixed broadleaves	1900	High forest	No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Ancient Woodland Site, Connecting People with woods & trees	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, Site of Special Scientific Interest
CW - Compt. 2a forms the southern ASNW tip of the site. It hosts a network of permissive pathways and 3 pedestrian access points from the Cotswold Way along the southern boundary into the compartment, and the restricted byway that runs through the site along the east of 2a and 2c. The byway comprises the Coaley SSSI – a geological SSSI (Site of Special Scientific Interest) of some 4.85ha for abundant fossils. The sunken lane (restricted byway) cuttings provide valuable exposures of the underlying Cotswold Sand Formation A High Forest canopy of mature beech and ash covers much of this compartment. It is expected that this current high forest canopy has been reduced greatly by previous windblow as many root plates and overturned stumps are evident. As a result of the high level of sunlight to the woodland floor regeneration dominates the understorey, this is complimented by a small percentage of coppice. Regeneration is of locally typical dense mixed broadleaves and is even aged throughout at circa 25 years old. Species are dominated by ash and including beech, sycamore, sallow, holly, hazel, Norway maple and a small component planted cherry, (less than 5%). Ground Flora is dominated by ground ivy, but includes localised patches of locally typical ancient woodland flora such as bluebell, dog's mercury, sweet woodruff and sanicle. There are also localised patches of very light bramble cover. Old man's beard grows thickly amongst the understorey in localised patches.							
2b	0.12	Mixed broadleaves	2014	Coppice	Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Ancient Woodland Site, Connecting People with woods & trees	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, Site of Special Scientific Interest
CW - A small area on the slope below 1a, with a similar compositions and history as 1a and 2a. There is no mature beech canopy and the young mixed broadleaves are dominated by ash beech, sycamore, sallow. Managed on a rotation of 2-3 years due to the landscape views retained and the nature of the vegetation that is growing as a result above (floristically interesting and diverse attracting a lot of butterflies). It is located close to the main management access.							
2c	0.75	Mixed broadleaves	1960	High forest	No/poor vehicular access within the site	Ancient Woodland Site, Connecting People with woods & trees	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, Site of Special Scientific Interest

CW - The western side of 2c forms an external boundary with grazing land, and the east boundary is the restricted by way and SSSI sunken lane. There is a badger sett present (See Conservation Feature Map). Many more mature trees, notably beech, have been retained along the external boundary of the site; at the badger sett is a mature beech that has been pollarded in the last 30 years or so. A remnant footpath follows the western external boundary just within the woodland. Canopy is ash dominated semi-mature broadleaved mix dominated by an ash canopy of circa 40 years age, showing adb. Understorey is sparse but consists of regenerating Holly, Sycamore and Field maple							
2d	2.97	Mixed broadleaves	1900	High forest	No/poor vehicular access within the site	Ancient Woodland Site, Connecting People with woods & trees	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, Site of Special Scientific Interest
CW - The west entrance runs in from Spring Tyning along the restricted byway. The boundaries of 2d are the power lines to the north, the external site boundary to the west and the restricted byway to the south. The ground is steep east to west The tree canopy cover across is very variable. As with compt 2a a high percentage of the previous mature beech high forest canopy has blown over leaving many old root plates and stumps. It is estimated that 30% is still covered with mature Beech canopy. Small localised areas of sub canopy approx 40 yrs old and dominated by ash have developed across the site. Coppice and regenerating mixed broadleaved understorey are present and frequent, along with rare planted cherry (less than 5%). Ground flora is sparse and dominated by ground ivy, with Dog's mercury, sweet woodruff and sanicle present. Periwinkle, a non-native invader has colonised an area towards the west roughly 0.1Ha in extent. This is located 40m east of the access point on the external boundary.							
2e	1.48	Beech	1900	High forest	Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Ancient Woodland Site, Connecting People with woods & trees	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty, Site of Special Scientific Interest
CW - A long thin compt. sandwiched between the Cotswold Way and the Permissive bridleway. Occupies a steep, inaccessible slope and is bordered to the north by power lines. Once dominated by mature Beech high forest this area has only retained a remnant few canopy trees (circa 10%). The increase in light has led to the development of a dense naturally regenerating mix of locally typical broadleaves. The rapidly developing even aged regeneration is of circa 30 years age. A proportion of understorey is made of hazel from coppice origin but this is in the minority. Field layer is becoming sparse as dense regeneration begins to block out light. As with other areas ground ivy is dominant.							

2f	2.35	Mixed broadleaves	1960	High forest	Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Ancient Woodland Site, Connecting People with woods & trees	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty
CW - Located to the north of the power lines and on the lower (western) and mid slopes of the site. An external boundary consists of a grazing field. A high forest canopy of semi-mature mixed broadleaves dominated by ash. This is variable in density but is estimated to cover circa 65% of the area. Where canopy trees are missing Old man's beard is suppressing the understorey of hazel coppice. Cherry has been planted throughout and in a few cases this has fought through old man's beard and is fast reaching a place in the variable canopy. Field layer is sparse or dominated by Ground Ivy as with other areas.							
2g	2.00	Ash	1960	High forest	Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Ancient Woodland Site, Connecting People with woods & trees	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty
CW - Area on the lower slopes of the northern section of the woodland. The external boundary of 2g is followed by a dedicated bridleway, a permissive footpath runs parallel to this and the internal boundary is formed by the permissive bridleway and Cotswold Way national trail. The canopy is dominated by ash grown as maidens, with elm, sycamore, English oak and Whitebeam. Some plantation evident of cherry and possibly of ash and oak but the canopy is dominated by trees derived from natural regeneration. Dense understorey in parts, dominated by hazel and hawthorn, this has been coppice in the past.							

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2020	1a	Thin	0.10	0	0
2020	1b	Thin	4.47	8	35
2020	1c	Thin	6.57	10	65
2020	2a	Thin	1.75	20	35
2020	2b	Thin	0.12	0	0
2020	2c	Thin	0.75	20	15
2020	2d	Thin	2.97	12	35
2020	2e	Thin	1.48	10	15
2020	2f	Thin	2.35	11	25
2020	2g	Thin	2.00	18	35

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.