



Crow Park

Management Plan 2018-2023

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THE WOODLAND TRUST

INTRODUCTION

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations. Please either consult The Woodland Trust website www.woodlandtrust.org.uk or contact the Woodland Trust (wopsmail@woodlandtrust.org.uk) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland. Our strategic aims are to:

- Protect native woods, trees and their wildlife for the future
- Work with others to create more native woodlands and places rich in trees
- Inspire everyone to enjoy and value woods and trees

All our sites have a management plan which is freely accessible via our website www.woodlandtrust.org.uk. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
4. The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
- 10 Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

SUMMARY

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site - their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

1.0 SITE DETAILS

Site name:	Crow Park
Location:	Whitehaven
Grid reference:	NX977179, OS 1:50,000 Sheet No. 89
Area:	11.34 hectares (28.02 acres)
Designations:	Ancient Semi Natural Woodland, Other

2.0 SITE DESCRIPTION

2.1 Summary Description

Crow Park is on a steep slope and is planted in the shape of a rabbit. Mature broadleaves form the majority of tree species and a small bamboo area exists in the south. Buzzards nest in the woods and a number of benches add to visitor enjoyment.

2.2 Extended Description

Crow Park is a large urban wood, in the heart of Whitehaven, between the town centre and the Loop Road. The wood is on a steep western facing slope, is an intrinsic feature in the landscape and is highly visible from the town. The wood was planted (P1930) in the shape of a rabbit; with the Whitehaven Loop Road to the east at an elevation of 70 metres and Castle Park to the west some 40 metres lower and has an average gradient of 1 in 6. In the south of Crow Park is a deeply incised valley of an un-named gill, which runs northeast-southwest and has many of the woodland characteristics of the nearby Midgey Gill Wood (ASNW) adjacent to Park Drive.

The north of the wood, known locally as White Park (cpt1 3.3ha), is aligned north-south across the west-facing slope and provides fine views across to the port of Whitehaven. White Park is 480 metres long and on average 30 metres wide and only a small southern section is wooded and the rest is patches of younger woodland with open spaces predominantly with dense grass and scrub. Crow Park (cpt2 8.1ha) is in a reverse 'J'-shape, approximately 450 metres north-south and 300 metres east-west. In terms of both woodland type and geomorphology Crow Park is varied but managed as one unit. The wood consists of a mix of mature broadleaved trees, all of a similar age, and these were probably planted around 80-100 years ago. The main species are oak and sycamore with some elm, ash, downy birch, Corsican and Scots pine. There are also a few lime and horse chestnut in the west of the wood. The shrub layer is very sparse and consists of occasional holly and elder. The woodland plants are dominated by bramble with rosebay willowherb although in the west of the wood there is less bramble and more specialised woodland plants such as dogs mercury and male fern are abundant. Around edges of the wood close to housing some invasive non-natives species are growing, including Montbretia and Japanese knotweed as result of the dumping of garden waste. There are few signs of regeneration of trees and shrubs, mainly because the wood is densely shaded, and open gaps tend to become rapidly dominated by coarse vegetation such as bramble.

Rhododendron was previously planted as part of the parkland landscape but has recently been cleared, although very small amounts still appear in the ghyll. A small area of bamboo exists to the south of the wood.

Buzzards (*Buteo buteo*) are known to nest in the wood, and red squirrels are present in the area. Access to the wood can be gained from 8 entrances, including some direct from the Loop Road and from the southerly entrance off Park Drive; there are also several entrances from the west and Castle Park. There is one broad well surfaced route running north-south through the whole wood and a varied network of surfaced and un-surfaced paths through the wood totalling approximately 2,000m of public and permissive footpaths. There are 3 benches located in the white Park section. The wood is in a busy urban location and is very well used by local people for recreation and as a through route into the town. Castle Park to the west and below the wood is a traditional council run park, with a playground, bandstand and lawns for recreation, so compliments the wood very well.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Crow Park is in the town of Whitehaven in West Cumbria. The wood is to the east of The Castle and the west of the Loop Road South; which is the main trunk road serving Whitehaven the A595.

Parking is limited to nearby streets or town centre car parks. The C2C and Hadrian's Wall National Cycle Route passes through Whitehaven and along Coach Road to the west of Crow Park. For more information on cycle routes contact www.cycleroutes.org/hadrianscycleway or contact Sustrans 0845 113 00 65.

There are several entrances into Crow Park and White Park, all with Woodland Trust welcome signs. Three entrances can be found off the Whitehaven Loop Road, one off Park Drive to the south and several from Castle Park to the west. A metalled route runs through the wood from White Park at the north to Castle Park at the south and to the traffic lights at the gated park entrance. Where this route goes into White Park the footpath has a stone surface all the way up to the Loop Road. This route is heavily used as a main route from the Loop Road into Whitehaven town centre, is very accessible for prams and wheelchairs and can be used throughout the year. Several other footpaths criss-cross the wood but can be steep and muddy in places. A Whitehaven brick-footpath crosses the wood at its midpoint and runs from the Loop Road to Scotch Street. Magnificent views over Whitehaven town and the harbour can be gained from White Park and there are several benches throughout the wood.

From Park Drive to the south of the wood visitors can walk to the adjacent ancient woodland of Midgey Gill.

Whitehaven Railway Station is a stop on the scenic Cumbrian Coast Line 63 km (39½ miles) south east of Carlisle and is operated by Northern Rail. Many trains on the route from Carlisle terminate here. There is generally an hourly service from Carlisle and an infrequent service southbound to Barrow-in-Furness. On Sundays, three trains a day run to Carlisle. Please note there are two stations in the town. To get to the southern most entrance of Crow Park use the station at Corkickle. From the station turn right onto Coach Road. At the traffic lights cross straight over and go through the stone arch into Castle Park. This surfaced footpath leads directly into Crow Park. From the main station at Bransty Row turn left onto George Road. Take the next left on Wellington Road to St James Pitt Road. Near the end of the road on the left is a public right of way. This leads up into White Park; which is the northern end of Crow Park.

The nearest bus stop to the wood is on Flatt Walks served by local route 17 and for buses to/from Carlisle the bus stop is on Lowther Street. Traveline North East & Cumbria provides comprehensive timetable and fare information for all bus, coach, rail and Lakeland ferry journeys to/from and within Cumbria & the Lake District telephone 0871 200 2233.

There are numerous public toilets in the town centre including facilities on Irish Street and full facilities at the main railway station. For local information try www.whitehaven.org.uk or www.copelandbc.gov.uk or the Whitehaven Tourist Information Centre, Market Hall, Market Place, Whitehaven Telephone: 01946 598914.

3.2 Access / Walks

Urban orienteering event on Thursday 10th September 2015 between 5:30pm-8:30pm. Suitable for adults and families with children. Contact West Cumberland Orienteering Club for details.

4.0 LONG TERM POLICY

It is the Trust's objective to enhance the typical characteristics of both the ancient semi-natural and secondary woodland within the landscape and to maintain and improve the biodiversity of the whole woodland, as well as increase people's awareness and enjoyment of this ancient habitat. This is in line with the outcomes in the Trust's Action Plan 'Keeping Woodland Alive'. The Trust aims to achieve this through the management of three key features:

1. Informal Public Access

The Trust will maintain the informal access to the woodland on some 2000m of public and permissive paths; with the provision welcome signs at the entrances. Public access will be encouraged with paths and structures maintained and improved where necessary. Defined views will be retained so that local users and visitors can continue to share in the wood's beauty, gain an understanding of the woodlands importance in the landscape and enjoy it's position in the centre of Whitehaven and the views out to the harbour. Public information and promotion of the woodland nationally through the Trusts website, publications and directory and locally continue where possible and posters will be used to inform and involve visitors with the woodland.

2. Ancient Semi Natural and Secondary Woodland

The Trust aims to maintain the overall high forest continuous-cover structure of Crow Park (cpt2) as mixed woodland. This will be done by retaining both native and non-native canopy species which will maintain the landscape value of this woodland. Natural regeneration and development of the understorey will be monitored and encouraged to ensure succession. Control of rhododendron, Japanese knotweed, bamboo and garden exotics will continue to reduce the threat of these invasive non-natives to the native woodland species. The Trust aims to enhance the biodiversity of the woodland characteristics which will include conserving deadwood communities, developing older trees, protecting the aquatic environment in the gill, and adopting working practices that do not impact adversely on the integral environment and protecting the ancient woodland from adverse practices and degradation due to the tipping of garden waste.

3. Historic Landscape

The Trust aims to maintain the mixed woodland and open structure of White Park (cpt1), creating and managing defined viewpoints to retain the historic views out across Whitehaven and to the harbour for visitors to the wood and the general public passing along the Loop Road. There is also the opportunity to maintain a scrub to woodland cover of both native and non-native species to help buffer and increase the core woodland area of Crow Park (cpt2) and yet maintain the park landscape feel of White Park.

It is anticipated that this approach will safeguard and enhance the existing environmental value of the wood and maintain and enhance the level of public access in the woodland.

5.0 KEY FEATURES

The Key Features of the site are identified and described below. They encapsulate what is important about the site. The short and long-term objectives are stated and any management necessary to maintain and improve the Key Feature.

5.1 Informal Public Access

Description

Crow Park Wood is very well used by local people as a route into Whitehaven town centre but attracts relatively few visitors from further a-field. There are 3 entrances to the wood from the Whitehaven Loop Road and an entrance off Park Drive below the garages plus there are several entrances from the west and Castle Park. At the entrances Woodland Trust signs welcome visitors to the wood. Through the wood there is a surfaced (tarmac) and stoned route from the Loop Road at the northern point of the wood to Castle Park and the gated entrance leading to Whitehaven town centre. From this path there are a number of footpaths through the woodland, which in places can be steep and are generally unsurfaced. A Whitehaven brick path runs from the Loop Road through the middle of the woodland east west and leads to Scotch Street. The internal landscape to the woodland is interesting and from White Park spectacular views across Whitehaven town and towards the harbour can be gained. There are several benches along the footpaths. From Crow Park visitors can access Castle Park recreation area and Whitehaven town centre. From the southern exit to Park Drive visitors can access Midgey Gill Wood.

Significance

Crow Park is one of 4 urban woods in Whitehaven town centre (the others are the nearby Midgey Gill, Harras Moor on the other side of the Loop Road, and Arrowthwaite Wood on the other side of the valley), all managed by the Trust. It provides informal recreation opportunities for the local community, gaining experience of woodland in a predominantly urban environment. Increasing enjoyment of woodland is one of the Trust key outcomes and a cornerstone to the vitality of the woods. The woods intrinsic qualities and historical links to Whitehaven Castle make it an important local resource and an educational resource for visitors and organised groups. Public appreciation of woodlands is good for the well being of those visiting the wood and ultimately, good for the wood. Crow Park is a significant feature within the town's landscape and affords spectacular views out to the harbour. At a national, regional and local level there are objectives to encourage local people to be involved with woodland and Crow Park is in an important location to facilitate use and enjoyment of woodland.

Opportunities & Constraints

The footpath network at Crow Park is quite extensive and varied and for an urban woodland the area is quite large. The woodland attracts many local users and there are several well-used routes taking people from the Loop Road directly into Whitehaven town. The main surfaced route means the wood can be utilised throughout the seasons and can be used with wheelchairs and prams. In winter the ground conditions may become muddy on the unsurfaced routes. There are opportunities to improve the path system and make the woodland more accessible in all seasons. There is quite an extensive drain system requiring regular maintenance to keep water run-off away from the paths. There is an opportunity to inform the public of management practices, landscape and historical interest in the wood through websites, posters and local leaflets. With all urban woodland it gives local people an opportunity to connect with nature on their own doorstep. There are a number of benches in the wood towards the top of the hill, where a rest is welcome and there are good views over the town, harbour and out to sea. Litter and tipping are ongoing problems. It tends to accumulate in particular areas and needs very regular collection (monthly) to prevent the woodland looking unsightly and being a safety issue. Tipping along the boundaries is also an issue; particularly the southern boundary. Vandalism does occur, mainly of signs and structures. There is an opportunity to engage with neighbours and visitors about these issues.

Factors Causing Change

Fly Tipping, litter, vandalism

Long term Objective (50 years+)

The Trust's long term plan is to maintain and improve the informal access to the woodland on approximately 2,000m of permissive and public footpaths and work with the County Council to maintain standards on the public footpaths; to provide continuity of visitor access in line with a very well used wood (access category A) and to promote a safe and welcome environment. Viewpoints out to the harbour from White Park are defined and maintained so that local users and visitors can continue to enjoy the splendid views out to sea. Public information and promotion of the woodland, both nationally through the Trusts website, publications and directories and locally through the Borough Council and posters, will be undertaken to inform and involve visitors with the woodland. The Trust will continue to promote the woodland amongst people in the region and members nationally so long as the primary objective of 'no further loss of woodland' (in terms of both quality and quantity) is not compromised.

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

Maintain all the entrances (8) with welcome signs, cutting and strimming these and the path network of 2,000m. Undertake regular safety inspections at defined intervals and clearance of roadside vegetation to Highways guidelines, working with the local Council where they maintain responsibilities for boundaries and the internal wall. Clear litter and garden waste as necessary and where possible. Clear the drainage systems (approximately 1000m) regularly to prevent blockages and keep water running. Defined viewpoints by the benches will be maintained and regular management carried out to keep vegetation down to low scrub and grass. All work will be carried out to the standard Woodland Trust specifications.

5.2 Ancient Semi Natural Woodland

Description

The wood is on a steep western facing slope, is an intrinsic feature in the landscape and is highly visible from the town. The south of the wood known as Crow Park (cpt2) is a deeply incised valley of an un-named gill this area of the wood, which runs northeast-southwest and has many of the woodland characteristics of the nearby Midgey Gill Wood and is also designated Ancient Semi-Natural Woodland.

Crow Park woodland area is approx 8.1ha in size (excluding the White Park area which is mainly grassland with scattered trees & shrubs), in the form of a reverse 'J'-shape, and approximately 450 metres north- south and 300 metres east -west. The canopy is predominately made up of mature broadleaves. The most common tree species are oak and sycamore, with some elm, ash, downy birch, Corsican pine and Scots pine. A few lime and horse chestnut can be found to the west of the wood. The shrub layer is very sparse and composed of the occasional holly and elder. The ground flora is dominated by bramble with the occasional rosebay willowherb although in the west of the wood bramble is much less common and dogs mercury and male fern are abundant. Around edges of the wood close to housing there has been some colonisation of non-native species, including Montbretia and Japanese knotweed as result of the dumping of garden waste. There are few signs of regeneration of trees and shrubs, mainly because the wood has a closed canopy, and open gaps tend to become rapidly dominated by coarse vegetation.

Significance

The woodland is an important landscape feature in the centre of Whitehaven and is one of 4 woods in the town managed by the Woodland Trust. Whitehaven has a far more wooded landscape than many urban areas so there is scope for this wood to function as part of a larger woodland environment. Parts of Crow Park are ancient semi natural woodland and have provided continuous habitat for the woodland communities for centuries and continuity of this habitat is vital for the ecological woodland biodiversity. At a national, regional and local level woodland within the landscape is credited with importance and within the urban environment can improve the quality of life and reduce pollution.

Opportunities & Constraints

In the past the trees in Crow Park Wood have not been managed much and consequently has a dense, closed, even-aged canopy. After the wood was acquired by the Trust in the 1990s it was thinned, to open up the woodland, improve stand stability and crown development. The work is affected by the risk of wind throw which has occurred when the wood has been hit by the normal westerly gales. Other constraints include the difficulties of access and safety needs of working in such a busy urban environment. Crow Park is part ASNW either side of the gill with the rest being once the grounds of Whitehaven Castle. There is an opportunity to manage the adjacent woodland area to encourage the spread of ancient woodland plants and natural regeneration of tree species. This could also be improved and diversified by planting native trees & shrubs that would be expected in the area but are not present. Rhododendron had been planted in the southern area and could be technically classed as Planted Ancient Woodland (PAWs), but most of it has been removed, with only small amounts regenerating and needing occasional checking and clearing. Rhododendron is present on neighbouring Castle Park and there is an opportunity to speak to the Council regarding the presence of this species near to the ancient semi-natural woodland. Standing deadwood has ecological importance but its retention is constrained in places by safety needs. Garden waste poses a threat to the continuity of ground flora particularly in tipping hotspots off the Loop Road to the south east of the wood, along all boundaries to houses and near to the allotments. Garden waste has encouraged the colonisation of nettles and brambles and also introduced invasive non-native species such as Montbretia and Japanese knotweed which have colonised small areas of the woodland. Opportunities to work in partnership with the local Council, local community organisations and local people could be created to reduce this problem. The Gill running through the woodland has in the past suffered from pollution (sources unknown). This has constrained the maintenance of a good riparian habitat. Crow Park is constrained by size and acts as an island habitat surrounded by a busy urban environment. This is a limiting factor on its diversity potential.

Factors Causing Change

Invasive introduced non-native species: rhododendron, Japanese knotweed, montbretia. Fly tipping, dumping of garden rubbish, pollution, wind damage, vandalism, encroachments. Ash dieback will have limited impact as ash is only a minor component of the canopy.

Long term Objective (50 years+)

Continuous canopy cover over most of the woodland with an increased diversity of age and species range, a well developed shrub layer, tree/shrub regeneration, a good ground flora at least the current fauna communities. The condition aspired to is dynamic and includes the retention of old trees, restoration of the ancient woodland by eradicating non-natives, and ensuring protection of the ancient woodland characteristics and the retention of standing and fallen deadwood. Monitoring and intervention to deal with potential threats to the woodland are always likely to be necessary.

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

Retention of mature canopy trees to promote longevity, continuous cover and develop deadwood both standing and fallen, where safe to do so given the access objectives and safety.

Regeneration. Take advantage of gaps in the canopy and small-scale clear-fell areas (created by tree safety works or wind throw) to regenerate and diversify the age and species range of trees and shrubs. Previous gaps have usually regenerated poorly before being quickly overrun with dense, coarse vegetation, so this will generally be achieved by small scale planting, soon after the gaps are created. Record, monitor and record planting activity at 5 year intervals to assess the general trend and rate of change as if there are insufficient gaps it may be necessary to consider other actions to achieve regeneration for example creating small clear-fell coupes.

Continued monitoring and control of all invasive non-native species, such as rhododendron, Montbretia (*Crocasmia x crocosmiiflora*) and Japanese knotweed with the aim of eradicating these. Work with the local Council to reduce the level of garden tipping.

Manage all boundaries to ensure no encroachments occur.

5.3 Historic Landscape

Description

Compartment 1a (3.3ha), known locally as White Park, is aligned north-south across the west-facing slope and provides fine views across to the port of Whitehaven. White Park is 480 metres long and on average 30 metres wide and has historically been part of the grounds of Whitehaven Castle. It abuts the Loop Road to the east with iron railings denoting the boundary. To the west and north there is housing and the boundary is a mix of walling and fencing. To the south is Compartment 2 (Crow Park), separated by a wall running east-west with Whitehaven brick-surfaced public footpath running alongside the wall. White Park is dominated by a broad, surfaced, slightly sunken track, which connects Crow Park to the south with the Loop Road to the north. Local people use this track very frequently as an access route into Whitehaven town centre and the local Council has situated several benches along it. There are 4 main entrances into the wood here and cross drains running east-west through the compartment taking water from the Loop Road and the housing area above. White Park is a patchwork of woodland and grassy areas and fine view points over the harbour, the bay and out to sea. Where the canopy is closed is composed of mainly lodgepole pine and green alder to the west of the track and sycamore), beech, hawthorn, hazel and lodgepole pine to the east. Sycamore also extends along the roadside on the eastern margin. The ground layer is sparse with occasional ferns and bluebells. The areas of younger woodland are very variable with a mixture of lodgepole pine, Scots pine, Norway spruce, sessile oak, pedunculate oak, Turkey oak, downy and silver birch, dog rose, rowan and alder with some gorse, all of which has obviously been planted. In the open spaces the vegetation cover is mainly grasses but there are also significant patches of heather. On the very northern boundary there is a small area of mature trees with elm, sycamore, ash and sessile oak with yew and laurel beneath.

Significance

White Park was historically part of Whitehaven Castle grounds and may have been managed as parkland around the castle. In the 20th century it has been managed as a park and has afforded spectacular views across the town of Whitehaven to the harbour and the sea beyond. Having been part of a wooded historic landscape for many centuries (despite the growth of the urban landscape of Whitehaven) it is important to retain this continuity of this management, conserving the wildlife, history and landscape value it provides.

Opportunities & Constraints

There is an opportunity to continue to maintain a number of open areas to retain the historic views out across Whitehaven and to the harbour for visitors to the wood and the general public passing along the Loop Road. There is also the opportunity to maintain a scrub to woodland cover of both native and non-native species to help buffer and increase the core woodland area of Crow Park (cpt2) and yet maintain the park landscape feel of White Park. Maintenance of viewpoints and an open landscape will limit the biodiversity potential of the overall woodland.

Factors Causing Change

Natural succession To Woodland

Long term Objective (50 years+)

The long term aim is to maintain the open structure of White Park (cpt1) with areas of open woodland at defined viewpoints and areas developing from scrub to woodland to buffer cpt 2.

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

Three key viewpoints from the track were created in 2009 and will be maintained with a regular annual work, cutting back vegetation to keep them open. These viewpoints correspond to open areas to the east of the track, which too can be maintained once every five years through coppicing to retain viewpoints out to the harbour from the Loop Road. In the scrub-woodland buffer zones canopy species will be retained, thinning only where necessary for access and where tree safety works are required. Tree safety inspections will be completed at defined intervals with standing and fallen deadwood retained where safe to do.

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
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APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	3.30	Other		Non-wood habitat	People issues (+tve & -tve)	Informal Public Access	
<p>Compartment 1a (3.3ha), known locally as White Park, is aligned north-south across the west-facing slope and provides fine views across to the port of Whitehaven. White Park is 480 metres long and on average 30 metres wide. It abuts the Loop Road to the east with iron railings marking the boundary. To the west and north there is housing and the boundary is a mix of walling and fencing. To the south is Compartment 2 (Crow Park). The wall running east west acts as the sub-compartment boundary. White Park is dominated by a broad, surfaced, slightly sunken track, which connects Crow Park to the south with the Loop Road. The track is very well used as an access route into Whitehaven town centre. A Whitehaven brick path runs east west along the southern boundary of the compartment. Copeland Borough Council have situated several benches alongside the track which are popular. There are 4 main entrances with welcome signs into the compartment. Cross drains run east west through the compartment taking water from the Loop Road and the housing area above. A drain runs parallel and to the east of the surfaced track to keep surface water off the path and direct it back into the drain system. White Park is open, scattered woodland with clumps of trees and grassy open areas with view points to the bay. Where the canopy is closed is composed of mainly lodgepole pine (<i>Pinus contorta</i> var <i>latifolia</i>) and green alder (<i>Alnus viridis</i>) to the west of the track and sycamore (<i>Acer pseudoplatanus</i>), beech (<i>Fagus sylvatica</i>), hawthorn (<i>Crataegus monogyna</i>), hazel (<i>Corylus avellana</i>) and lodgepole pine to the east. Sycamore also extends along the roadside on the eastern margin. The ground layer is sparse with occasional ferns and bluebells (<i>Hyacinthoides non-scripta</i>). The areas of younger woodland are very variable being composed of a selection of lodgepole pine, Scots pine (<i>Pinus sylvestris</i>), Norway spruce (<i>Picea abies</i>), sessile oak (<i>Quercus petraea</i>), pedunculata oak (<i>Quercus robur</i>), Turkey oak (<i>Quercus cerris</i>), downy and silver birch (<i>Betula pubescens</i> and <i>B. pendula</i>), dog rose (<i>Rosa canina</i>), rowan (<i>Sorbus aucuparia</i>) and alder (<i>Alnus glutinosa</i>), with an understorey of gorse (<i>Ulex europaeus</i>). In the open spaces the vegetation cover is mainly grasses but there are also significant patches of heather (<i>Calluna vulgaris</i>). On the very northern boundary there is a small area of mature trees elm (<i>Ulmus</i> spp.), sycamore, ash (<i>Fraxinus excelsior</i>) and sessile oak with yew (<i>Taxus baccata</i>) and laurel beneath.</p>							
2a	8.10	Sycamore	1930	High forest	Gullies/Deep Valleys/Uneven/Rocky ground, People issues (+tve & -tve)	Informal Public Access	Ancient Semi Natural Woodland

This compartment, known as Crow Park, is 8.1ha in size and is in the form of a reverse 'J'-shape, being approximately 450 metres north-south and 300 metres east-west. The Whitehaven Loop Road is to the east and Castle Park is to the west and the wood is on a west-facing slope. To the north is compartment 1 White Park and to the south is housing, a number of garages and Park Drive. Also to the east, at a management entrance, is an area of garden allotments. There are several entrances into Crow Park all with Woodland Trust welcome signs. A metalled road runs through the compartment from White Park at the north to Castle Park at the south and onto the traffic lights at the gated park entrance. This is very well used as a footpath as a main route into Whitehaven town centre. Several footpaths criss-cross the wood but can be steep and muddy in places. Drains run parallel and either side of the metalled route and north south through the western section of wood and along the boundary with Castle Park. In the south of Crow Park is a deeply incised valley of an un-named gill, which runs northeast-southwest and has many of the ancient semi-natural woodland characteristics of the nearby Midgey Gill Wood adjacent to Park Drive. A British Rail tunnel passes under the wood and has 3 large, circular, surface shafts for the air venting of the tunnel in the wood. The compartment in terms of both woodland type and geomorphology is varied but managed as one unit. In the southern section around the gill canopy is made up of predominately mature broadleaves with a top height of between 16 and 22 metres depending upon their location on the slope. Oak (*Quercus* spp.) and sycamore (*Acer pseudoplatanus*) dominate the canopy species although there is also elm (*Ulmus procera*), ash (*Fraxinus excelsior*), downy birch (*Betula pubescens*) and Scots pine (*Pinus sylvestris*). The understorey is not well developed and is composed of the occasional holly (*Ilex aquifolium*) and elder (*Sambucus nigra*). The ground flora is dominated by bramble with the occasional rosebay willowherb (*Chamerion angustifolium*) although around the edges of the wood there is widespread colonisation of Montbretia (*Crococsmia x crocosmiiflora*) as result of the dumping of garden waste. The canopy in the upper part of the west facing slope is more open and dominated by sycamore although there is also oak and elm to the south and both Scots and Corsican pine to the north. Where canopy gaps occur, the ground flora is dominated by bramble but also includes bluebells and red campion. There are few signs of regeneration of trees and shrubs, due to the heavy shading and closed canopy. To the west of the internal metalled road the wood is secondary and forms a transition between the mainly native woodland of the upper slope and the more formal planting of Castle Park and there is a greater diversity of tree species. As well as sycamore there is oak, elm, lime (*Tilia x europaea*), horse chestnut (*Aesculus hippocastanum*) and birch. The canopy is closed and as a consequence of the lower light levels bramble is much less prevalent and dogs mercury (*Mercurialis perennis*) and male fern (*Dryopteris felix-mas*) are abundant. Rhododendron was formerly planted as part of the parkland landscape but has largely been cleared. A small area of bamboo exists to the south of the wood. Buzzards (*Buteo buteo*) are known to nest in the wood, and red squirrels (*Sciurus vulgaris*) are present in the areas and in nearby woods such as Midgey Gill, although only infrequently recorded here.

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.