

# **Bishops Knoll**

# Management Plan 2017-2022

# MANAGEMENT PLAN - CONTENTS PAGE

ITEM Page No.

Introduction

Plan review and updating

Woodland Management Approach

Summary

- 1.0 Site details
- 2.0 Site description
  - 2.1 Summary Description
  - 2.2 Extended Description
- 3.0 Public access information
  - 3.1 Getting there
  - 3.2 Access / Walks
- 4.0 Long term policy
- 5.0 Key Features
  - 5.1 Historic Features
  - 5.2 Local Woodland Habitat
  - 5.3 Connecting People with woods & trees
- 6.0 Work Programme

Appendix 1: Compartment descriptions

Glossary

# **MAPS**

Access

**Conservation Features** 

Management

# 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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 <a href="www.woodlandtrust.org.uk">www.woodlandtrust.org.uk</a> 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 <a href="www.woodlandtrust.org.uk">www.woodlandtrust.org.uk</a>. 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.
- 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: Bishops Knoll Location: Stoke Bishop

**Grid reference:** ST553751, OS 1:50,000 Sheet No. 172

Area: 2.98 hectares (7.36 acres)

**Designations:** Community Forest, Conservation Area, Site of Local Nature

Conservation Importance, Tree Preservation Order

# 2.0 SITE DESCRIPTION

# 2.1 Summary Description

Bishops Knoll is a wonderful hidden garden and woodland from the 19th Century. The site is on the outskirts of Sneed Park and the Avon Gorge in Bristol. Although overgrown with ivy, bamboo and laurel, the woodland is slowly being uncovered as we discover the lost ornamental terraced gardens and arboretum. It has a fascinating history, first recorded as a medieval deer park, gifted by Henry VIII after the dissolution of the monasteries to Sir Ralph Sadler (portrayed in the BBC drama Wolf Hall). It later became the grounds of a large late-nineteenth century estate house called The Knoll when it was developed into a series of terraced gardens, a sloping arboretum, orchards, lawns and paddocks with a network of 'pleasure' paths - much of which still remains. The house was used as a First World War hospital for Australian soldiers, set up and run by the then owner Robert Bush at his own expense. The woodland contains a mix of veteran exotic and ancient trees and planted native broadleaves including oak, ash, hazel and hawthorn. Well used paths allow a wide network of walks, with many interesting features to look out for and views across the gorge to Leigh Woods.

# 2.2 Extended Description

Bishops Knoll is a woodland with a hidden terraced garden and arboretum in Bristol, situated in Sneyd Park and Stoke Bishop on the north eastern slopes of the Avon Gorge, Bristol. National Character Area (NCA) 118 Bristol, Avon Valleys and Ridges. It sits between Sneyd Park to the south and east, Avon Wildlife Trust's Bennett's Patch Nature Reserve and a railway line to the west, and Old Sneed Park Nature Reserve owned by Bristol City Council and Sea Mills to the north. The wood forms an attractive component of the local landscape with views across the Avon Gorge to Leigh Woods, and is an important and increasingly popular part of recreational green space in the north west of the city of Bristol.

The site is rich in history. The first known recording refers to the area as part of a medieval deer park, when the site was thought to be wood and wood pasture, and the wood still contains some ancient oak pollards. It later became the grounds of The Knoll, a large estate house in the late nineteenth century where it was developed into a series of terraced gardens, a sloping arboretum, orchards, lawns and paddocks with a network of 'pleasure' paths. The estate house served as a First World War hospital for wounded Australian soldiers, but was demolished in 1970, and the site of the house developed into flats in the mid 1980's. The Trust acquired the grounds, now overgrown in 1986 and planted the rest of the paddocks and lawns with mixed broadleaves. Numerous features from the garden remain; including the terraced gardens, a gazebo, an iron pergola, an orchard, and the arboretum containing significant large specimen trees.

It comprises of two blocks: the south (Cpt 1a) containing the landscaped garden features, with the Victorian terraces, arboretum, some natural secondary woodland and some more recent planted woodland, and one exceptional Sessile oak pollard; and the smaller northern block (Cpt 2a) with natural secondary woodland and some planted trees, with a number of ancient oak pollards also found here. Earlier maps and paintings of the area show this area as parkland with no significant woodland cover.

The wood has a number of well used paths which fit into a wider network of access in the area including the neighbouring nature reserves that form a well know area of recreational green space of historical interest. A number of surveys and reports have been carried out: a full survey of the garden was carried out in 1995; a survey and assessment was carried out by an MSc student in 2014; and a condition survey and report of the structures was undertaken in Feb 2017. All can be found in the Woodland Trust site files.

# 3.0 PUBLIC ACCESS INFORMATION

# 3.1 Getting there

Public transport

The nearest bus stop is at Julian road which is a 1km walk away along pavement.

**Parking** 

On road parking at Bramble Lane for a small number of vehicles.

#### 3.2 Access / Walks

#### Access

Access can be gained from several directions. The main entrance is located on Bramble Lane, a public road with a kerbed pavement, and a wide opening gate. A public footpath bisects the property and there is access to both blocks of Bishops Knoll wood from the footpath and Bennetts Patch Nature Reserve, although it is rocky and uneven in places. From the northern end access can be found across Old Sneed Park Nature Reserve through a kissing gate, and also in the south-west corner via a track under the railway line which leads from the A4 Portway and Bennetts Patch, there are some uneven steps to climb to access the site.

#### **Paths**

The site is located on a fairly steep slope as it is part of the Avon river valley, therefore most paths have some gradient to them.

There are un-surfaced tracks leading through the woodland. These involve slopes which can be slippery when wet as well as some long flights of steps, and care should be taken at all times. Circular routes are available with numerous paths both throughout the wood and gardens, and also to neighbouring sites. Access to the terraced gardens is via steep steps.

# 4.0 LONG TERM POLICY

Historic Features - In 50 years' time the historic features of the site will have been preserved to promote public awareness, enjoyment, and appreciation of our historic heritage. The essential character of the site is the landscaped garden with the Victorian terraces, secret pleasure paths, and arboretum. Although some of the site will be allowed to develop as woodland, the long term vision is to enable access to the features whilst maintaining a 'hidden garden' that is an exciting place to explore. The orchard, pergola, arbour, and arboretum trees and tree rings will be retained and maintained as long as it is safe to do so. The retaining walls in the terraced garden will be restored to a safe condition where they are no longer at risk of falling and maintained as safe. The historic interest will continue to be promoted to a wider audience through relationships with special interest groups, historians and engagement activities with local partners.

Local Woodland Habitat - In 50 years' time the woodland will have developed a mixed age species and structure diversity through management under a continuous cover forestry regime. There will be abundant shrub and understory layers, natural regeneration and robust ground flora populations. The old growth stands of ancient oak pollards, along with the specimen arboretum trees and areas of planted native broadleaved woodland will be managed to maximise their natural lifespan and to ensure that there is a succession of trees and deadwood habitat for the future.

Public Access/Connecting People with Woods and Trees - In 50 years' time the importance of the wood as a local recreational resource will have been maintained and improved, so the site is valued by local users and visitors, both recreational and as an interesting historical landscape. The Welcoming Site Programme (WSP) will lead to a series of lasting upgrades that improve the visitor experience and will likely increase the number and range of visitors to the wood. An attractive and serviceable network of tracks and paths through the site will provide views and encourage the appreciation of the woodland. The access will be managed to meet the required high standards of the Welcoming Site Programme and will provide a clear welcome. An engagement plan will set out a developed programme of engagement activities and event further enhancing people's visit to the site. The site will continue to be promoted to a wider audience through engagement activities and events with the Friends of Bishops Knoll, The Avon Gardens Trust, and by continuing to work with and involve the local community and neighbouring Avon Wildlife Trust and Friends of Old Sneed Park.

# 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 Historic Features

Description

Bishops Knoll contains numerous historical features reflecting its past use as a landscaped garden, arboretum and medieval deer park. The first known recording refers to the area as part of a medieval deer park, and the wood still contains some ancient oak pollards thought to be from that time. The site was gifted by Henry VIII after the dissolution of the monasteries to Sir Ralph Sadler and the land was part of the Sneyd Park estate until 1650. In 1855 Bishops Knoll residence was built. The grounds of this large, attractive manor were landscaped into a series of terraced gardens, a sloping arboretum, orchards, lawns and paddocks with a network of 'pleasure' paths. In 1908 it was bought by Robert Edwin Bush who had made his fortune in Australia as a sheep farmer and had returned to England in 1904 as a multi-millionaire. During the First World War, Robert and his wife Marjorie turned the house into a hospital for injured Australian soldiers, and with over 2,000 Australian servicemen treated there. After Robert's death in 1939, the house passed through various owners, becoming a hostel and then a school for nurses, until it was eventually demolished in 1972 with the grounds becoming overgrown. More information can be found in 'Bristol's Australian Pioneer' by Chris Stephens

The site was acquired by a building firm, Bensons Ltd in 1981, who erected three blocks of flats which neighbour the site. In 1983 the Woodland Trust were donated the land in two tranches by Bensons Ltd and the newly formed Bishop's Knoll Management Company Limited. The Woodland Trust planted the paddock with mixed broadleaves in 1986, and have been gradually uncovering and restoring the gardens and features since. Numerous features from the garden remain; including the terraced gardens, a gazebo, an iron pergola, an orchard, remains of the potting shed, a gardener's cottage, tool sheds, vineries, and the arboretum.

The arboretum was planted as part of the ornamental gardens in the late 1800's and contains many significant large specimen trees including Coast Redwood, Lawson Cypress, Western Red Cedar, Oriental Spruce, Corsican Pine, Weymouth Pine, Monterey Cypress, Jeffrey's Pine, Yew, Sessile Oak, Fern-leaved Beech, Holm Oak and London Plane. Many of the trees are reaching senescence. 12 new conifers were planted in 1987. Arboretum name plates were installed in 2016 on a select number of trees in partnership and with funding from the Avon Gardens Trust. The understorey was dominated by bamboo and laurel - Cherry, Portuguese and Bay, but over successive years this has been removed by volunteers and contractors.

Memorial stone and replica plaque commemorating Bishops Knoll hospital service to Australian servicemen in WWI installed at entrance in 2016 with funding from Australian Department for Veteran Affairs.

A number of surveys and reports have been carried out: a full survey of the garden was carried out in 1995; a survey and assessment was carried out by Wendy Tippett - an MSc student and Landscape Architect in 2014; and a condition survey and report of the structures was undertaken in Feb 2017 by The Building Consultancy. All can be found in the Woodland Trust site files.

# Significance

The site is regionally important for its rich historic features. The gardens were the grounds of an important mansion and WWI hospital and are of historic interest as a designed garden and piece of important local history. The gardens are not covered by any designations or protection but are representative of a period in the history of Sneyd Park and Bristol. The trees which feature as part of the Arboretum are special specimen trees, many rare to the region and the site is very visible in the landscape especially from the Avon Gorge and A4 Portway.

# Opportunities & Constraints

#### Opportunities:

A potential Heritage Lottery 'Our Heritage' Grant to engage visitors in the unique local history of the site. Interpretation boards highlighting the interesting features found within the wood. Opportunities to engage visitors, volunteers, local groups and historians with work to uncover features, and carry out further surveys, restoration works using heritage skills and assessments of the historic features and past history.

Opportunity for Bishops Knoll wood to engage local community through active volunteer working party, led by the volunteer wardens in carrying out conservation and preservation of historic features.

#### Constraints:

Presence of these features does constrain woodland operations, all features are difficult to access, are on steep slopes, and some structural issues that need to be regularly surveyed and repairs are expensive. No vehicle access for contractors.

Continuous vegetation, tree and shrub growth can cause the deterioration of the features.

# **Factors Causing Change**

Establishment of woodland and scrub. Decay of existing features due to natural deterioration and weathering. Long term decline of specimen trees, notably causing health and safety hazards in and around the site.

# Long term Objective (50 years+)

In 50 years' time the historic features of the site will have been preserved to promote public awareness, enjoyment, and appreciation of our historic heritage. The essential character of the site is the landscaped garden with the Victorian terraces, secret pleasure paths, and arboretum. Although some of the site will be allowed to develop as woodland, the long term vision is to enable access to the features whilst maintaining a 'hidden garden' that is an exciting place to explore. The orchard, pergola, arbour, and arboretum trees and tree rings will be retained and maintained as long as it is safe to do so. The retaining walls in the terraced garden will be restored and maintained as safe. The historic interest will continue to be promoted to a wider audience through relationships with special interest groups, historians and engagement activities with local partners.

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

To ensure that existing features are maintained and improved in a safe condition and management allows visitors to appreciate the historic features of the site. This will be achieved by:

Writing Heritage Lottery bid in 2017/18 to fund required restoration works to heritage structures following commissioned survey in Feb 2017. Ideally these would be carried out over 2-3 years. The site is also a Welcoming Site (WSP)in 2018 which can combine restoration works to create heritage/people engagement project and improve access to the historical features whilst engaging volunteers, partner organisations and visitors in the project. From 2018 onwards including -

Vegetation and tree clearance in Winter 2018 and 2019 on and around garden structures in the terraces and boundary walls in Cpt 1, as highlighted in Structural Survey Feb 2017.

Structural repairs to terraces, walls and garden features in 2018, 2019 and 2020, as highlighted in Condition Survey Report by The Building Consultancy Feb 2017 - includes wall rebuilding, consolidation of existing stone work, rebuilding of terraces and garden features etc. in Cpt 1.

Repair existing and install new Victorian iron railings throughout Cpt 1 where needed - throughout southern section of site on network of pleasure paths and around arboretum trees. Replace iron railings on Lookout. Approx. 400m. black 20-30mm iron rails and uprights.

Design and install 2 x historic features interpretation boards highlighting the historical significance and features of the site, and replace entrance board with A1 + 2x A4 panel welcome board. Rebrand existing boards and replace artwork retaining frames.

Plant new trees to continue history of the arboretum and orchard where gaps in canopy allow as current trees deteriorate. Occasional conifer specimens are foreseen in this plan period as part of the heritage project where previous tree rings occur following loss of previous trees and vegetation clearance. 5 x selected species in 2019.

Cut grass on terraces and in the entrance orchard area as necessary to keep it open and welcoming and to stop further growth of trees on terrace areas.

Prune the apple trees to ensure they are healthy and do not become top heavy. Prune once every three years cutting no more than 1/3 tree in any year using volunteers.

Where volunteers are able continue to control the vegetation around the features undertaking light maintenance work inc shrub clearance and ivy removal, maintenance of paths, terraces, steps and garden features etc.

Implement monitoring schedule to inspect historic features - Visual inspections of historic features every two years and carry out any emergency safety works as needed on paths, walls, terraces, tree works, building safety work etc.

#### 5.2 Local Woodland Habitat

# Description

Bishops Knoll forms a strip of woodland along the north east side of the Avon Gorge, part of National Character Area (NCA) 118 Bristol, Avon Valleys and Ridges. The origins of this wood are as part of a medieval deer park with wooded areas, one of which, Folly Wood, was located in the Bishops Knoll area and survived into the 19th century and the wood still contains some ancient oak pollards. Earlier maps and paintings of the area show the higher east areas near the house as parkland with no significant woodland cover.

The current woodland at Bishop's Knoll is a mixture of veteran trees, an arboretum, secondary woodland and planted areas of woodland. It comprises of two blocks: the larger south area (Cpt 1) containing the landscaped garden features, the arboretum, natural secondary woodland and the Woodland Trust 1986 planted woodland, all with shrubs from the arboretum including patches of laurel species and occasional bamboo, and also one notable exceptional Sessile oak pollard, thought to be a circa 300-400 year old bundle planting. The smaller northern block (Cpt 2) has secondary woodland and some planted areas of trees P1986, with a number of the ancient oak pollards also found here.

The areas of planted native woodland include oak, ash, small leaved lime, cherry, hazel, crab apple, wild service and hawthorn. With very occasional scattered more recent hazel plantings from 2012. The secondary woodland is predominantly ash dominated with occasional oaks, goat willows, and understorey of blackthorn, hawthorn, hazel, and occasional controlled laurel from the arboretum.

The ground flora is not currently very diverse, being dominated by ivy, bramble and nettle. But new species including areas of primroses are finding their way into the maturing woodland. There is a large amount of the parasitic ivy broomrape throughout the site which is nationally scarce but locally very common.

The old oak pollards in Cpt 2 are a remnant of an old growth site, and these can be found in the north section along the boundaries. The area would have formerly been wood pasture and evidence suggests the old trees indicate the site was part of a medieval hunting chase, but they are more in evidence at the neighbouring nature reserve Old Sneed Park, and part of a much wider complex which includes enclosed unimproved pasture, woodland and scattered individual ancient trees.

# Significance

The wood is part of a larger SNCI which forms a wildlife corridor along the Clifton Gorge, linking with other woods, semi-natural habitats, parkland and open green space. The woodland is in an affluent area with private housing with large established gardens which provide an additional wildlife habitat.

The SW of England holds a high proportion of the national total of wood pasture sites. This is one of a handful of old wood pasture and old growth sites in the Bristol area and it's importance is recognised in the Bristol City Council Ancient Trees, Wood Pasture and Parkland Biodiversity HAP 2000.

# **Opportunities & Constraints**

# Opportunities

Opportunities for connecting people to woods and trees, particularly through engaging visitors in the range of woodland species through e.g. tree ID walks.

Opportunity for Bishops Knoll wood to engage local community through active volunteer working party, led by the volunteer wardens. Volunteer group can control the laurel, and bamboo species

#### Constraints

Predominantly ash secondary woodland and ash plantings are susceptible to ash die-back. Ground conditions are variable with poor tracks due to steep slopes, hollows, waterlogged areas and springs.

# **Factors Causing Change**

Pests and Tree diseases, particularly ash dieback

Non-native species could impact on the composition of the woodland e.g. laurel and bamboo, and possible regeneration of arboretum species.

Deer browsing affecting recruitment of natural regeneration and squirrel damage preventing some broadleaf trees from reaching maturity.

# Long term Objective (50 years+)

In 50 years' time the woodland will have developed a mixed age species and structure diversity through management under a continuous cover forestry regime. There will be abundant shrub and understory layers, natural regeneration and robust ground flora populations. The old growth stands of ancient oak pollards, along with the specimen arboretum trees and areas of planted native broadleaved woodland will be managed to maximise their natural lifespan and to ensure that there is a succession of trees and deadwood habitat for the future.

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

To ensure continued existence of the wood and to allow it to develop naturally and healthily with good structural diversity and species composition with natural regeneration of broadleaf trees, some mature trees, a rich shrub layer and developing ground flora. There are no interventions planned for the woodland in this plan period, other than small scale ride-side coppicing, and work for tree safety in the plan period.

Ensure that the orchard and arboretum areas are fully stocked to retain their character. Transplant 3 of the trees in the kitchen garden to the orchard area - volunteers.

Invasive non-native shade-bearing under storey shrub species will be observed and controlled if they are detrimentally affecting woodland regeneration or ground flora. Check in 2019. Laurel has been cleared by volunteers and contractors over the last plan period, regrowth should be cut annually by volunteers and if needed treated with herbicide by contractors to prevent reestablishment.

The rides and internal pathways will be managed by rideside coppicing annual where needed to ensure it allows light and air movement along the paths to benefit wildlife, increase and allow the spread of ground flora, in addition to improving public access. It is hoped that this work may be achieved by volunteers.

Monitor regeneration and damage by squirrel and/or deer and monitor spread of ash dieback in tree safety zones.

# 5.3 Connecting People with woods & trees

# Description

Bishops Knoll is situated in the Sneyd Park and Stoke Bishop area of north east Bristol on the north eastern slopes of the Avon Gorge. With the quiet residential area of Sneyd Park to the south and east including the neighbouring Bishops Knoll flats, Avon Wildlife Trust's Bennett's Patch Nature Reserve and the Sea Mills railway line to the west, and Bristol City Council's Old Sneed Park Nature Reserve and eventually the area of Sea Mills to the north.

The wood forms an attractive component of the local landscape with views across the Avon Gorge to Leigh Woods, and is an important and increasingly popular part of recreational green space in the north west of the city of Bristol that still retains a quiet 'lost hidden garden' character.

The informal network of paths within the wood link with surrounding access and popular urban green space. These include a permissive route through to Old Sneed Park Nature Reserve to the north, owned by Bristol City Council and managed by the Friends of Old Sneed Park containing meadows, woodlands and a lake. Bennett's Patch and White's Paddock Nature Reserve to the west is a new reserve with a large meadow with ponds and a large shed, owned and managed by Avon Wildlife Trust. It was created as part of celebrations marking Bristol's year as European Green Capital in 2015, and also contains the two large wicker whales, a popular attraction with families. It is linked by a path under the railway at the southern end through the terraced gardens, and the public footpath which bisects the site.

The site is becoming increasingly popular due to work by all three neighbouring organisations to increase visitors, and raise the profile of these areas of urban green space. Bishops Knoll has a captivating history that many new visitors are now discovering, and the 'lost hidden garden' feel of the site make it a fascinating and exciting place to explore and discover within the city of Bristol.

New interpretation boards and leaflets were installed at the three main entrances in 2016, highlighting the historical interest and features of the site. Entrances were also upgraded, repaired and made more welcoming, and the arboretum plates installed on feature trees. Path work to improve the access in the north section was also carried out with contractors in summer 2017 to allow access in a particularly muddy clay section that was impassable in winter.

#### Significance

Public access is vital to ensure on-going support for the Trust's work. Inspiring everyone to enjoy and value woodland is a fundamental aim of the Woodland Trust. Bishops Knoll provides an important local amenity for people living in Sneyd Park and Stoke Bishop and is well used, and the fascinating historical interest of the site also attracts specialist visitors.

In 2018 it has been selected for Trust's Welcome Sites Programme, the top 250 WT sites managed for people. It helps fulfil the Trust's aims of inspiring everyone to enjoy and value woods and trees.

# **Opportunities & Constraints**

#### Opportunities:

A potential Heritage Lottery 'Our Heritage' Grant to engage visitors. The inclusion of the wood in the Welcome Sites project allows us to put the extra resources into the wood to enable more people to visit and to engage with users of the wood through interpretation, leaflets, signage and events, and to engage with volunteers, specialist and neighbouring organisations through partnership work - Friends of Bishops Knoll, Avon Wildlife Trust, Friends of Old Sneed Park, Avon Gardens Trust.

#### Constraints:

Ground conditions are variable with steep slopes, and flights of steps which restrict the possible range of visitors.

On-street parking only.

# **Factors Causing Change**

Erosion and deterioration of paths, mis-use and vandalism occasionally occurs due to the urban nature of the site.

Loss of the woodland through pests/diseases E.g. Ash die-back

# Long term Objective (50 years+)

In 50 years' time the importance of the wood as a local recreational resource will have been maintained and improved, so the site is valued by local users and visitors, both recreational and as an interesting historical landscape. The Welcoming Site Programme will lead to a series of lasting upgrades that improve the visitor experience and will likely increase the number and range of visitors to the wood. An attractive and serviceable network of tracks and paths through the site will provide views and encourage the appreciation of the woodland. The access will be managed to meet the required high standards of the Welcoming Site Programme and will provide a clear welcome. An engagement plan will set out a developed programme of engagement activities and event further enhancing people's visit to the site. The site will continue to be promoted to a wider audience through engagement activities and events with the Friends of Bishops Knoll, The Avon Gardens Trust, and by continuing to work with and involve the local community and neighbouring Avon Wildlife Trust and Friends of Old Sneed Park.

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

The Welcome Sites Project allows us to put the extra resources into the wood to enable more people to visit and to engage with users of the wood by creating and maintaining and easily accessible, attractive, well-maintained and safe woodland that a wide range of public frequently enjoy. Ensure entrances, facilities and path network are appropriate for level and type of use and in line with access category B. To achieve this -

Paths will be maintained and cut back twice yearly to provide appropriate access, with entrances, signage and access to interesting features maintained and litter clearance as necessary.

Particularly muddy areas on steep slopes will have steps and revetment installed and replaced to improve and maintain informal public access as outlined in KF1 - Historic Features. Small access improvements when current infrastructure needs replacing can be carried out when needed by contractors and volunteers.

Access improvements - aggregate and terram of difficult areas of path in Summer 2018 to improve access in muddy areas, following on from path works in north section in 2017.

Replace all steps throughout site in Cpts 1 and 2 where needed in Summer 2018 - to 1m wide with treated and revetted 6 x 2 inch board. Reassess paths in 2019 and repair/install following changes or possible increases in usage.

New interpretation board at main entrance with double panelled A4 notice board, (plus 2x boards about history around site in KF1 in 2018),

New access gates, and infrastructure around site where applicable as part of WSP upgarde.

The metal railings and stone path edging will be inspected every two years for safety and repaired as necessary to ensure continued public safety. The historic features - walls and terraces will be checked every 3 years and iron pergola every five years.

Legal responsibilities - work to maintain railway side trees along west boundary. Expert survey of west boundary wall with railway every 6 years. Wall inspected biennially by SM and every 3rd insp done externally.

# 6.0 WORK PROGRAMME

Year Type of Work Description Due By

# APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	2.41	Mixed broadlea ves	1980	High forest	No/poor vehicular access within the site, Services & wayleaves, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Connecting People with woods & trees, Local Woodland Habitat	Community Forest, Conservation Area, Site of Local Nature Conservation Importance, Tree Preservation Order

Secondary and planted woodland with arboretum and former landscaped garden. Natural regeneration of secondary ash woodland, with willow and hawthorn, plus planting of oak, ash, field maple, lime, cherry and mixed woody shrubs following acquisition by the Trust in 1986. One exceptionally large Sessile oak tree on east boundary which is thought possibly to have been a bundle planting, with report on this tree in the reference file. There are numerous scattered features of the garden visible particularly in southern most section including terraces, iron railings, paved sections, walls and remnants of structures. Ground flora is unexceptional and is ivy dominated, but patches of fern, periwinkle, primrose and scattered broomrape (Orobranche sp.) give added interest. Arboretum planted as part of the ornamental gardens in the late 1800's with large specimens of many coniferous and broadleaf species including Coast Redwood, Lawson Cypress, Western Red Cedar, Monterey Pine, Monterey Cypress, Yew, Holm Oak and London Plane. The understorey was dominated by laurel sp. and bamboo but over successive years this has been removed by volunteers and the site is now much more open. A full list of tree species is in the reference file. Small orchard area with mature apple trees at the main entrance.

The site is on an east to west slope that is steep in places. Several flights of steps exist but no vehicle access is possible.

Cpts 1a,b and c combined in 2017-2022 Mgmt Plan.

Woodland Importance, Tre Habitat Preservation	2a	0.57	Oak (pedunc ulate)	1900	High forest	vehicular access	People with woods & trees,	Community Forest, Site of Local Nature Conservation
								Importance, Tree Preservation Order

Mature mixed broadleaf woodland, predominantly c P1900 oak, ash, small leaved lime and hawthorn, with the rest 1990s planted broadleaves following acquisition. There are a small number of ancient pollarded oak trees at the northern edge and in the adjacent Old Sneed Park nature reserve which is owned by Bristol City Council. The wood is fringed with dense areas of bramble with a grass path along the eastern edge. There is a slope in this area but less severe than other parts of the site, again no vehicle access is possible.

Bishops Knoll

# **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.