

Ruislip Woods National Nature Reserve



Management Plan 2024 - 2028



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1.1 Introduction

This management plan aims to set out objectives for the next five years from 2024 – 2029. It builds on the success of the last one which introduced some modified management strategies to improve access for the public and habitats for wildlife, in particular the earlier mowing regime and the more focused approach to coppicing along major paths. This more targeted approach ensures that the paths are lighter, drier and wider and so of benefit to plants and animals and people. Some selected coppice stools have been singled to provide more maiden hornbeam trees which can potentially grow to their maximum age. The success of the earlier mowing over the last 5 years has resulted in Poor's Field regaining its 'favourable status'. Successive years of bracken control has significantly helped achieve this result. The discovery of the presence of the very rare barbastelle bat in Bayhurst Wood in 2020 is a positive sign that the overall management is on the right track. These animals require woods with a varied structure with old damaged standing trees in which to live. Also vital to their survival is connectivity. Therefore, in the next five years an emphasis must be placed on connecting Ruislip Woods to nearby woods. The installation of 46 dams in Park Wood are designed to prevent flooding of neighbouring residential properties by holding water in the woods for longer. This is incredibly beneficial for the wildlife and should be repeated in the other 3 woods. We will need to do all we can to mitigate the effects of climate change such as increased droughts.

In 2020 another 29.1 acres of ancient woodland was added to the NNR with the purchase of the formerly private section of Copse Wood, bringing the total size of the NNR to 756 acres. This wood had not been managed for approximately 70 years so had developed an understory dominated by holly and laurel. This has now been grubbed out. This unmanaged wood will also provide an excellent comparison with the adjacent managed Copse Wood. If parts are left unmanaged it will add yet another valuable resource for wildlife in the rich, diverse mosaic of habitats that makes up Ruislip Woods National Nature Reserve.

All four Woods contain a high number of veteran and ancient trees, mostly in the form of stools or stubbs. It is vital to maintain these trees for both their ecological importance for rare wildlife and for their historical importance with most of them marking ancient or old boundaries. An urgent survey of these trees is required to identify them and to prescribe long term management.

The plan was written by the Woodland Officer in close liaison with the Management Group which comprises volunteer naturalists, representatives of local residents associations, Councillors and other users of the National Nature Reserve. This group provides a forum for discussions relating to the Management of the Woods. The plan should be seen as a statement of intent rather than a wish list of ideas and progress of its delivery will be made public at regular intervals.

Site name **Ruislip Woods National Nature Reserve**

Author(s) of plan London Borough of Hillingdon (LBH)

Date written March 2024

Area of site NNR Declaration – 295.0 ha

Key Natural Features

<u>Feature</u>	<u>Date acquired by LBH</u>	<u>Date Designated</u>
Park Wood	April 1965	May 1997
Grub Ground	April 1965	May 1997
Poor's Field	April 1965	May 1997
Copse Wood	April 1965	May 1997
Mad Bess Wood	April 1965	May 1997
Bayhurst Wood	April 1986	May 1997
Ruislip Local Nature Reserve	April 1965	May 1997
Tarleton's Lake	April 1986	May 1997
Private section of Copse Wood	October 2020	May 2021

1.2 Location

Ruislip Woods NNR is situated in North West Middlesex within the London Borough of Hillingdon.

It is crossed by two roads Ducks Hill Road (A4180) and Breakspear Road North.

The local planning authority is London Borough of Hillingdon

It is accessible by public transport.

Bus

Location	Bus
Ruislip Common/Ducks Hill Road	331
Ruislip Lido	H13
St Vincents Nursing Home/Haste Hill	H13

Train

Location	Distance miles
Ruislip Manor (Met/Piccadilly)	0.9
Ruislip (Met/Piccadilly)	1
Northwood Hills (Met)	0.5
Northwood (Met)	1
West Ruislip (Central/BR)	1.1

Main identifying features	Area (ha)	Grid Reference	OS map
Park Wood	100.28	TQ 095 890	176
Grub Ground	11.9	TQ 084 901	176
Poor's Field	16.2	TQ 088 898	176
Local Nature Reserve	4.42	TQ 091 898	176
Northern Finger	0.1	TQ 088 902	176
Copse Wood	75.00	TQ 084 901	176
Mad Bess Wood	55.77	TQ 075 894	176
Bayhurst Wood	39.5	TQ 068 889	176
Tarleton's Lake	2.8	TQ 065 895	176
Total	305.97		

This information is summarised on Maps 1 and 13 in Appendix 2.

1.3 Summary Description

Four extensive woodlands (305.97 ha), Park Wood, Copse Wood, Mad Bess Wood and Bayhurst Wood together form a large complex of structurally diverse and species-rich ancient woodland known as the Ruislip Woods; this is the largest block of ancient semi-natural woodland in Greater London. The Ruislip Woods include one of the most extensive oak/hornbeam coppice woods in southeast England. The site also includes acid and neutral grassland, ponds, streams and marshland.

Ruislip Woods lie largely on London Clay with smaller areas on the sandy Reading beds and later gravels. The highest point is in Copse Wood and Park Wood (90m), the lowest in Park Wood (45m).

The woodland is predominantly hornbeam *Carpinus betulus* coppice with oak standards and is interesting because of the occurrence of both pedunculate oak *Quercus robur* and sessile oak *Q. petraea*. The mixture of hornbeam and beech *Fagus sylvatica* in Bayhurst Wood is also unusual and wild service trees *Sorbus torminalis*, although uncommon, can be found throughout the woodland.

Several tributaries of the River Pinn flow through the woods in natural meandering courses.

Other associations include oak/birch *Betula verrucosa* and alder *Alnus glutinosa* with aspen *Populus tremula*. The wooded streams, scrub, ponds and an area of grass-heath mosaic contribute to the diversity of the site from which around 360 species of vascular plants have been recorded. These include a number of species that are scarce or locally rare. The butterflies and moths are also of interest.

1.4 Land Tenure

Ownership

The entire site is owned freehold by the London Borough of Hillingdon

Management Agreements

None at present

Wayleaves

1. Gas main across Poor's Field
2. Water main across Mad Bess Wood, Park Wood and Poor's Field.

Covenants

There is a covenant across the whole site allowing continued public access and restricting the erection of buildings.

Common

Poor's Field – Registered under Commons Registration Act 1965 – 17th May 1976

Public Rights of Way

Footpaths and Bridleways

Description	Length m
Statutory Footpaths	18756
Statutory Bridleways	2790
Permissive Bridleways	4300
Permissive Footpaths	Not Measured

Map 3 in Appendix 2 shows these features.

Relevant interests outside the site boundary

Ruislip Lido – wholly owned by LBH

Scout Campsite - wholly owned by LBH

Map 1 in Appendix 2 highlights the land owned by London Borough of Hillingdon adjacent to Ruislip Woods NNR. Much of this land is under Agricultural Tenancies, but departments within the Council directly manage some of the other land. Scope exists for negotiations with these departments to ensure the land is managed sympathetically and in keeping with land adjacent to a NNR.

Reference to and location of copies of leases and nature reserve agreements is included in Appendix 2.

2. Evaluation and Objectives

2.1 Site Description

COUNTY: GREATER LONDON

BOROUGH: Hillingdon

SITE NAME: RUISLIP WOODS

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981. In 1997 the site was designated a National Nature Reserve. Part Local Nature Reserve (LNR) declared under Section 21 of the National Parks and Access to the Countryside Act 1949.

Local Planning Authority: London Borough of Hillingdon

National Grid Reference: TQ 061 892

Area: 305.97 ha. (756 acres)

Ordnance Survey Sheet 1:50,000: 176

Date Notified (Under 1949 Act): 1950

Date Notified (Under 1981 Act): 1990

NNR designation: 1997

1:10,000: TQ OS NE ~ TQ 09 SE Date of Last Revision: 1975

Other Information:

Ruislip LNR was declared in 1959.

Reasons for Notification:

The Ruislip Woods form an extensive example of ancient semi-natural woodland, including some of the largest unbroken blocks that remain in Greater London. A diverse range of oak and hornbeam woodland types occurs, with large areas managed on a traditional coppice-with-standards system. The site is also unusual in Greater London for the juxtaposition of extensive woodland with other semi-natural habitats, mostly notably acidic grass-heath mosaic and areas of wetland. These habitats and especially the woodland contain a number of plant and insect species that are rare* or scarce* in a national or local context.

The woodland lies in four major blocks, known as Bayhurst, Mad Bess, Copse and Park Woods, situated across the upper slopes and valleys at the head of several stream systems. Park Wood is the only unbroken area of ancient semi-natural woodland larger than 100 hectares in Greater London.

Nearly all the woodland is on London Clay or clays of the Reading Beds. This has given rise to soils which are acidic and frequently poorly drained, especially in some of the valleys and on the more gently sloping ground. Characteristically of such in south- Britain, the woodland is mostly dominated by pedunculate oak *Quercus robur*, sessile oak *Q. petraea*, hornbeam *Carpinus betulus* and birch *Betula* species. These occur in a number of distinctly recognisable stand-types such as lowland birch/sessile oak woodland, a variant of pedunculate oak-hornbeam woodland and acidic sessile oak-hornbeam woodland. Most of the stand types are uncommon or localised in Great Britain, and these include the oak and hornbeam types, which cover large areas in each of the woods.

The woodland varies widely in structure, with parts supporting mature high forest and more extensive areas supporting hornbeam coppice with oak standards. There are also areas of recent secondary woodland at various stages of development toward high forest. In recent years management of the old coppice has been reinstated on a large scale adding further variety to the woodland features.

The distribution of the different stand types partly reflects the soils and former management. The pedunculate oak-hornbeam woods occur predominantly in Mad Bess Wood, Copse Wood and the southern part of Park Wood. These are replaced by sessile oak-hornbeam woods in the north of Park Wood and Bayhurst Wood. Also in Bayhurst Wood the occurrence of beech *Fagus sylvatica* provides a transition to acidic sessile oak-beech woodland. Examples of birch-oak woodland tend to occur on more freely draining soils, particularly in Copse and Park Woods. Many of the tree and shrub species that are associated with ancient woodland occur within these woods. These include field maple *Acer campestre*, midland hawthorn *Crataegus laevigata*, aspen *Populus tremula*, wild cherry *Prunus avium*, wild service tree *Sorbus torminalis* and guelder rose *Viburnum opulus*. Where the drainage is impeded the range of species also includes alder *Alnus glutinosa*, willow *Salix* species and the less common alder buckthorn *Frangula alnus*.

The acidic soils give rise to a characteristically limited ground flora which is often sparse or absent under the dense shade of old hornbeam coppice. The dominant species include bramble *Rubus fruticosus*, bracken *Pteridium aquilinum*, honeysuckle *Lonicera periclymenum*, creeping soft-grass *Holcus mollis* and, in places, bluebell *Hyacinthoides non-scripta*.

Along rides, in areas of recently-cut coppice and on damper ground in the stream valleys, the ground flora tends to be more diverse. Many of the species are strongly associated with ancient woodland such as wood anemone *Anemone nemorosa*, yellow archangel *Lamiastrum galeobdolon*, yellow pimpernel *Lysimachia nemorum* and betony *Stachys officinalis*. Several others are scarce in Greater London, including broad-leaved helleborine *Epipactis helleborine*, violet helleborine *E. purpurata* and common cow-wheat *Melampyrum pratense*.

Areas of wetland vegetation occur in some of the main valleys, such as at the Ruislip Local Nature Reserve which supports a species-rich association of willow carr, tall fen and swamp communities. Additional diversity is provided by the juxtaposition of the woodland with areas of acidic grassland, neutral grassland and open heath. Poor's Field, situated adjacent to Copse Wood on the sand and clays of the lower Reading Beds, supports a complex mosaic of these habitats. Characteristic species of the more acidic parts include heather *Calluna vulgaris*, tormentil *Potentilla erecta* and mat-grass *Nardus stricta* species which are rare or scarce in Greater London such as common spotted orchid *Dactylorhiza fuchsii*, petty whin *Genista anglica*, lousewort *Pedicularis sylvatica* and dwarf gorse *Ulex minor* also occur. The woodlands and adjacent open habitats support an insect fauna which includes nationally rare* and nationally scarce* species of moths (Lepidoptera), beetle (Coleoptera) and two-winged flies (Diptera). Among the rarer species are two moths, the light orange underwing *Archiearis notha* and the leadcoloured drab *Orthosia populeti* associated with aspen, and the great oak beauty *Boarmia roboraria*, a moth whose larvae feed on oak. The Diptera include a nationally rare soldier fly *Xylomya maculata* (vulnerable**) which is confined to a few ancient woodlands containing over-mature trees with rot holes.

The Ruislip Woods also support a diverse range of breeding birds characteristic of woodland habitat. These include tawny owl *Strix aluco*, all three British species of woodpecker: green *Picus viridus*, greater spotted *Dendrocopos major* and lesser spotted *D. minor*, Nuthatch *Sitta europaea* and the less common woodcock *Scolopax rusticola coccothraustes*. The large extent of the woods and the presence of adjoining open habitats provide particularly suitable conditions for several of the less common breeding species.

*Nationally rare: recorded from 15 or less 10 km squares in Britain; nationally scarce: 15-100 km squares.

**The term 'vulnerable' refers to status category 2 in Shirt, D B, (ed) 1987, British Red Data Books 2.

Insects. The status of individual species is subject to periodic review.

2.2 Operations likely to damage the special interest

Standard Ref. No	Type of Operation
1	Cultivation, including ploughing, rotovating, harrowing, and re-seeding.
2	Grazing.
3	Stock feeding.
4	Mowing or other methods of cutting vegetation.
5	Application of manure, fertilisers and lime.
6	Application of pesticides, including herbicides (weed killers).
7	Dumping, spreading or discharge of any materials.
8	Burning.
9	The release into the site of any wild, feral or domestic animal*, plant or seed.
10	The killing or removal of any wild animal*, including pest control.
11	The destruction, displacement, removal or cutting of any plant or plant remains (including tree, shrub, herb, hedge, dead or decaying wood, moss, lichen, fungus, leaf mould, turf).
12	Tree and/or woodland management+ and changes in tree and/or woodland management+
13a	Drainage (including the use of mole, tile, tunnel or other artificial drains).
13b	Modification of the structure of water courses (e.g. rivers, streams, springs, ditches, drains), including their banks and beds, as by realignment, regrading and dredging.
13c	Management of aquatic, and bank vegetation for drainage purposes.
14	The changing of water levels, tables, and water utilisation (including irrigation, storage and abstraction from existing water bodies and through boreholes).
15	Infilling of ditches, dykes, drains, ponds, pools, marshes or pits.
16a	Freshwater fishery production and/or management**.
20	Extraction of minerals, including peat, sand and gravel, topsoil, sub-soil, chalk and spoil.
21	Construction, removal or destruction of roads, tracks, walls, fences, hard-stands, banks, ditches or other earthworks, or the laying, maintenance or removal of pipelines and cables above or below ground.
22	Storage of materials.
23	Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling.
26	Use of vehicles or craft likely to damage or disturb features of interest.
27	Recreational or other activities likely to damage or disturb features of interest.
28	Game and waterfowl management and hunting practices. + (including afforestation, planting, clear and selective felling, thinning, coppicing, modification of the stand or underwood, changes in species composition, cessation of management), 'animal' includes any mammal, reptile, amphibian, bird, fish or invertebrate. **including sporting fishing and angling.

2.3 Conservation Objectives

Ideal long-term management objectives

The primary aims of this plan are nature conservation, public access and community involvement.

The underlying aim of the plan is to maintain the Ruislip Woods NNR for use by the public for amenity and recreational pursuits which are consistent with (a) their continuance in all parts as woodland, heathland or wetland, and (b) their designation as a site of special scientific interest.

Maintenance of deciduous woodland in all areas with long history of woodland cover in a favorable condition

Attribute	Target*	Current assessment
Area	No loss of ancient woodland area	No obvious external threats. FAVOURABLE
Structure/Natural processes	Varied structure across the site: Canopy layer min 40% -70% max. Shrub layer min 20%-40% max. Leave all dead standing trees where not a safety risk.	Canopy layer and ground flora good. Deadwood –improved since coppiced wood has been left on site. FAVOURABLE
Regeneration	Natural regeneration in gaps	Regeneration appearing in gaps FAVOURABLE
Composition	>95% native trees and shrubs	FAVOURABLE
Quality Indicators	>80% of ground flora referable to relevant woodland NVC type	FAVOURABLE

Maintenance of coppiced woodland in all areas with long history of coppiced woodland cover in a favorable condition

Attribute	Target	Current assessment
Area	Maintain a coppicing regime in areas with long history of coppice management. Coppice as much as time and resources will allow each year	Approximately 95% of areas previously coppiced have been brought back into rotation. Some areas have been re-coppiced since the 1980s. FAVOURABLE
Structure/Natural processes	At least two age classes present in coppice areas	Across site many different age ranges. FAVOURABLE
Regeneration	Coppice re-growth to be > 1m after 2 years	Re – growth has been good in all compartments. Natural regeneration has appeared in gaps FAVOURABLE
Composition	>95% native trees and shrubs	FAVOURABLE
Quality indicators	>80% of ground flora referable to relevant woodland NVC type	FAVOURABLE

Maintenance of the current diversity of habitats in wetland/willow carr type habitats, including Tarletons Lake, Northern Finger and Local Nature Reserve

Attribute	Target	Current assessment
Area	Maintain the current diversity of habitats	FAVOURABLE
Structure/Natural processes	Maintain as wetland areas with, halting succession to woodland and removing invasive species.	Currently Himalayan Balsam is present in Northern Finger and LNR, threat remains from Copse Wood FAVOURABLE
Species	To maintain and enhance conditions for key species, particularly <i>Meles meles</i> and bats	Currently badgers to be found in all 4 Woods FAVOURABLE

Conservation of as wide a diversity of habitats as possible, to include:

- Lowland birch – sessile oak woodland
- Pendunculate oak – hornbeam woodland
- Acidic sessile oak – hornbeam woodland
- Acidic sessile oak – beech woodland

Attribute	Target	Current assessment
Area	No loss of ancient woodland	No obvious external threats FAVOURABLE
Structure/Natural processes	Varied structure across the site: Canopy layer min 40% -70% max. Shrub layer min 20% -40% max. Fallen/standing dead trees Maintain mature/veteran trees 5% permanent open space 10% temporary open space	Canopy layer and ground flora good. Dead wood – good in areas coppiced in last 20 years Overall FAVOURABLE
Composition	> 95% native trees and shrubs	FAVOURABLE
Quality Indicators	>80% of ground flora referable to relevant woodland NVC type	FAVOURABLE

Maintenance of grass-heathland in a favourable condition

Attribute	Target	Current assessment
Area	No loss of grass-heathland	Area is stable through grazing and scrub clearance. Threat exists through vegetation succession and atmospheric pollution from car fumes FAVOURABLE
Structure/Natural processes	Varied structure across area	FAVOURABLE
Regeneration	Regeneration of heathland species	Through scrub clearance and follow up mowing, areas have converted to grassland from woody scrub FAVOURABLE

* Note - These are not Natural England objectives which are appended as appendix 6

The definition of favourable condition:

“Habitats

A natural habitat or community will be taken as favourable when:

- The area/s that it covers within the site are stable or increasing, and
- The specific structure and functions which are necessary for its long term maintenance exist and are likely to exist for the foreseeable future, and
- The condition of its typical species is favourable

The important factors are that the habitat is stable or increasing in area, that it is sustainable and that the condition of typical species is also favourable

Species

A species will be taken to be in favourable condition when:

- It is maintaining itself on a long-term basis as a viable component of its natural habitats
- The natural range of the species, within a site, is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis

In short, the population must be viable in the long-term, the range must not be contracting and sufficient habitat exists to support the species in the long-term. “

2.4 Criteria for Evaluation

1. **Size:** Largest block of woodland in Greater London (300 ha). Park Wood (100 ha) is the 100th largest ancient semi-natural woodland in England. The majority of sites in London are less than 20 ha. (Spencer).
2. **Rarity:** Comprises 10% of the current total area of ancient semi-natural woodland in Greater London. Ancient semi natural woodland on ancient sites in Greater London reduced by 19% between 1950 and 1985 (Spencer).
3. **Fragility:** The grass-heathland areas, carr, woodland rides and ponds are the most fragile habitats. Many of the most interesting communities and species are in these areas.
4. **Typicalness:** Ruislip Woods is one of the best and most extensive examples of sessile oak/hornbeam woodland, a type which is confined to south-east England.
5. **Recorded history:** Ruislip Woods has a well documented history. Details of the management records back to medieval times are known, (see Ruislip Woods Long Term Management Plan, *Bowlt and Hawksworth* 1982) (Appendix 5)
6. **Position in an ecological unit:** Ruislip Woods forms a significant portion of Hillingdon’s northern greenbelt.
7. **Potential for development:** The reintroduction of coppicing into Bayhurst Wood. Whilst works have concentrated on the macro infrastructure of the woodland i.e. coppicing and woodland management, potential for development exists in concentrating on micro habitat management. An example would be pond management.

8. Opportunity for public involvement: The local community has been closely involved with the protection and development of the site for over 70 years. The Ruislip Association originally saved the site from development in 1928. A community group, Ruislip Woods Management Advisory Group (RWMAG) was set up in 1982 to monitor the delivery of the Ruislip Woods Long Term Management Plan. The group meets four times a year with Hillingdon Council. The Ruislip Woods Community Ranger Service was created in 1996 and provides a valuable human resource. This service has in recent years reached its full potential, with four different groups.

Opportunities for primary schools to receive environmental education have been realised. The site maintains full public access. The site has an extensive range of footpaths and bridleways which are used by various user groups.

9. Demonstration of excellence: In 1992 in his ten year review of the Long Term Management Plan, Peterken said:-

The long-term management plan

“The plan is one of the most thoroughly researched and considered documents of its kind. It shows a deep understanding of the development of the woodland and its current condition”

Survey

“The wood is already amongst the best surveyed ancient woods in Britain”

General comment

“As both a professional in nature conservation and as a native of Ruislip, I am happy that recent management of Ruislip Woods is good for the long term amenity and nature conservation values. Indeed these woods are becoming one of the best demonstrations of good semi-natural woodland management in England”

Bats

<i>Barbastella barbastellus</i>	IUCN RED LIST
<i>Pipistrellus pipistrellus</i> – Pipistrelle	BAP (PL) LBAP
<i>Eptesicus serotinus</i> – Serotine	LBAP
<i>Myotis daubentonii</i> – Daubenton	LBAP
<i>Nyctalus noctula</i> – Noctule	LBAP
<i>Plectonus auritus</i> – Long Eared Bat	LBAP

Birds

<i>Picoides minor</i> - Lesser Spotted Woodpecker	RDB
<i>Scolopax rusticola</i> – Woodcock	

Amphibians

<i>Triturus cristatus</i> - Great crested newt	
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Reptiles

Snakes	
<i>Natrix natrix</i> – Grass snake	LBAP
<i>Vipera berus</i> – Adder	LBAP

Authority:

BAP	UK Biodiversity action plan
BAP (PL)	UK Biodiversity action plan Priority List
LBAP	London Biodiversity action plan
SOCC	Species of Conservation Concern
SSSI	Site of Special Scientific Interest
W&C Act	Wildlife and Countryside Act, 1981.
RDB2	British Red Data Books 2
IUCN RED LIST	International Union for Conservation of Nature

Impact assessment

Background

In August 1950 Ruislip Woods was first scheduled as a Site of Special Scientific Interest by the Nature Conservancy Council under section 23 of the National Parks and Access to the Countryside Act 1949. That schedule was revised in 1975. The Ruislip Woods SSSI included Copse Wood, Mad Bess Wood, Bayhurst Wood, Poor's Field, the Ruislip Local Nature Reserve, the Northern Finger, Tarleton's Lake and the Golf Courses.

In 1990 the SSSI was re-notified under Section 28 of the Wildlife and Countryside Act 1981, from which time potentially damaging operations were listed by and prohibited unless specifically authorised by the Nature Conservancy Council (NCC). The Ruislip Woods SSSI now includes Grub Ground but excludes the golf courses.

In 1959 the Ruislip Local Nature Reserve was declared by the NCC under section 21 of the National Parks and Countryside Act 1949. In 1982 LBH adopted the Ruislip Woods Long Term Management Plan (RWLTMP) prepared by the Ruislip-Northwood Woods Advisory Working Party and approved by the NCC. The RWLTMP provided the future of the woodlands, heathland and common for at least one hundred years from 1982 by returning to the traditional way of management, using a twenty year coppice cycle, a ten year thinning-inspectional cycle for non-coppice areas and a return to open aspect grasslands. In 1992 in his ten-year review of its implementation Dr George Peterken, formally a member of the Chief Scientist's team, NCC, described the RWLTMP as one of the most thoroughly researched and considered documents of its kind. As a consequence of the RWLTMP and the management carried out by LBH, with advice from RWMAG, Dr Peterken commented that Ruislip Woods were becoming one of the best examples of woodland management in England. In May 1997 Ruislip Woods SSSI were declared a National Nature Reserve under section 28 of the Wildlife and Countryside Act 1981, London's first.

3.0 Rationale

Site wide

The rationale for the whole site is to continue the management strategy, both site wide and for specific features, contained within the Long Term Management Plan adopted in 1982. This set in place a 100 year strategy for the site that delivered the endorsement of the Peterken report after ten years and designation as a NNR after 15 years. It emphasises the importance of public access and education as well as nature conservation.

As experience was gained during implementation some of the details of the Plan were amended such as the treatment of wavers, grouping of retained oaks and dead wood. Further development in the light of experience is both inevitable and welcome.

Restating the requirements of the plan in a project based format is also welcome as it allows the general requirement to monitor and keep records contained in the original Plan to be made specific within each project. This will make auditing this requirement easier and help to address any issues that may arise.

3.1 Identification of operational objectives, selection of management options and outline prescriptions

Feature	Aim	Management
Geology	Maintain geological Diversity	Non intervention, prevention of damage
Grass – Heathland	Maintain the open aspect of areas and halt succession	Active management, through grazing (Poor’s Field), scrub clearance and mowing
Deciduous woodland	Maintain areas of deciduous woodland where there is a history of woodland cover	Limited intervention through removal of invasive species and ride side management
Coppice Woodland	Maintain coppice woodland in all areas with a long history of coppiced woodland cover	Active management through the continuation of coppicing
Streams and Pond	To continue to maintain existing dams along ditches and streams and to monitor their effectiveness	Active management and non-intervention to maintain and enhance streams and areas of open water
Ruislip Local Nature Reserve	Maintain the current diversity of habitats	The main pond should be de –silted during the length of this plan
Tarleton’s Lake	Maintain current	Staff to manage

	diversity of habitats	
Site wide	Conserve as wide a diversity of habitats as possible	Through monitoring and active management conserve diversity of habitats
Species	Maintain and enhance site conditions for the key species present	Active management and non-intervention to ensure that conditions remain favorable for key site species.
Site wide	Conserve native local and rare species of plants, bryophytes, fungi and animals	Through monitoring and active management encourage the spread of their populations
Earthworks	Preserve historically Important earth works and ancient boundary ditches and banks	Introduce more interpretation to inform the public of the importance not walking on these historic artefacts
Research	Continue to find out more about site species and impact of management activities	Non intervention, monitoring
Education	Encourage the learning of the natural aspects of the NNR and to encourage people to take part in its physical management through joining the volunteer groups	Continue with the successful Classroom in the Woods programme
Management demonstration	To promote the site as an example of good woodland practice	Active management through the continuous improvement of site management, sharing information with key woodland organisations. Publish papers and hold open days if appropriate
Public Access	To encourage ownership. To allow access to the facility for all. To contribute to a healthier Borough	Active management through the maintenance of a network of footpaths/bridleways and promote their use. Undertake ride management as in areas of deciduous woodland. Produce numerous leaflets of walks in Ruislip Woods
Community involvement	To fulfill the requirements of London Borough of Hillingdon	Active management through volunteer ranger programme and continuing liaison with interested groups and a programme of community events
Appreciation	Ensure user groups and the wider public are aware and appreciate the site	Active management through visitor interpretation boards, guided walks, articles and leaflets

Site safety	Ensure level of site safety appropriate to full access public woodland	Active management through site inspections and undertaking safety works
Maintenance of estate fabric	Maintain estate fabric in a manner befitting a National Nature Reserve and the site importance as a key amenity feature in the London Borough of Hillingdon	Active management to maintain the estate fabric and key features

1.3 Impact Assessment (Challenges and Opportunities)

Global warming

The effects of climate change on Ruislip Woods are unpredictable and likely to be complex. The general trend is towards warmer, wetter weather and more frequent droughts in the summer months. Higher temperatures may also produce radical changes in the vegetation communities in the woods such as earlier growing times which could affect the synchrony of caterpillars with leaf-burst. The intricate relationship between predators and prey could be upset by changes in growth rates. This plan underlines the need to link up a network of similar habitats to Ruislip Woods in order to give wildlife the best chance possible to adapt to whatever changes occur.

Threat of encroachment

The boundary of the site is, in places, heavily urbanised and the general pressure on the site continues to be substantial. Encroachment onto the site has occurred in the past and as infill houses increase so the pressure will be greater. As Park Lodge Farm is in the hands of HS2 it remains to be seen what the future is of this huge neighboring area of land.

Proximity of Golf Courses and farmland

A water course runs through golf courses to the NNR with the possibility of chemical/fuel spills and chemical spray drift. Agricultural chemical drift, mechanical trimming of hedges and grazing can strongly affect the woodland boundary. Buffer strips can make a big difference and protect the woods from some of the adverse effects.

Fly-Tipping/Garden rubbish

Along with the threat of encroachment, the proximity of heavily urbanised areas gives rise to garden rubbish being deposited onto the site with the possibility of garden escapees colonising areas at the expense of more fragile native species. Occasional misguided planting can also become a threat to fragile species. The 'fly tipping' of commercial waste and garden refuse has decreased due to regular patrols by staff. Cars being dumped has all but ceased to be a problem due to the car parks being locked at night.

Public Access

Due to the soil structure (London Clay) and large numbers of people using the site, some degree of trampling of vegetation and puddling of the clay sub-soil occurs. This is particularly evident at entrances, throughout the woodland, during winter months. This limits visitor numbers and the enjoyment of the unprepared. Many walkers will avoid using the statutory paths if they are wet and create new routes through the woods. This of course is damaging to plants during the spring months. Properly managed statutory paths will ease this problem.

Dog Walking

The number of people walking dogs in the Woods has seen a steady increase over the last decade. There is also an increase in the amount of people walking more than one dog. This has several impacts on the Woods and users of the woods.

1. The increase in resulting dog faeces can alter the soil structure by adding more nutrients thus encouraging nutrient rich plants such as nettles.
2. Increased dog activity will also disturb wildlife and cause stress to the cows. Many dog walkers want to avoid other dogs so tend to stray off the statutory paths. Over the years this has resulted in a network of paths leaving hardly any areas in the reserve where wildlife is undisturbed by dogs.
3. There is a serious danger of people, particularly children, catching Toxocariasis from dog faeces. This can lead to blindness and permanent brain damage. The Classroom in the Woods frequently brings children into close contact with logs and soil and therefore the risk of contact with dog faeces is high.
4. Confrontations between dogs and people become more likely.

Possible solutions could be more control orders or dog free fenced off zones in conjunction with more publicity regarding the issue and responsible dog walking education days. A licensing system for professional dog walkers was introduced in 2019 and has resulted in a significant decrease in their number. The 'free for all' dog walking culture has come to an end. Those that remain are properly vetted.

Vehicular Access

Due to the soil structure, vehicles using the site can have a negative effect due to rutting and a breakdown of soil structure/path construction. Vehicles should not be used in wet conditions unless absolutely essential.

Conclusions

Vigilance is required on all of these issues through communication with neighbours and users of the Reserve about the importance of the site and their ability to prevent damage.

2. Long-Term Management Objectives to 2028

The two primary aims of this plan are nature conservation and community involvement. The London Borough of Hillingdon, as a Section 28(G) Authority, under the Countryside and Rights of Way Act (2000) has a duty to maintain and enhance the Ruislip Woods SSSI. To achieve these aims the management group has proposed the following objectives with detailed strategies of and how they can realistically be followed through.

Aim 1 Community involvement - To utilise the Nature Reserve as an educational resource and to encourage active involvement of the local community in its management.



2.1 OBJECTIVE 1

Encourage educational activities in the woods

The Classroom in the Woods programme of nature activities offers the chance for pupils to learn in a fun and challenging way. It has been extremely popular with local schools many of whom have returned year after year. It has never been more important to encourage children from an early age to value and enjoy the natural world. Up to now, the Classroom in the Woods programme has introduced children to the woodland ecosystem with fun, hands on learning activities. Now it needs to go a step further and ensure that teachers are following up on their participation in the programme and are also making the vital connections between environmental problems and how individuals are part of them and what they need to do to help solve them. There is abundant evidence that being outside with nature benefits humans and that learning in a fun, hands on way is a better way of learning for many children. The mission now is to help children understand that they are going to have to craft new lifestyles for living more harmoniously with the ecological systems that support them. Hopefully they will then educate their parents to do the same.



2.2. OBJECTIVE 2

Provide continued volunteering opportunities in the Woods

Volunteers have been essential to the continued management of the woods since 1993 when volunteering in the woods was first actively encouraged by Hillingdon Council. Since then varying numbers of willing volunteers have been carrying out practical tasks such as charcoal production, coppicing, scrub clearance, boardwalk installation and much more. Volunteer numbers have remained steady for the last 20 years with 4 regular groups operating. The management group recognizes the efforts made by the volunteers and places a high priority on maintaining and building on the number of participants.



2.3 OBJECTIVE 3

Maintain and improve the condition of the bridle paths and footpaths for public access.

Much of the bridle path system in the Woods has been upgraded over the last 20 years by laying a hard surface on areas that were constantly boggy and inaccessible for much of the year. Widening work has also been carried out along the bridle paths to help dry them out. The hoggin used for surfacing could possibly be injurious to the Woodland's flora due to its alkalinity. No more hard surfacing should be carried out apart from on very small sections where there is absolutely no other alternative. The Sandy Gallup in Copse Wood was re-surfaced with fresh sand in 2014. Sections of bridle path should be temporarily closed in extreme wet conditions where continued riding would cause irreparable damage to the paths.

As cycling in the Woods is restricted to the bridle paths, any work carried out for horse riding will benefit this activity. Cycling in the woods has not been a major problem, but there is growing evidence of conflict with pedestrians with a few instances of walkers being knocked down by cyclists having been reported. With the popularity of cycling growing, it could potentially become a health and safety problem. Cycling is an environmentally friendly form of transport so more people should be encouraged to cycle to Ruislip Woods. However, it would cause too much damage if too many people cycled in the Reserve.

Due to the clay based soil, paths in the NNR are often wet for 6 months of the year. In the past it was common practice for wet areas to be drained in the interests of public access. This practice is no longer considered appropriate since it alters the structure of the woods and militates against its conservation. Wet areas are also known to be a vital source of water for wildlife during dry spells.



The solution to the problem of wet paths has been to install boardwalks and bridges in the worst affected areas. From 2003 – 2014 A total of 27 boardwalks and bridges were installed in the wettest areas of the Woods on the statutory footpaths. All have been made using timber from Ruislip Woods oak. In addition, channels have been created to divert the water from the paths into the Wood.

In 2014 fifty new oak footpath signs were installed throughout the woods to inform the public where the statutory paths are. People will, however frequently cut corners and there are various ways of 'encouraging' walkers to keep to statutory paths. One way is to ensure the paths are in a constant good condition for walking. Another is to create barriers of thorny material such as Hawthorn *Crataegus monogyna* to divert people from the sensitive areas.

2.4 OBJECTIVE 4 UPDATE WOODLAND INFORMATION

The main entrance signs are well overdue for updating and renewing. As these signs are usually the first thing the public see when entering the woods it is essential they are welcoming and provide interesting up to date information on what wildlife to see and where to see it. They should also include a detailed map of the statutory footpaths and bridlepaths. The Woods have a number of historical attributes that people are mostly unaware of. These include ancient earthbanks, bomb craters, ancient stubbings and coppice stools and wartime artifacts. To promote understanding and appreciation of the NNR's archaeological and historic heritage a new leaflet will be designed giving a self-guided walk through Ruislip Wood's past.

Aim 2: Nature Conservation - To maintain as wide a diversity of habitats as possible to include:

- Deciduous woodland
- Coppiced woodland
- Grass/heathland
- Ponds, streams and wetland
- Rides
- Scrub

2.5 OBJECTIVE 5

Maintenance of deciduous woodland in all areas with a long history of woodland cover in a favourable condition.

Some areas of Ruislip Woods do not have a history of being coppiced so have been left for the natural process of succession to continue. Some of the coppice in the woods has not been coppiced for over 50 years. Likewise, this will be left to succeed to natural woodland. In the past all the oaks were harvested in Ruislip Woods for house or ship building. This is why there are virtually no oaks over 200 years old. So there is a strong case for allowing natural woodland to develop. Leaving trees to mature will encourage fauna associated with such trees for example, some rare species of bat, click beetles and hoverflies. Older trees support more wildlife than younger trees of the same species as they have a greater surface area and gnarled and fissured bark, cracks, sap runs and areas of dead wood and peeling bark. In general, the damper and more structurally complex the habitat, the more wildlife it can support. Conservation aimed at re-establishing natural processes will add to the 'wildness' of the woods. The experience of being in a truly wild, natural place is a rare opportunity for people living so close London, but Ruislip Woods offers something very close.



Area of non-coppice woodland in Park Wood

2.6 OBJECTIVE 6

Maintenance of coppiced woodland where it is beneficial to wildlife or where the coppiced material can be used.

From a conservation viewpoint, active coppice and unmanaged woodland complement one another. The coppiced areas in the wood provide a varied structure that adds to the rich diversity of wildlife in the Nature Reserve. The different heights and density of foliage provides habitats for a wide variety of plants and animals. Newly coppiced areas provide ideal light conditions for plants to flourish. Many birds, especially warblers, prefer the denser coppice of three to ten years growth. This also provides excellent protection for small mammals, where they would otherwise be chased by dogs. It is important therefore to continue with the coppice management, but with a fresh vision of which areas should be coppiced.

An increase in wet weather combined with a continued reduction in public spending means that less coppicing can be achieved. Experience shows that it is not always possible to reach some areas during the winter months as it is too wet and using vehicles to get to some areas causes damage to paths. Therefore, the management group has decided to start a more focused approach to coppicing by prioritising those areas that are easily accessed, for example on statutory footpaths or near entrances. Ideal conditions for wildlife to spread throughout the wood can be created by linking actively coppiced coupes with systems of carefully managed rides and glades. Those species that are dependent on coppice such as woodland fritillary butterflies will be catered for on wider better managed paths.

In addition, an emphasis should be placed on coppicing areas for the purpose of using the produce for charcoal, fencing and hedge laying and leaving other areas to grow to natural forest. The first 10 years after coppice are the most important for plants and birds. This is the ideal coppice rotation for hazel *Corylus avellana*. This means more coppicing can be achieved as the growth is smaller and can be done by hand by volunteers. There is plenty of hazel along rides in Copse Wood and Park Wood. Charcoal and logs can be produced from hornbeam *Carpinus betula* coppiced in Mad Bess and Bayhurst Wood. Sweet chestnut *Castanea sativa* coppice in Mad Bess will provide produce for split paling fencing. This may provide an income for the council if properly investigated.

Previously coppiced areas that cannot be reached during wet weather can be converted to natural woodland. This can be achieved either by non-intervention or singling. This involves cutting all but one stem which promotes a single-stemmed structure. Leaving more areas to develop naturally will benefit wildlife in the long run.

Experience over the last 10 years has shown that coppicing old hornbeams aged over 60 years often results in the death of the tree. So all trees of this age are now singled.

Due to concerns over oak sudden death and lack of regeneration of oaks in coppiced compartments, no oaks have been felled since 2005. Instead, one or two oaks have been felled every year on Poor's Field where the management prescription is to maintain as open acid grassland/heathland. Oak should be obtained from these areas when possible as required. In addition, other alternatives could be ride edges where they are casting too much shade. Several oaks will be required to be felled in the next few years as boardwalks and bridges have still to be installed on some of the wettest areas.

Oak mildew is thought to be the primary reason for the lack of oak regeneration in coppiced areas in the Woods. It can cover the whole leaf, seriously impairing photosynthesis. In fields where there is less competition oak saplings seem to grow unhindered. In the newly coppiced areas however the combination of oak mildew and vigorous competition from other plants appears to be too much for oak saplings to survive. Consequently there is not a varied age structure of oaks in the Nature Reserve. This is not the case in some unmanaged areas of the wood where there appears to be oaks of all ages.

2.7 OBJECTIVE 7

Maintenance of grass-heathland in a favourable condition.

Priority management has been placed on continued grazing and removing invading trees and scrub. Loss of grazing can result in the rapid loss in the species- richness of a grassland. Grazing is the optimal management for the acid grassland for the following reasons:

- The grassland owes its existence and diversity to grazing
- Mowing alone reduces flower diversity and encourages coarse grasses
- Ant-hills cannot be mown
- Grazing by cattle can provide a varied sward height for different plants and invertebrates
- Cattle grazing causes less damage to wildlife than mowing

Therefore, the continuance of cattle grazing is regarded as essential for the future conservation of Poor's Field. It is also beneficial for the field to be left ungrazed in some years to allow plants to grow to maturity and to set seed. In the absence of grazing on the other grassland sites, mowing is the only alternative. Mowing should be carried out in the late autumn and winter months to avoid basking reptiles.

Experience now highlights the fact that trying to return Grub Ground to open grassland is not an achievable objective. It is time to hold up a white flag to succession in the main area and concentrate on mowing the existing statutory paths and keeping them as wide as possible.

2.8 OBJECTIVE 8

Maintenance and enhancement of streams and open water habitats in a favourable condition.

Ruislip Woods has a rich and varied network of streams and open water habitats. Relatively few of the ponds are natural, mainly hollows or holes left by fallen trees. Some are old gravel workings, others are bomb craters from the 2nd World War and some were created for drink holes for livestock. Being part of a network should mean that the Woods pond wildlife is less vulnerable to disturbance and change.

Work should now concentrate on improving the condition of some of these ponds for wildlife as many are silted and temporary ponds, i.e. only hold water for part of the year. Not

including the LNR, only four ponds contain water all year round, two on Poor's Field one on Grub Ground and one in Bayhurst Wood.

In restoring a pond we need to have a clear idea of what improvements we are expecting and the benefits any management will achieve. It could be that in trying to restore a semi-permanent pond to permanent one, we actually lose flora and fauna. It is important, therefore, to establish a systematic survey and monitoring scheme for the ponds and a method of according priorities to each site.

Ideally all ponds should be surveyed for water level, signs of pollution, invasive species, notable plants, amphibians and invertebrates. The results will determine what, if any management is required after that.

Ditches and streams in the woods are a vital water source for wildlife. In the past they were cleared of silt regularly. This resulted in water leaving the woods rapidly and dry ditches for most of the year. During the last 5 years 49 dams have been installed in some of the streams and ditches in Park wood and Mad Bess Wood. This is to prevent flooding of nearby residential properties and to benefit wildlife by keeping water in the woods during dry spells. In addition, two new ponds have been dug in Park Wood to act as temporary water catchment areas.

The dead wood resource in ponds is as vital to invertebrates and other animals for refuge, hunting, hibernating, etc, as it is to those of terrestrial habitats, so should not be removed from ponds, streams or ditches, unless it is unavoidable.

2.9 OBJECTIVE 9

Ride management for wildlife

All of the rides in the Woods have become narrow and shaded. While some shaded rides are attractive and important for some species, especially fungi, ride management should, in general, be aimed at opening up more to allow in more light. Widths up to 1.5 times the height of the bordering trees are needed to ensure that some of the ride receives sunlight throughout the day. Butterflies and bees will be the major beneficiaries of this. However, it is not desirable to prescribe the same management for every ride. Each ride needs to be assessed on its own merits. Scalping creates a more natural look and provides microhabitats for many species. Scallops or bays also provide shelter for butterflies from the wind. The most important thing is to link coppice areas by rides to facilitate passage of mobile animals between them. It is also essential not to manage whole sections of paths but to leave some growth of different heights, i.e. rotational cutting.

2.10 OBJECTIVE 10

Scrub

Scrub provides an essential part of the woodland habitat mosaic. It is an important transition between grassland areas and the woodland and provides nesting sites for some birds and

food source for many animals, especially invertebrates. If left unmanaged, scrub will eventually succeed to woodland, so it needs to be managed. It will continue to be managed on a rotational basis so there is scrub at different levels of succession. Thick scrub is desirable for nesting birds, whereas less dense, low scrub will benefit reptiles.

2.11 OBJECTIVE 11

Understand the importance of dead wood, both lying and standing.

Ecologically speaking we have now considerably refined our understanding of just what is so important about dead and decaying timber, both lying and standing. Lying dead wood provides habitat and food for saproxylic fungi and invertebrates.

The coppice stool contains relatively little volume of over-mature timber and so constitutes a relatively poor dead wood habitat. To actively increase the dead wood resource, coppiced wood has been left in stacks where it is cut. Dead or dying standing trees are generally left to collapse naturally unless they are an obvious threat to public safety. The practice of felling unsafe trees will be undertaken where they are close to statutory paths and rides, in the vicinity of car parks and against neighbouring properties. The lack of old trees means there is a lack of rot holes and large dead wood, both standing and lying and therefore few if any of the associated animals and fungi. This re-enforces the need to leave more areas unmanaged.

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2.12. OBJECTIVE 12

Control of invasive species

A realization that total elimination of all the alien species in the woods cannot be achieved has been reached by the management group. It is also probable that some of the species are not as invasive as first thought. Himalayan Balsam for example is restricted to the wet areas of the woods and does not appear to penetrate into the shaded areas. Japanese Knotweed is present in small clumps in only 3 areas of the Nature Reserve and appears to be retreating even in these areas. Where alien species can be controlled relatively easily, they will. Of more concern are the invasive native species such as bracken and bramble. The least we can do is agree not to import any alien species into the woods or Lido.

Spanish Bluebells (*Hyacinthoides hispanica*)

These do occur in some areas of the woods, mainly where the NNR borders residential properties. The 2 main areas are in Park Wood and Copse Wood. Since 2007 the heads of the invading bluebells have been cut off to prevent further spread. This is not a very time consuming task, so will continue.

Garden Archangel (*Galeobdolan luteum spp argentatum*)

The presence of this plant is usually the result of garden rubbish being dumped in the woods from residential gardens. It can be very invasive forming dense areas of ground cover vegetation and outcompetes native species. Glyphosate is a suitable weedkiller to use as it is taken in to the perennial stems. It should be used when the plants are growing well and are moving their sap at a higher rate.

Laurel (*Prunus lauracerasus rotundifolia*)

This species of shrub is present in the Woods, but is sporadic and fairly easy to deal with. The management method is to cut to a stump and then to winch out the roots.

Parrot's Feather (*Myriophyllum aquaticum*)

This weed was found in Post Pond in 2007 and was removed by hand pulling. This should be repeated whenever it appears in order to eliminate it.

Holly

In some areas of the Woods, in particular Copse Wood, holly is starting to become a problem. This is due to the woods becoming much more shaded due to lack of grazing. Much of the holly grows next to residential properties and is therefore likely to be non-native. Holly shades out other flora. The most effective way of controlling it is to winch out the roots. A large area of dense holly was cleared in this way in 2011. Some native holly is beneficial to nesting birds and other animals so will be left.

Yew

Whilst yew is a native of Britain, it is not thought to be native in Ruislip Woods. Yew should be managed the same way as holly.

Bracken

Areas of bracken make a positive contribution to the natural qualities of the Woods in particular, cover for deer and other animals. However, if allowed to grow on Poor's Field it can degrade the grassland and form a species poor monoculture. Therefore the spread of bracken on Poor's Field should be controlled. This should be carried out in June and July by picking and slashing as this is the least damaging method where there are numerous ant hills. Cuttings should always be removed from the site and piled on the edge of the field for reptile basking sites.

2.13 OBJECTIVE 13

Buffer Lands

Ruislip Woods are buffeted by farmland, most of which is leased under agricultural tenancy, residential properties, a golf course, crematorium and the Lido. These buffer zones around the woods are essential to re-enforce it. Studies should now consider how some of these buffer areas can be improved for wildlife. Buffers can be a useful wind break and collection point for dust and agricultural sprays where they are used on farms and golf courses.

Residential Part of Park Wood and Copse Wood back on to residential properties. It is these areas that all of the alien invasive species have their origin. Vigilance is the only way of trying to control residents from dumping garden waste in the Woods. Greater liaison with dog walkers, residents, walkers and other users of the woods can result in better reporting of such incidences.

Farmland: This forms most of the buffer zone around Ruislip Woods. Ideally, where the edge of the woods meets farmland, there should be a gradual transition rather than a sharp, abrupt edge. The reason for this is that invertebrates from the grassland may use the wood for hibernation and some woodland invertebrates may feed from the grassland flowers in the summer. The transitional zone may provide a niche for those invertebrates that cannot find a suitable home in either woodland or grassland. The majority of species rich scrub occurs at the woodland-grassland transition. (Habitat Management For Invertebrates, Keith Kirby p70, 2001).

Agriculture makes an important contribution to the economy of the region and to the character of the wider landscape. The emphasis should be placed on achieving greater integration of agriculture and forestry, with woodland creation and management contributing practically and financially to farm businesses, whilst delivering other social and environmental benefits

Studies should now consider how to implement improvement to buffer strips and to include stakeholders in a positive way. This can be by incentives for leaving set -aside or inclusion in projects that benefit the community. An example could be to use a 15 metre wide buffer strip

to grow hazel, willow or alder which can be harvested for sale for hedge laying, pea sticks or kindling. Community groups or schools could participate in the project. Hillingdon already has an excellent example of community gardening in the established Rural Activities Centre in Harlington. This could be used as an outlet for selling woodland produce.

Hast Hill Golf Course: A golf course is basically a manicured garden, but on a larger scale. It requires large quantities of water in the summer months, pesticides, fertilizers, fungicides and frequent mowing on a large scale producing CO₂ into the nearby areas including Ruislip Woods. A study should be initiated to research how the golf course is affecting the NNR and suggest mitigating solutions.

Ruislip Lido: The loss of an area of secondary woodland to a car park in 2013 was unfortunate and demonstrates that the pressures of urban development can come from within as well as from outside the Reserve and that they are not going to decrease in the foreseeable future. This is why it is essential to provide alternative habitat by connecting the woods to other areas.

2.14. OBJECTIVE 14

Expanding and linking habitats

We should seek opportunities to expand woodland in the borough. Habitat corridors can lessen the effects of fragmentation. Islands of habitats can lead to in-breeding and population fluctuations. The wider the wildlife corridor, the better, but even wide ones will only benefit the more mobile species. Those species favouring old, unmanaged woods will not benefit until a few hundred years has passed.

There is scope for achieving woodland expansion in Hillingdon by linking some woods that are presently islands surrounded by farmland. Bayhurst Wood is already connected tentatively to a Wood behind St Mary's Church in Harefield by a continuous hedge. It would not take much to allow the hedge to grow out into woodland.

This plan will seek to initiate a study of surrounding woodland, grassland and other nature reserves and propose possible ways of linking them up. A study group will be set up comprising of all interested parties with a view of working together to link up woods and looking at possibilities of woodland creation.

2.15. OBJECTIVE 15

RE-INTRODUCTIONS OF NATIVE SPECIES

The subject of re-introductions should also be seriously considered during the next 5 years and could include pine marten and wild boar. Pine martens are known to cause a decrease in the number of grey squirrels wherever they are present. Wild boar can create open areas by grubbing up native invasives such as bramble and bracken. Introductions can include plants and invertebrates, but any debate regarding re-introductions should concentrate initially on the larger animals as they are in a minority at the moment. This plan will initiate the debate.

Section 4

COPSE WOOD

4.1 GENERAL INFORMATION

History

In the middle ages the wood was evidently much more extensive and was called Ruislip Common Wood or the Great Wood of Ruislip. In 1565 it comprised 860 acres of wood and underwood stretching from Northwood to the hamlet of Park Hearne (now submerged under the Lido), and from Ducks Hill east to Pinner over Haste Hill and Northwood Hills. In 1608 all uncoppiced parts were sold and most of the trees removed so that all but 292 acres remained as open common. A survey in 1721 gave the size as 341 acres, one in 1750 as 335 acres and one in 1853 as 331 acres.

Between about 1806 and 1864 part of the south-western area of the Woods (N, O, P, Q and R) was cleared. This was replanted sometime between then and 1905. The ridge and furrow pattern running north-south (especially visible alongside paths, particularly along the P – Q boundary) presumably dates from this period. Some planting with larch appears to have taken place subsequently but many larch poles were cut in 1897 – 98, almost all left being felled during World War 1 (Woodman, pers.comm.). The single mature larch near Ducks Hill Road in compartment O may be a remnant of this plantation. The area has now reverted to secondary woodland.

The north-west portion of the wood (compartments A-D) did not form part of the area sold to Middlesex County Council in 1936 '...as a permanent open space (Kings College Estates Committee Minute Book, 11.10.1935) and passed from King's College into private ownership in June 1952. In 2020 this area was purchased by Hillingdon Council and will be incorporated into the NNR after some management is undertaken. The area is 29.1 acres in size, so will increase the total size of the NNR from 726 acres to 755.1 acres.

Tenure

Entirely under the control of the London Borough of Hillingdon.

Entirely within the Ruislip Woods National Nature Reserve.

Map Coverage

See maps accompanying this report.

Size

75.004 hectares (185.34 acres).

Physical Features

The highest woodland of the area rising to 90m with a plateau at about 80m which falls, moderately steeply in parts to the east down to about 60m adjoining Poor's Field, and to the north and north east more gradually, although rising again in the compartments A-D.

Geology, Geomorphology and Soils

The highest, south-western parts are on pebbly plateau gravel which gives a porous well drained soil which tends to podsolize and is able to support healthy vegetation. These gravels are underlain by London Clay on which the hornbeam on the eastern and north-western slopes of the wood thrives. The lower layers of the London Clay are more pebbly and rather less acid enabling some plants characteristic of calcareous rather than heavy clay soils to grow. The north-east part of the woodland is on Reading Clays and sands which can be seen in the stream which traverses this area. Geologically this part of the wood (E-H) resembles Poor's Field rather than the other woods of the area.

Hydrology and Drainage

The northern parts of the wood are drained by a stream with two tributaries running west to east and which discharges into the Post Pond at the northern end of Poor's Field. Drainage on the plateau presents no problem because of the relatively porous nature of the soil but the areas on London Clay are badly drained. Run-off from the eastern slope of Copse Wood is a major source of water for the marsh plants of Poor's Field.

Vegetation

Three distinct types of vegetation can be recognised:

- Bracken – birch – heathland with hawthorn on the formerly cultivated units O-R
- Classic oak-hornbeam coppice on the heavier clay soils of the eastern slopes and northern and north-western parts
- Bracken – birch – oak on the lighter soils in the north-eastern compartments.

More detailed information is given in the compartmental notes.

Access

The wood can be entered from numerous points along the eastern boundary with Poor's Field. There are several entrance points from Ducks Hill Road where there is also a bridlepath entrance. Along the northern margin, the wood can be entered from the western end of the Broadwalk and the southern end of Northwood Way.

Bridleways and Footpaths

The main footpaths are shown on Map 3. This indicates those which are statutory rights of way.

The bridleway enters the wood at Ducks Hill Road in between Sections C and Y.

Parking

Visitors can use the Ruislip Lido car park and the smaller car park in Ducks Hill Road.

Fire Precautions

There is access to Copse Wood for fire engines from Ducks Hill Road, Poor's Field and Links Way.

4.2 SPECIAL FEATURES OF INTEREST

Aesthetic and Artistic

1. The open heathy bracken-birch areas are better developed here than elsewhere in the Ruislip Woods and provide a pleasant aspect of particular aesthetic value. The importance of those on the plateau is increased as they are visible from Duck's Hill Road and so add considerably to the scenic interest of that road.
2. The meandering streams in the north-eastern part of the wood in particular are especially attractive.
3. Appearance of the margin of Copse wood as viewed from Poor's Field should give the impression of grading into woodland rather than an abrupt change to enhance the naturalness of the area.
4. The laid hedges along Ducks Hill Road and part of Poor's Field add to the natural aspect of the NNR.

Archaeological

The nineteenth century boundary banks around compartments N-Q and their remnants of former ploughing should be retained as long as possible as evidence of former usage. These are most easily seen along pathways and no attempt to level them should be made.

Natural History

1. Copse Wood is especially important amongst the Ruislip Woods for its flowering plants due to the greater variation in soil types and the well – developed stream in the northern part of the wood. Plants include heather (*Calluna vulgaris*), Wood Forget-me-not (*Myostis sylvatica*) and Lesser Spearwort (*R.flamula*). Birds include woodcock, chiffchaff, willow warbler, blackcap and more recently buzzard which is regularly sighted flying over the Woods.
2. Grass snakes and slow worms are common on the birch-bracken areas, but will die out if the area is not maintained as an open heath habitat. The heathy areas are also important for butterflies and moths, for example the Great Oak Beauty (*Boarnia robraria*).
3. Great crested newts were found in Copse Wood below the Battle of Britain House site and have since been seen in a pond on Poor's Field next to Copse Wood. However, they are unlikely to breed in this pond as it is a temporary pond, usually drying out by end of May.
4. The badger sett in Copse Wood is the second largest in the NNR and should continue to be left undisturbed.

4.3 COMPARTMENTS

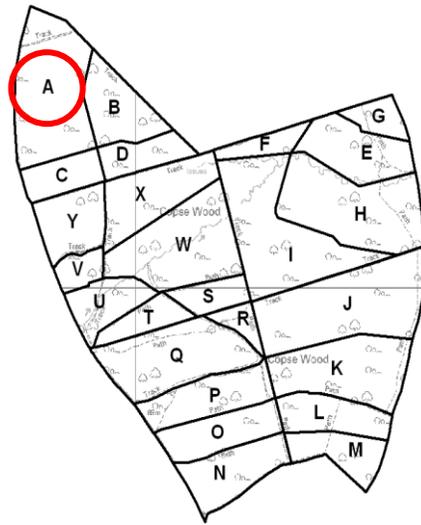
The following categories of data are included for each compartment:

- Up to date description. For original description see the RWLTMP
- Regeneration
- Long term objective
- Work received
- Work required
- Subsidiary objectives

EVALUATION OF MANAGEMENT REQUIREMENTS 2024

COPSE WOOD

Compartment A



Description: Part of the newly acquired (2020), former private wood. Mostly neglected hornbeam coppice with oak standards. Untouched for over 70 years. Holly and laurel are prolific, making this section almost impenetrable. There are a few cherry trees in the northwest part next to Ducks Hill Road and a large coppiced ash next to path R63. Holly, laurel and some yew are fairly well established in the rest of A. Maple and beech are also present in low numbers.

Regeneration: Mainly holly and laurel and a few maple saplings.

Objective: Mixed deciduous woodland.

Work received: All of the cherry laurel and holly was grubbed out in 2021.

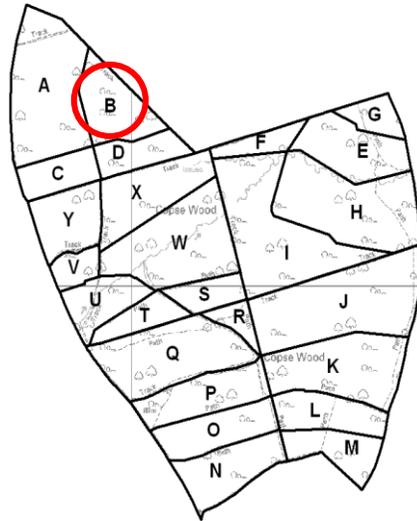
Work required: Coppice along R63 and area adjacent to the road.

Subsidiary: Maintain R63 as open path by coppicing and scalloping along its length.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment B



Description: Part of the newly acquired (2020), former private wood. Mostly neglected hornbeam coppice with oak standards. Untouched for over 70 years. Holly and laurel are invasive here but not as prolific as A. Hazel is more common in this section as is birch.

Regeneration: Where some of the hornbeam stems have fallen there are patches of hornbeam regeneration.

Objective: Mixed deciduous woodland. This area could provide a good example of what happens to neglected coppiced woodland.

Work received: Invasive laurel and holly have been grubbed out.

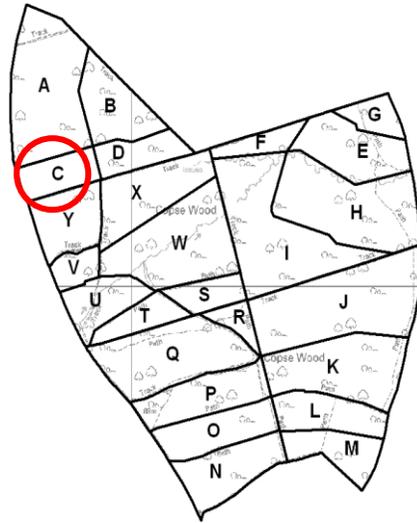
Work required: No more work required.

Subsidiary: There is much dumping of rubbish from adjacent residential properties. This should be stopped and monitored.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment C



Description: Part of the newly acquired (2020), former private wood. Mostly neglected hornbeam coppice with oak standards. Untouched for over 70 years. Also a few maple and sporadic laurel and holly.

Regeneration: Hardly any regeneration or ground cover.

Objective: Coppiced woodland.

Work received: Invasive laurel and holly have been grubbed out.

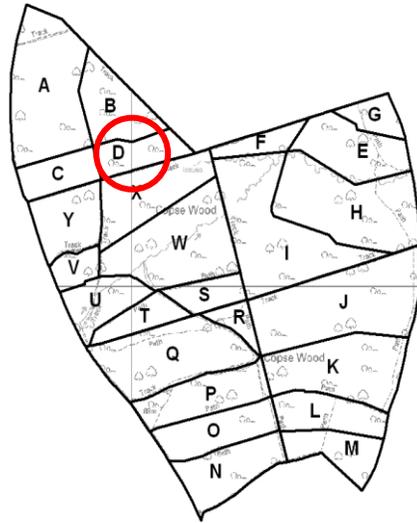
Work required: No more work required.

Subsidiary: Coppicing along the Sandy Gallup will open it up and so provide improved access.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment D



Description: Part of the newly acquired (2020), former private wood. Mostly neglected hornbeam coppice with oak standards. Untouched for over 70 years. There are a good number of coppiced hazel trees here. Also a small section of aspen and one large coppiced wild service tree. This area is also dotted with midland hawthorn.

Regeneration: Hardly any regeneration or ground cover.

Objective: Coppiced and mixed woodland.

Work received: Some invasive laurel and holly was grubbed out, but most of this compartment has been left untouched as it is not as affected by invasives and is a fairly good example of unmanaged ancient woodland, with one notable mature wild service coppiced tree.

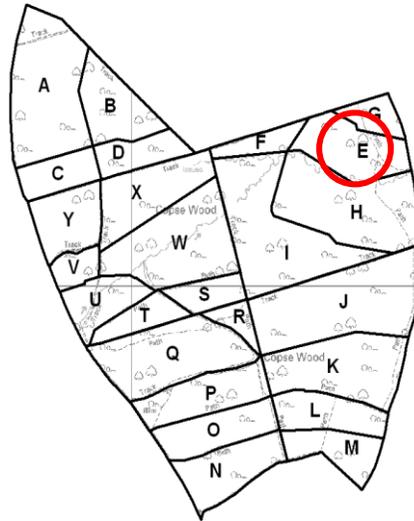
Work required: No more work to be done here.

Subsidiary: Due to its more varied number of species including 2 species of AWI (wild service and wood thorn), this area is best left unmanaged.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment E



Description: Uneven-aged well-spaced oak and birch with a dense bracken cover with a stream forming the southern boundary. Bluebells are well-developed here. Soil either inappropriate for hornbeam or eradicated from this area by man, perhaps in the 1608 clearance (see LTMP p.39). Himalayan Balsam is a problem here.

Regeneration: A few young oaks but these are sparse.

Objective: Maintenance as open birch-oak-bracken woodland.

Work received : Himalayan Balsam is a problem here. A number of organised balsam pulling days were organised in 2023 and were very successful.

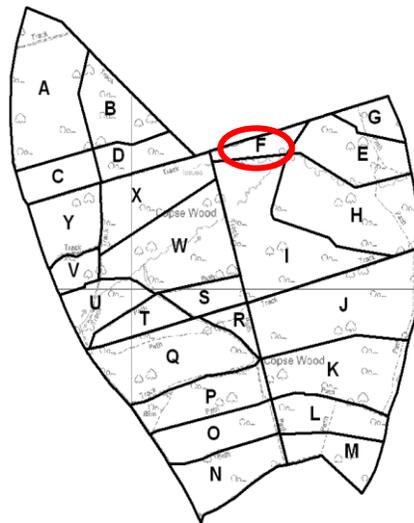
Work required: Keep statutory paths R68, 61, 62 and 67 clear and prevent spread of Himalayan balsam.

Subsidiary: Very popular with residents of Northwood due to the easy access from there.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment F



Description: Dense birch-oak-bramble thicket area with hawthorn and hazel near the stream. Good development of honeysuckle overgrowing other shrubs and also much Wood Sorrell (Oxalis acetosella) near the stream. There are several patches of ramsons (Allium ursinum) in this section.

Regeneration: None noted; shade from brambles too dense.

Objective: Mixed deciduous woodland.

Work received: Some widening work was carried out on the bridle path. A top up layer of sand was added to the Sandy Gallup in 2013.

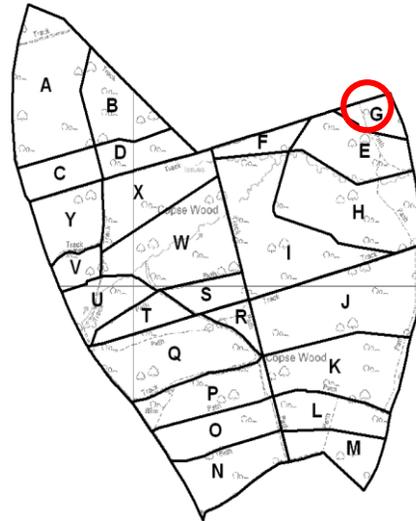
Work required: No works required apart from removal of overhanging branches and occasional widening

Subsidiary: Dumping of garden rubbish is not a problem here, but area should be patrolled regularly.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment G



Description: Mainly birch (large specimens of both species) with some sparse oaks and brambles below, also some uncoppiced hornbeam trees and bracken below in parts; especially important for the abundance of bluebells. Himalayan balsam is dense in this area and may out compete bluebells if not removed.

Regeneration: The birches are mixed in age, and re-establishing, but there are also old dead standing trees. There is little other regeneration.

Objective: Birch dominant mixed deciduous woodland.

Work received: Path along golf course has been cut back yearly. No other work received.

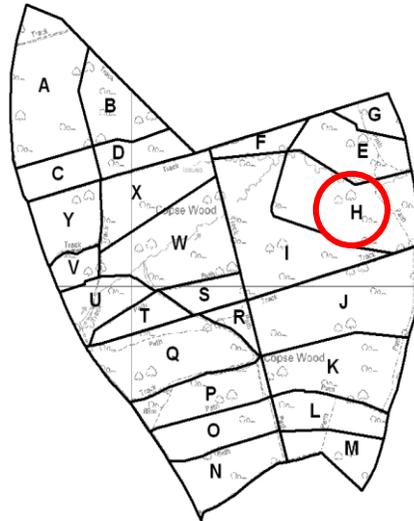
Work required: Probably best left to develop on its own. Prevent further invasion of Himalayan balsam in this area.

Subsidiary: Like E, very popular with residents of Northwood due to easy access from there. Scenically very pleasing as visible from large areas of E and H. With marginal scrub on the eastern boundary, forming a screen adjoining the Golf Course and adjoining houses.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment H



Description: Rather open birch-oak with a dense bracken sward below over much of the area though with hornbeam to the south. The margins of the stream along the northern boundary also support aspens and are especially rich in flowering plants and shrubs.

Regeneration: There are an acceptable number of young oaks scattered through the area and birch is regenerating.

Objective: Maintenance as open birch-bracken-oak area.

Work received: Path R70 has been scalloped in places, but due to its floristic value has been selected as a path to be coppiced on rotation along its entirety to add to its wildlife value. This will be combined with frequent scalloping and widening where required. The first section was coppiced in 2018 and further sections coppiced annually since. Some of the larger coppice stools have been singled to provide more mature maiden hornbeams.

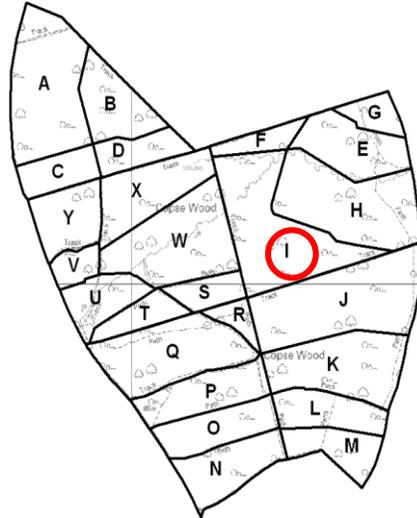
Work required: Frequent scalloping of R70 and continue yearly rotational coppicing of this path.

Subsidiary: Manage at the same time as E in order to retain the aesthetic continuity of the area the open aspect and large expanse of which, dissected by the sunken channel with the stream, is particularly appealing and unlike any other part of the woodlands.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment I



Description: Area of coppiced and mixed non-coppiced woodland. Flora well developed along the statutory paths in this section. Good amount of standing and lying dead wood of different sizes.

Regeneration: Some regeneration of oak has taken place where stools have died.

Objective: Oak-hornbeam coppice.

Work received : Frequent scalloping has been carried out along R70 and R74. A compartment has been coppiced annually since 2018, excluding 2019. Some of the larger hornbeam stools were singled.

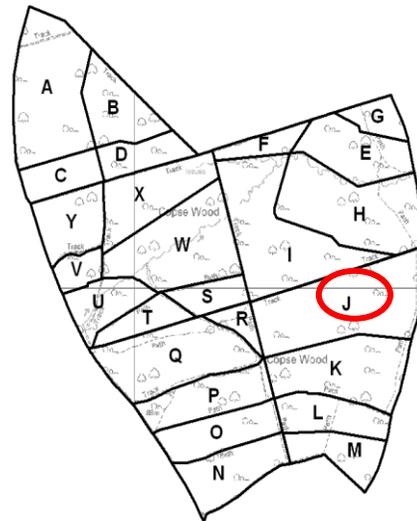
Work required: Continue with frequent scalloping and the rotational coppicing programme along R70 and 74.

Subsidiary: The two streams, one running through and the other forming the northern boundary, are important for flowering plants and mosses and would benefit from some opening up when work is carried out in the area.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment J



Description: Oak-hornbeam coppice with little ground vegetation except where clearing and replanting was carried out in 1971. Many stools rotten and dead.

Regeneration: Good hornbeam regeneration near some open areas adjacent to the 1971 clearings, also some birch and bracken establishing in these marginal parts.

Objective: Oak-hornbeam coppice.

Work received: Scalping and coppicing along R70 as in H and I.

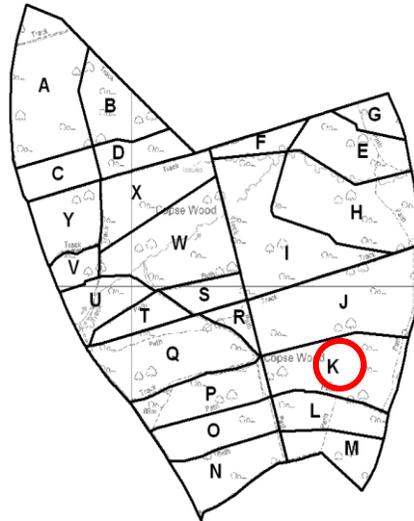
Work required: Continue to coppice and scallop along R70.

Subsidiary: R70 footpath is rich in woodland flowers and in spring is one of the best paths to walk along for this reason. Should be kept open as much as possible to retain the light.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment K



Description: Hornbeam coppice with oak standards. Large area was coppiced in 2011.

Regeneration: Excellent regeneration of hornbeam and silver birch.

Objective: Maintain as oak/hornbeam coppice.

Work received: No work received.

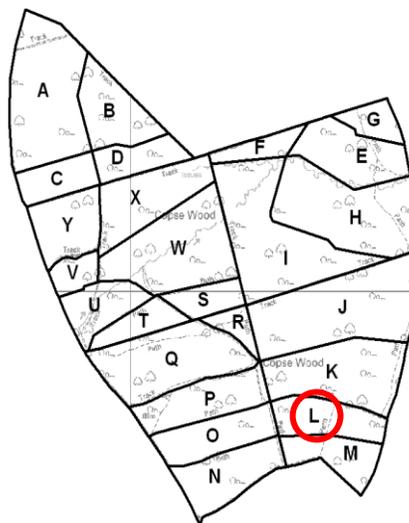
Work required: Leave to revert to high forest.

Subsidiary: None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment L



Description: Oak-hornbeam coppice. Some hazel and birch.

Regeneration: Regeneration good.

Objective: Leave to naturally revert to high forest.

Work received: Small area in this section was coppiced in 2014.

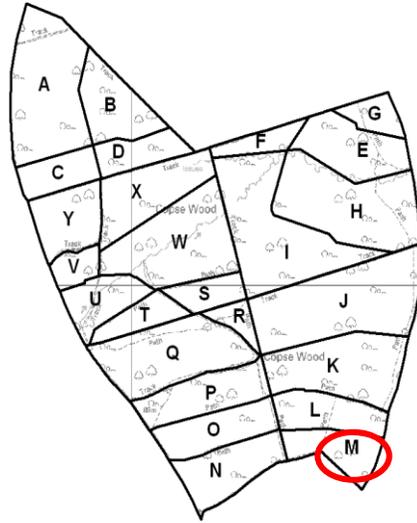
Work required: No work required.

Subsidiary: None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment M



Description: Oak-hornbeam coppice

Regeneration: Some oak, holly and hornbeam regenerating.

Objective: Oak-hornbeam coppice

Work received: No work received.

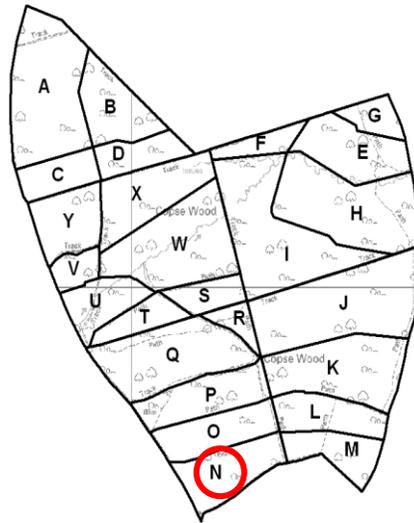
Work required: No work required.

Subsidiary: None

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment N



Description: Mainly birch with bracken below, also oaks especially in the north-east adjacent to O. Also hawthorns, and willows and gorse towards the eastern end, and scrub to the west. An especial feature of the unit is the occurrence of the Twayblade (Listera ovata) which has been known here for many years; 200-300 plants of this rare orchid were recorded here in 1955 by Pickess (Kent, 1975:532), but Crooks (1970:32) gave the population as about 50. Wrighton's (1979: 12) indication that it was last seen in 1950 is quite erroneous -- it was still flourishing with about 30 plants seen in 1981. It now appears to be extinct in the Woods.

Regeneration: Little regeneration in the bracken-dominated areas but the oaks present are varied in age. Some sycamore spreading near the southern margin.

Objective: Open birch- bracken area

Work received: None received.

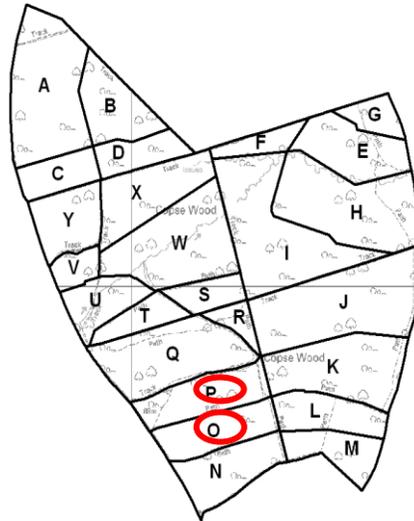
Work required: The manpower required to keep this area as open birch, bracken habitat is not available so this area should now be left to naturally succeed to high forest.

Subsidiary: Maintain scrub development along the western limit as a screen for the road to inhibit the dumping of rubbish.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment O+P



Description: The main formerly heath area on the pebbly plateau gravels, the importance of which for flowering plants and insects (especially butterflies) has already been referred to (p.42). It is also of archaeological interest for the furrows still evident (p.39) and the bomb crater in O (p.42). Crooks (1970) considered the decline of heathland plants to be due to the predominance of birch and also noted that the wetter areas were drying out. Today the area is primarily a birch-bracken area (Figs 16-17) with oaks locally regenerating profusely; some old hawthorns (a sign of secondary woodland), sweet-chestnuts (near the bomb crater in O and also in P), willow (by the bomb crater in O), and an ancient larch perhaps relict from the former plantation in the area (see p.39). Part of P was burnt in 1976 and here the moss flora is rich. Scrub is developed along the western margins. Sycamore is becoming quite thick and invasive in parts.

Regeneration: Oaks, and birches regenerating, also sweet chestnuts, hawthorns and holly. Most of the oaks are less than 20 cm diam.

Objective: Open birch-oak-bracken-heath area.

Work received: No work received in this area.

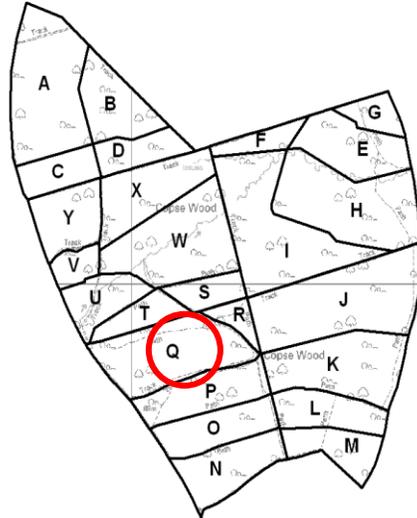
Work required: None required.

Subsidiary:

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment Q



Description: Birch and oak with bracken in parts and a great deal of dense aged hawthorn and brambles making much of the unit difficult to penetrate; some self-seeded hornbeam on heavier soils, also willows near the site of the old Ranger's Hut. There is a single alder buckthorn next to the road which should be maintained.

Regeneration: Oak is regenerating well in the more open areas, but much of the birch is old. Also developing are young hollies, one yew, and even beech and hazel.

Objective: Mixed open deciduous woodland.

Work received: R69 was widened and scalloped in 2017.

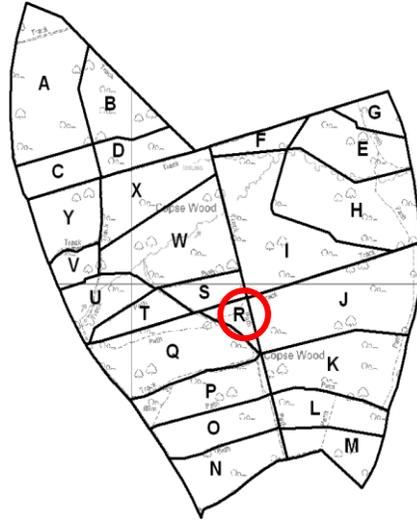
Work required: Removal of conifers and holly where it is a problem.

Subsidiary: This compartment contains a good mix of tree species including a large coppiced wild service. Two of the 4 stems of the wild service were blown down in 2018 and another in 2022.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment R



Description: Very similar to Q and conveniently treated with it, it is also part of the formerly cleared area and not ancient hornbeam coppice. Mainly rather dense birch-bracken-oak-hawthorn with young hollies much is difficult to pass through easily.

Regeneration: Regenerating oak and hollies, also some hornbeam, and hawthorns.

Objective: Mixed deciduous woodland.

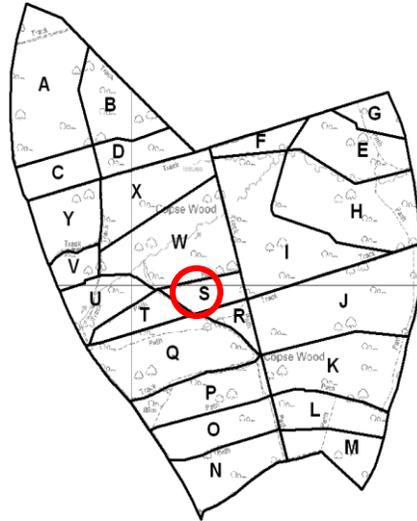
Work received: R69 was widened in 2017.

Work required: Maintain the cross roads section as open glade as this is a good area for silver washed fritillary butterflies.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment S



Description: Long-neglected oak-hornbeam coppice, some invading birch, little ground cover except brambles in parts. Also some hazel in the east, willows in the south-west, field maple in the east, and (according to Crooks, 1970) pollarded ash on the western side. Includes a locality for the Common Cow-wheat (*Melampyrum pratense*).? There is a huge coppiced oak situated in this area.

Regeneration: Little; oak and hornbeam near the eastern limit path, also scattered hollies.

Objective: Natural high forest.

Work received: The crossroad part of this unit was opened up a bit to create a glade.

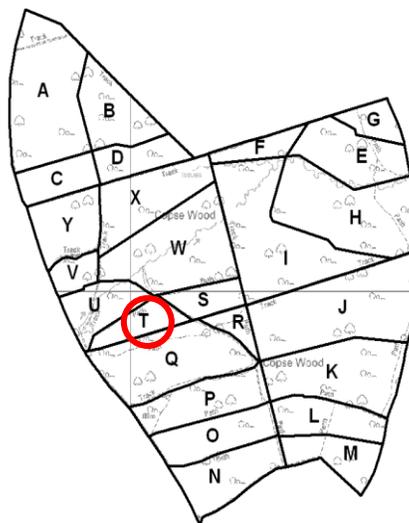
Work required: Create scallops along R69 and R74.

Subsidiary: The path at the S/T/R/Q cross-paths is wet and of interest for flowering plants, including rushes and willows; these latter of especial importance for butterflies and moths.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment T



Description: Oak-hornbeam coppice, with some old hawthorns (both species) near the southern edge. Also invading birch and bracken in a few places. The ground flora is poor or with brambles/honeysuckle (the latter especially luxuriant in the east). Some of the large hornbeam coppice was singled in 2011.

Regeneration: Almost none except immediately by paths. There are few young hollies.

Objective: Leave to succeed to high forest.

Work received 2017 - 2022: R69 was scalloped in 2017.

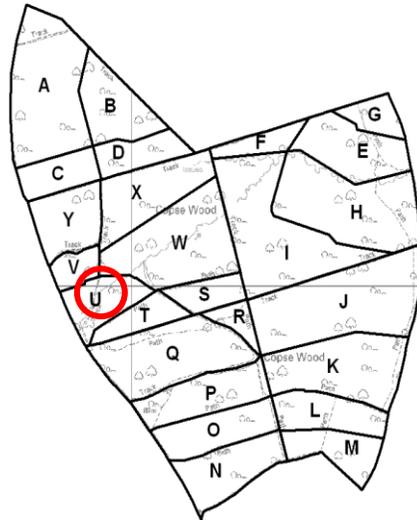
Work required: Continue to scallop along R69 on a rotational basis.

Subsidiary: The importance of the bank with stubbed hornbeams along the southern boundary and its treatment are mentioned above. As a public footpath enters by the western end of this unit, this part should be kept slightly more open so that there is a gradual rather than an abrupt entrance into the wood; this will increase aesthetic appeal and at the same time promote its natural history value.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment U



Description: Long-neglected oak-hornbeam coppice except for a cleared strip parallel to Duck's Hill Road continuous into V. Old hawthorns render part very scrubby and difficult to penetrate. A stream runs through this unit and alongside it there are elder thickets near the south-west/north-east path junction. A single alder buckthorn (important for butterflies; see p.42) is present near the south-west corner and there is also a coppiced ash near the road. Strip marshy and important for sedges etc.

Regeneration: A wide range of trees regenerate in the cleared western area but little elsewhere.

Objective: With its variety of trees this area is best left to form mixed deciduous woodland.

Work received: None received

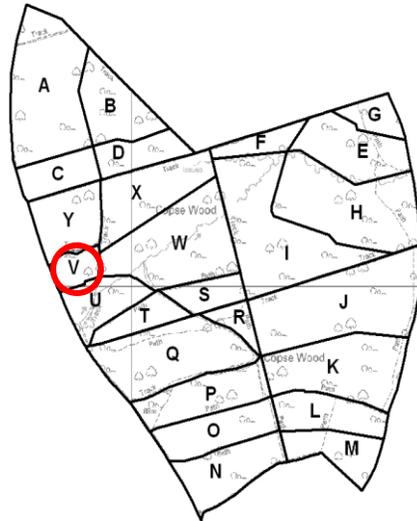
Work required: Continue to trim hedge along Ducks Hill Road.

Subsidiary: Plant hornbeam in gaps in the hedge in order to extend it to rest of Ducks Hill Road

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment V



Description: Long-neglected oak-hornbeam coppice with some birch and old hawthorns in parts. Rather similar to U and including a cleared strip near Duck s Hill Road continuous with that in U. This strip rather drier here and almost impenetrable in parts due to prolific regeneration. Some elder and hazel are present. Little ground cover in much of the unit away from the marginal strip where there are brambles and honeysuckle.

Regeneration: A wide range of trees regenerating in the western strip, including an appreciable amount of ash, also some by paths, including hornbeam and oak.

Objective: Leave to form mixed deciduous woodland.

Work received 2017- 2022: No work carried out here apart from bridle path widening.

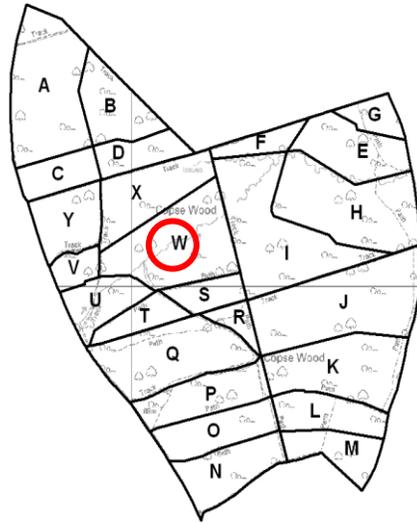
Work required: Continue to lay hedge along Ducks Hill Road. Keep bridle path open and scalloped.

Subsidiary: In the thinnings in the marginal strip, the ash should be kept as it is scarce in the area. Work in the strip should be carried out at the same time as in the comparable continuous area in U is treated to retain the continuity; comments under U apply. Access to the manhole cover in the unit will be needed from time to time.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment W



Description: A rather mixed area but mainly long-neglected oak-hornbeam coppice. There is much bracken in the north-western part adjacent to X and birch is especially common here also. A particular feature of the area is the stream running from west to east across its entire length and the valley-like topography., the importance of this for flowering plants has already been stressed (p 42) Maple, crab apple, and hazel also occur along the north-south path through the unit.

Regeneration: Little regeneration except along the path margins or where there has been some gap made in the canopy.

Objective: Leave to become high forest.

Work received: Four compartments have been coppiced on R74 since 2018.

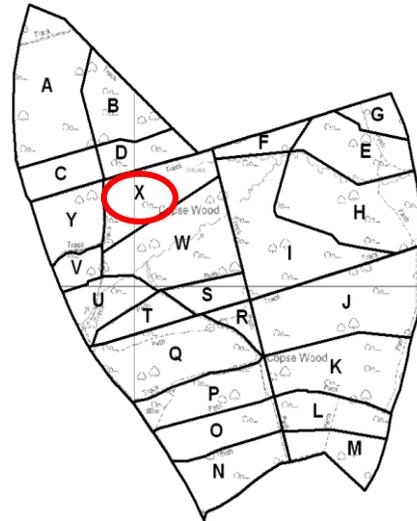
Work required: Continue to coppice along R74.

Subsidiary: There is a large badger sett in this unit. Trampling is a problem and should be discouraged using natural barriers such as hawthorn cuttings from coppicing. Remove damaged and rotten boardwalk close to badger sett.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment X



Description: Long-neglected oak-hornbeam coppice, with dead stools and dead branches still standing. Bracken provides the ground cover, especially in the east; birch is scattered throughout, and there are some old hawthorns to the north-east. A small stream with one fork is also present.

Regeneration: Little or none in most of the unit although some hornbeams are regenerating in clearings formed where old stools have died. Some oaks in the bracken area and hollies scattered throughout.

Objective: Mixed deciduous woodland.

Work received: The Sandy Gallup was re-surfaced with a new layer of sand in 2014.

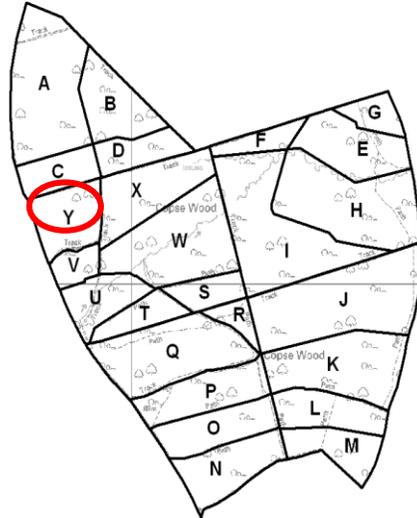
Work required: Widen and scallop Sandy Gallup.

Subsidiary: The stream margins should be opened up in the course of coppicing work, but it should be stressed that these are less important for flowering plants than that in U-W-I.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2022

COPSE WOOD

Compartment Y



Description: Oak-hornbeam coppice, with scattered birch. Little ground cover through much of the area but brambles, honeysuckle and bracken in parts. Near the road there are some maples and ash, and the unit also has the Wild Service Tree, rare in the area.

Regeneration: Where stools have died brambles and hollies tending to regenerate (to 2m in places) but there is little regeneration through most of the unit except by the eastern boundary track where oak, hornbeam and birch were found to be regenerating in this better-lit situation.

Objective: Mixed deciduous woodland.

Work received: None

Work required: None required.

Subsidiary: Keep the maples and other varied trees near the road. Maintain the hedge adjoining Duck's Hill Road to reduce dumping of rubbish and stop unofficial access points being forced through it.

Battle of Britain House Site

Geology, Geomorphology and Soils

Largely on London Clay. The site has a south facing aspect, and slopes down to the southeast.

Hydrology and Drainage

There are no wet areas; drainage is north-eastward down the slope.

Vegetation

Western section (Z1) Relict garden and lawn. Rhodendrons and laurels along north side and either side of former approach road. Scattered planted conifers and other horticultural trees and bushes. Relict oaks, particularly towards west, with hawthorns and non-coppiced hornbeams. Also present; willow, sycamore, hazel, briar, and gorse.

Eastern section (Z2) Ancient woodland of hornbeam coppice with oak standards. Some birch, holly, and laurel also present.

Access

Z1 has no easy entry.

Z2 can be entered directly from the boundary with Copse Wood. Recent access has developed from the car park via the relict fields and also across the boundary ditch in the SW corner into White Hill fields.

SPECIAL FEATURES OF INTEREST

Aesthetic and Artistic

The splendid view from the elevated site of the former house looking across to Harrow Church, Horsendon Hill, Epsom Downs and Box Hill was described by Victor Stanyon, the first warden of the Battle of Britain House (Stanyon 1961). Growth of trees since then has somewhat obscured this view.

Archaeological

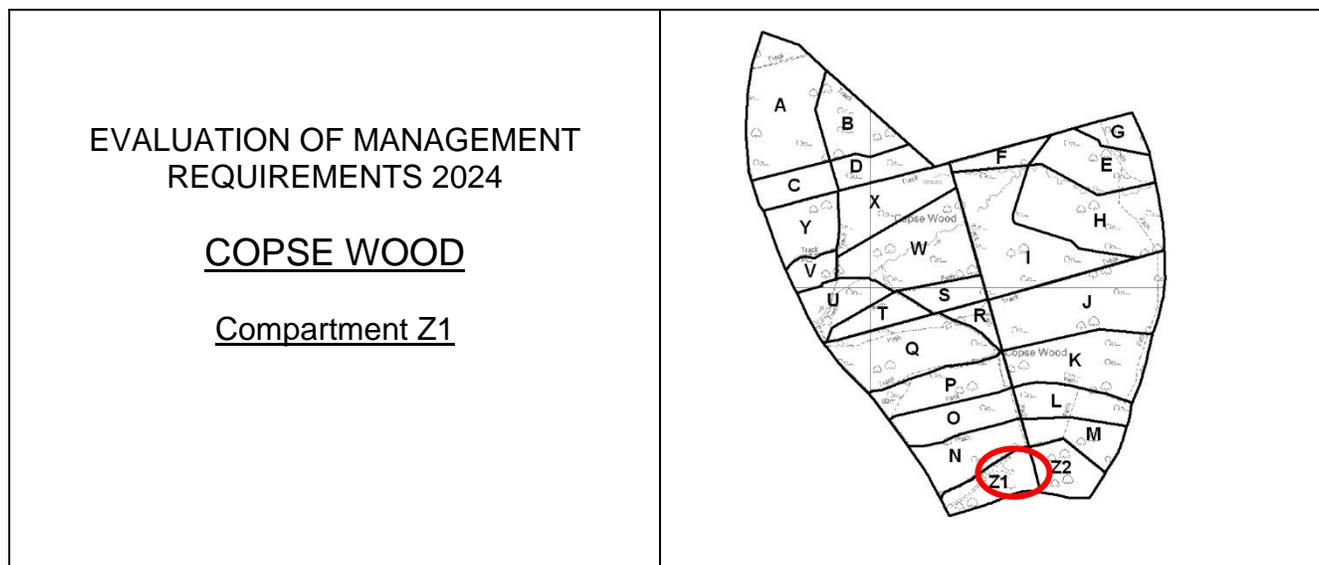
Remains of several relicts from the wartime occupants of the house and site as a training area for espionage activities, including a pistol firing range in Z2.

Natural History

Z1 has the largest known colony of Broad-leaved Helleborines (*Epipactis helleborine*) in the Ruislip NNR. Several anthills on former lawn.

Z2 is ancient woodland of coppiced hornbeam with oaks. The ground flora has practically disappeared since 1950. There is a large colony of English Bluebells (*Hyacinthoides non-scripta*) at the southern end.

DESCRIPTION OF COMPARTMENTS



Compartment Z1

Descr.: Relict partially landscaped garden, with several planted conifers and other trees and shrubs, and open oak woodland. Road to former house covered with soil and now grassed over. Dense laurel and rhododendron along northern boundary with Copse Wood. Former lawn invaded with hornbeam, birch, oak and bramble but grass not yet quite swamped.

Regen.: Hornbeam, birch and a few oaks on lawn.

Obj.: Central grassy area surrounded by open woodland.

Work received 2017 - 2022: The lawn area had been cleared of scrub most years with scrub being left around the edges as adders have been observed in some years.

Work required: Remove scrub from former lawn to maintain open grassy area. Reinstate the old boundary hedge alongside Duck's Hill Road to eliminate roadside space suitable for dumping.

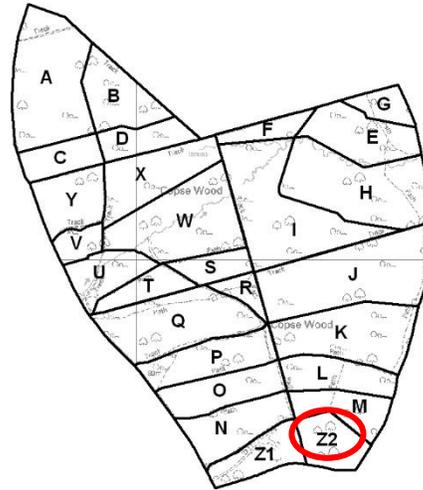
Subsidiary: Z1 was originally part of Copse Wood until sold by King's College for a house and garden in 1906. Many of the oak trees were retained and much of the area was allowed to continue in a semi-wild state. This has continued since the house was burnt down and cleared from the site in 1984. The compartment is increasingly being invaded with native flora from the adjacent woodland. In particular the largest known colony in the Ruislip Woods NNR of Broad-leaved Helleborines has developed on and beside the site of the former house. Z1 is a crucial area of developing secondary woodland for which the complete history is known, from ancient woodland, through clearance (except for many of the oaks) to the commencement of its development as secondary woodland 25 years ago. Data from here will be most valuable in the continuing debate about the return of species into secondary woodland.

This compartment should now be considered for inclusion in the Ruislip Woods SSI/NNR.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

COPSE WOOD

Compartment Z2



Compartment Z2

Descr.: Hornbeam coppice with oak standards. A few birch holly and laurels. Very little undergrowth.

Regen.: None.

Work received 2017 - 2022: Part of this unit was coppiced in 2010, since which a number of the oak standards left have died.

Work required: Z2. Is within the NNR. The hornbeam coppice has gradually shaded out most of the ground-flora particularly within the last sixty years. Coppicing should recommence to rectify this. This should have the added benefit of protecting the colony of English Bluebells from the current trampling by walkers. As the coppice in this area is approximately 80 – 100 years old, the hornbeams should be singled.

Section 5

MAD BESS WOOD

5.1 GENERAL INFORMATION

History

Formed by piecemeal enclosure of Westwood Common in the Manor of St Catherine's. 92 of its present 139 acres were said to be wooded in 1587 and two blocks (10 and 26 acres) had been enclosed during the preceding two years. In 1609 – 10 further woodland was enclosed. Five pieces of the woodland were named in 1769, including the first usage of 'Mad Bess Wood'. By 1865 a small allotment for a 2.5 acre gravel pit on the east side and a 12 acre field in the south-east corner had reverted to woodland.

Tenure

Entirely under the control of the London Borough of Hillingdon.
Entirely within the Ruislip Woods National Nature Reserve.

Map Coverage

Ordnance Survey sheet 176 (1:50,000 series); national grid reference TQ (51) /07589 (approx. centre of wood)

Size

55.77 hectares (139.43 acres).

Physical Features

Rising from about 57m all along the southern boundary to about 89m in the north-east corner near the car park.

Geology, Geomorphology and Soils

Mainly on London Clay except in the uppermost part which adjoins Ducks Hill Road which is on the oval plateau gravel deposit which extends into Copse Wood. The gravel was exploited in the past and this has led to the formation of depressions which have now been recolonized and provide an interesting habitat for plants. Gravel has been washed down onto the clayey areas in places.

Soils on the plateau gravel are more porous than the heavier soils produced from the London Clay.

Hydrology and Drainage

The main drainage channel is the Mad Bess stream which rises in the fields to the north of the wood and enters in its extreme west corner near Breakspear Road North. The stream runs parallel to this road to emerge on the southern boundary of the wood before entering Cannon Brook in Ladygate Lane. The stream itself is of interest in showing two good examples of miniature ox-bow lakes which are useful for educational purposes.

Two transitory water courses are also present. One rises in the middle of the wood just north of the Centre Drive and runs to the southern boundary to join Mad Bess Stream at the point where that leaves the wood. The other rises by the car park and flows in a ditch beside Chestnut Drive as far as the Centre Drive where it flows through the units L and K to emerge from the wood near the Crematorium.

Vegetation

Large areas of the wood are oak with hornbeam coppice. Near the centre, some areas consist of mainly oak and birch with bracken below giving a much more open aspect. Adjacent to Duck's Hill Road is a wet strip with much alder and birch. The south-east part of the wood is of more recent origin than the remainder and includes some gorse as well as oak and birch. To the west and north of the car park sweet chestnuts, some evidently once coppiced and others younger and self-sown, are a prominent feature. More detailed information is given in the compartmental notes.

Access

The main point of access today is from the car park located just off Duck's Hill Road near the summit of the hill. Direct entry is also possible from next to Ducks Hill Cottages and behind the Six Bells Pub. Two access points are also provided off Breakspear Road North.

Bridleways and Footpaths

The whole wood is traversed by a number of rides which have distinctive names. The names were preserved on painted boards nailed to trees at the ends of the main rides until at least the 1950s.

A bridleway enters the wood at the extreme north east corner from Duck's Hill Road and continues 20-50m from the boundary in the wood along its northern edge to emerge on Breakspear Road North opposite the entrance drive to Bayhurst Wood car park.

Parking

There is a car park within the limits of the wood near the top of the hill off of Duck's Hill Road. Visitors to the wood can also use the Bayhurst Wood car park.

Fire Precautions

Access for fire engines is possible from the gate on Duck's Hill Road and from the entrance to Mad Bess Campsite off of Breakspear Road North. Not all paths will be accessible to large vehicles.

5.2 SPECIAL FEATURES OF INTEREST

Aesthetic and Artistic

1. The view of the wood across the fields from Fine Bush Lane and Breakspear Road is very fine and it is hoped that these fields will remain as Green Belt to preserve existing vistas of the woods.
2. The old green track, now named the Main Drive, which runs from the Scout's open-air chapel towards the north side of the wood retains the romantic air of a half-forgotten road.

Archaeological and Historical

1. This wood contains more earthworks than the other Ruislip Woods. These consist principally of boundary banks and ditches which are thought to reflect the successive phases of enclosure of the wood from the sixteenth century onwards.
2. There is a large bank and ditch running parallel to Ducks's Hill Road some 50m into the wood from the road on its eastern boundary to the north and south of the access drive into the car park. This system is especially important as being the early medieval boundary of the sub-manor of St. Catherine's within the parish of Ruislip.
3. The Main Drive is the surviving portion of a vanished lane system which formerly linked Jackets Lane and Breakspear Road.
4. The shallow excavations where gravel appears to have been extracted (e.g. in M and U) are of interest as evidence of former usage.
5. Attention should be paid to the overall system of banks and ditches since this is part of our heritage and can all too easily be destroyed as shown in the north-east corner of the wood while an entrance for the bridleway was being constructed in 1979.

Natural History

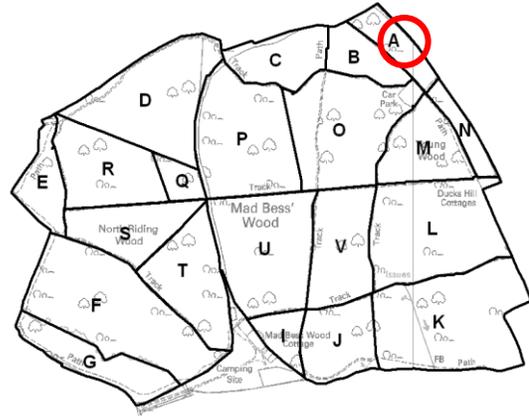
1. The alder marsh running parallel to Duck's Hill Road is the best example of this type of vegetation in the area. It has a distinctive flora, including also alder specific fungi such as the bracket-forming *Inonotus radiatus* and small cup fungi on alder catkins. Several insects are also confined to alder including the moths May Highflyer (*Hydriomena impluviata*), Dingy Shell (*Euchoeca nebulata*), and Small Yellow Wave (*Hydrelia flammeolaria*). Also of importance ornithologically for the flocks of redpolls (*Acanthis caberet*) and siskins (*Carduelis spinus*), which feed on the trees.
2. The sweet chestnut is a particular feature of Mad Bess Wood and evidently has a longer history here than in any of the other woods, as evidenced by the size of many of the trees and further by the massive size of some of the coppiced stools now producing three or more trees from each. Regeneration is now very successful and the tree needs containing here and preventing from spreading further into Copse Wood if it is not to lead to adverse effects on the existing plants and animals. The tree should not be eradicated, though originally almost certainly planted, as it adds diversity to the flora and there are some fungi confined to it.
3. In K there are some planted Norway Spruce (*Picea abies*) which are attractive to goldcrests. In 2005 hobbies also nested in one of the spruce. These trees are not regenerating and should be allowed to die out naturally.
4. Most of the birds recorded for the woods as a whole occur here, including species such as the green woodpecker (*Picus viridis*), chiffchaff (*Phylloscopus collybitis*), tree creeper (*Certhia familiaris*) and mixed flocks of tits (*Parus* species) in winter. Woodcock (*Scolopox rusticola*) and cuckoo (*Cuculus canorus*) are also to be seen here.
5. Orchids are very rare in the woods, but both broad-leaved helleborine (*Epipactis helleborina*) and the violet helleborine (*E.purpurea*) have been found here.
6. Other plants which are rare or local in the area are betony (*Betonica officinalis*) in the central section, creeping St Johns wort (*Hypericum humifusum*) in P, cut-leaved dead nettle (*lamium hybridum*) on the eastern side, and the wood sedge (*Carex sylvatica*) in several places.

5.3 DESCRIPTION OF COMPARTMENTS

EVALUATION OF MANAGEMENT REQUIREMENTS 2024

MAD BESS WOOD

Compartment A



Description: This area was set aside for the digging of gravel at the time of the enclosures and as a result of this is lower and consequently wetter than the adjoining land. Primarily alder with birch, the alder mostly shooting from coppiced stools except for one large tree in the centre. The northern part is drier with young oaks, sweet chestnut, and cherries (with seedlings). Old elder bushes occur along the bank up to the road and willow, hawthorns and alder buckthorn are also present. The old manor boundary forms the west side; this is of interest for mosses and is capped by stubbed hornbeams.

Regeneration: No seedling alders noted, perhaps due to the close canopy. Regeneration only in the northern part (see above).

Objective: Damp alder wood allowing some alders to grow to full size and coppicing the rest.

Work received: None received.

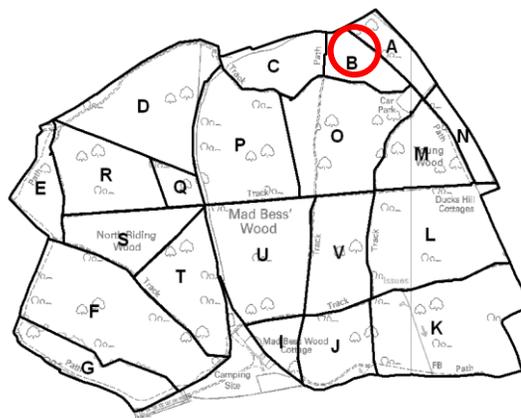
Work required: Coppice alder area, but single some of the stools.

Subsidiary: This method should maintain the best stand of alders in the woods in a healthy condition and will also ensure that a continuous screen between the wood and Duck's Hill Road remains. The development of scrub just inside the boundary fence, replaced in 1980, should be permitted to provide further discouragement against dumping rubbish and additional nesting for birds.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment B



Description: Sweet chestnut predominates with oak and birch close-spaced between. The chestnuts were formerly coppiced and consist of several now large trunks arising from single stools (Fig. 20); some of the stems were removed from a few of these in 1981 for use in bridleway fence construction. Some of the birches are dead or dying and a small amount of coppiced hornbeam is in the compartment near the junction with C. There is also a fairly large patch of cherry in this unit. Little ground cover except for bracken in places.

Regeneration: Little regeneration apart from sweet chestnut in the closed-canopy area. Some young birch, holly, chestnut and hornbeam towards the boundary with C.

Objective: Coppiced woodland

Work received: This area was coppiced in 2018. Much of the produce was used for posts and rails in Bayhurst bridlepath fence.

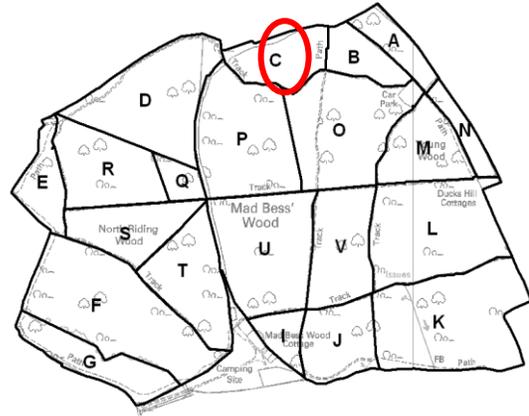
Work required: This area should be coppiced every 15 – 20 years as it produces a good crop of posts, rails and stakes for almost all fencing requirements in the woods. The coppiced alder will provide posts for natural flood management throughout the NNR.

Subsidiary: The hornbeams on the boundary bank with A should be stubbed every 15 – 20 years. They should also be haloed.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment C



Description: Oak – hornbeam coppice with some dense growth with much birch at the eastern end. A bank and more grassy area along the northern edge which is the route of an old lane. This marginal strip includes some ash, willow, suckering elms, field rose and hawthorn. The western end of the bank is topped by four coppiced beeches. Another earth bank runs north – south across the middle of the compartment.

Regeneration: Little regeneration except in the northern more open strip where young birch, willow and hornbeam appear.

Objective: Mixed deciduous woodland

Work received: None received.

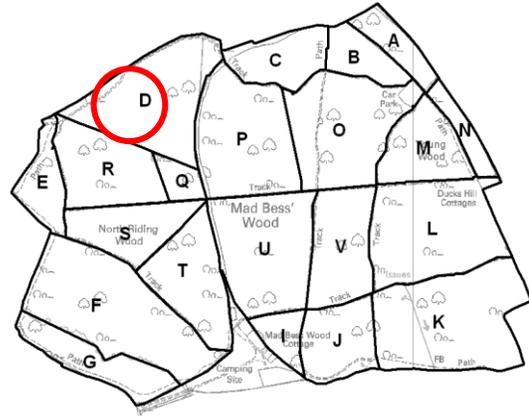
Work required: None required

Subsidiary: Includes the bridleway at its northern end. If this is used for access by vehicles and machines, care must be taken not to damage the earth banks.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment D



Description: Oak – hornbeam coppice. Very little birch. Some hawthorn is present on the bank of the Main Drive and in the northern boundary where the more open aspect permits ash, hazel; suckering elms, one lime and some large cherries (dead) do occur. One of the largest wild service trees in the woods is found on the bridlepath.

Regeneration: Little except in the northern margin.

Objective: Coppiced woodland

Work received: R79, R80 and R81 were kept clear of vegetation annually.

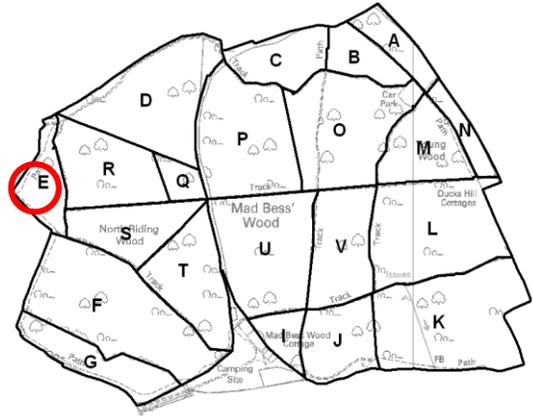
Work required: Coppice along bridlepath.

Subsidiary: Includes the bridleway almost through the centre. The earth bank at the southern boundary does not have stubbed hornbeams but trees along it could be treated in this way to make it stand out. Do not coppice the wild service.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment E



Description: Oak-hornbeam coppice with some bramble below and a few birches. Some hawthorn and one cherry on the western edge. Several small wild service trees are to be found in this unit. Large elms formerly present in the south-west corner died and have been removed but they are now suckering profusely. One two acre plot was coppiced in 1981 on the recommendation of the Working Party.

Regeneration: Good regeneration of wild service and elm suckers.

Objective: Mixed deciduous woodland and coppice

Work received : Area 1 on the bridlepath was coppiced in 2019.

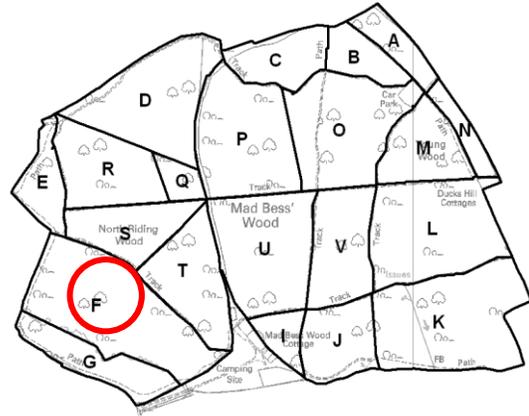
Work required: Keep R93 accessible to the public, but avoid coppicing the wild service on this path.

Subsidiary: Includes the bridleway. The margin should be kept fairly open to allow pleasant views across the adjacent fields.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment F



Description: Largely oak-hornbeam coppice with a few birches. A denser area in the centre contains in addition hawthorn and holly and there are some elders by the stream. Hawthorn hedge and ditch at the north-west end and some pollarded elm on the south-east boundary bank. One two acre plot was coppiced in 1981 on the recommendation of the Working Party.

Regeneration: Limited regeneration.

Objective: Retain as uncut hornbeam coppice.

Work received : None received.

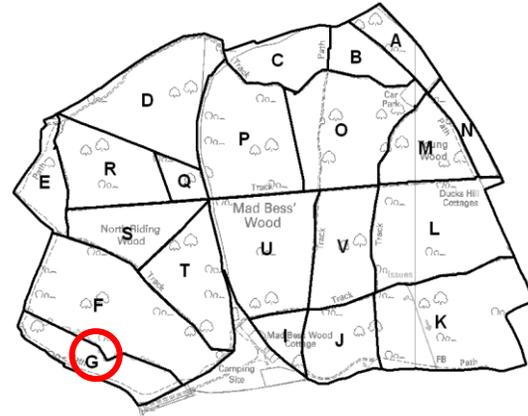
Work required: None required

Subsidiary: The stream itself should not be interfered with in any way because of its educational value in illustrating the development of a lowland waterway system.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment G



Description: Largely oak-hornbeam coppice with fewer oaks than many areas and also some birch. The southern end is particularly dense and scrubby due to local regeneration. The ground cover of ivy near the stream is especially striking and worth retention. Elders are also present on this side of the stream and sycamores occur by the road in the south-west corner. There is also a large coppiced ash. Elm is suckering near the road.

Regeneration: Little regeneration except on the southern and western boundaries.

Objective: Part mixed deciduous woodland and part coppiced woodland along the bridle path.

Work received : None received.

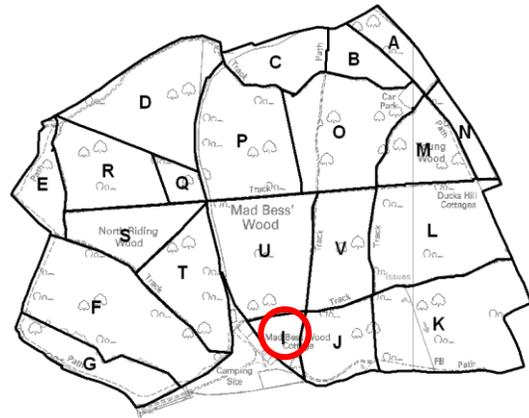
Work required: None required.

Subsidiary: Stub boundary hornbeams along the south-east boundary bank.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment I



Description: Oak-hornbeam coppice with some birch.

Regeneration: Good regeneration.

Objective: Oak-hornbeam coppice.

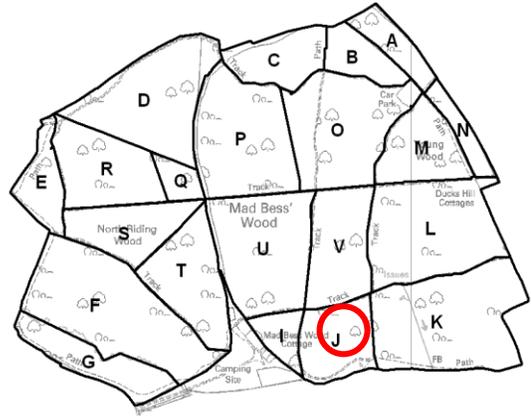
Work received : The area opposite the scout chapel was coppiced in 2017. R90 has been kept clear annually.

Work required: Keep paths wide and accessible.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment J



Description: Long-neglected oak-hornbeam coppice. There are also some small birches. Little ground cover except towards the northern edge where bracken is encroaching.

Regeneration: Some regenerating hornbeam and oaks where there is more light to the north and near the northern path; young hollies scattered through the area.

Objective: Mixed deciduous woodland.

Work received: None.

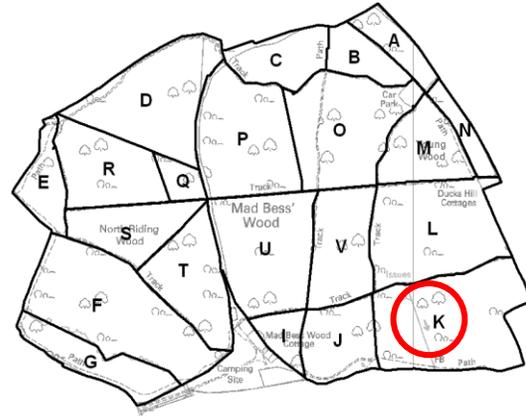
Work required: None required. R90 has been kept clear annually.

Subsidiary: Preserve the earth bank to the eastern side of the unit K.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment K



Description: This area was once pasture and historical evidence indicates that it reverted back to woodland prior to 1865 and this is substantiated by the planted spruce here and the lack of coppiced hornbeam except in the extreme north-west. There is no evidence that the area was ever ploughed. It was still relatively open in 1939 (Fig. 23). This unit now has an extremely varied and rich flora which also includes birch, one large twinned beech, cherry, alder buckthorn, guelder rose, hazel, ash, aspen (in the centre), rowan, hawthorns, willow, one large sycamore, elder, and several straggling aged gorse bushes. The southern part includes some scrubby areas. Scrub is also present along the western bank of the small stream. This is arguably the finest area of the woodlands for butterflies and moths; the Lead-coloured Drab (*Orthosia populeti*), Great Oak Beauty (*Boarmia robraria*), Pale Oak Beauty (*B. consortaria*), Brindled White-spot (*Ectropis extersaria*), Tawny-barred Angel (*Semiothisa liturata*) and Dwarf Pug (*Eupithecus tantillaria*) are all easily found in this particular area.

Regeneration: Regeneration is abundant compared with most other compartments and includes birch, hornbeam, hollies (several to over 1 m), hawthorn, cherry, ash, beech (one 2 m), sweet chestnut, sycamore and gorse (in the 'pipe ride'). The spruce is not regenerating.

Objective: Open mixed deciduous woodland.

Work received: R101 has been cleared for public access annually.

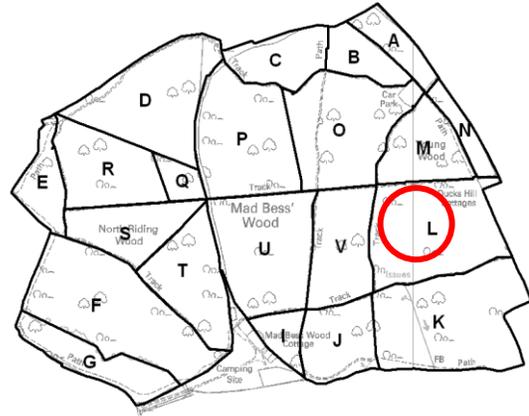
Work required: Most of this area is now mixed deciduous woodland. A small area is still open with remnants of gorse and bracken. This area should be opened up again for its wildlife value.

Subsidiary: This area, if maintained in its open scrubby form provides a rich habitat for many species not found elsewhere in the wood.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment L



Description: Largely oak-hornbeam coppice.

Regeneration : Regeneration is mainly in the northern part with hornbeam, sallow, oak, and dense birch shoots in places. Other young trees include beech (0.75m, 2.25m), sweet chestnut and several hollies.

Objective: Oak-hornbeam coppice scallops along R85 with a section of mixed deciduous woodland in the northern part.

Work received : The main central path has been widened and scalloped twice.

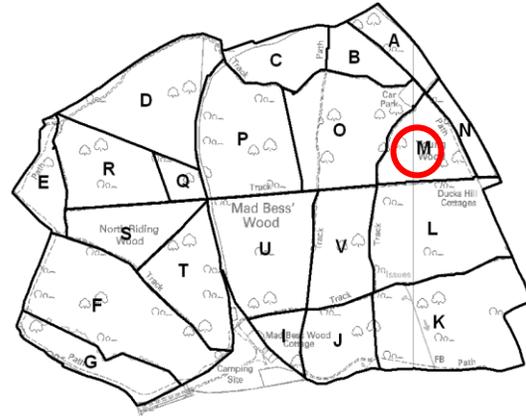
Work required: Scallop and widen by coppicing when required.

Subsidiary: None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment M



Description: Largely oak-hornbeam coppice

Regeneration: Regeneration is mainly in the northern part with hornbeam, sallow, oak, and dense birch shoots in places. Other young trees include beech, sweet chestnut and several hollies.

Objective: Retain as mixed deciduous woodland.

Work received : R86 and 85 have been kept clear annually.

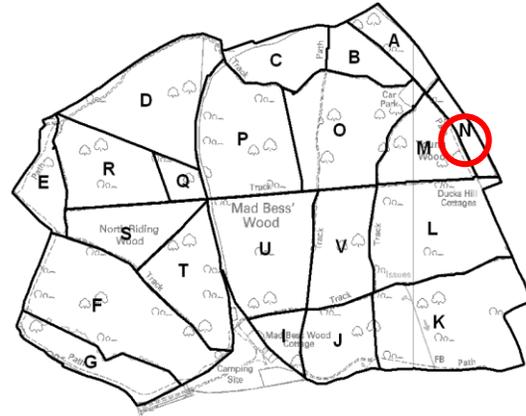
Work required: Widen and scallop R86 and R85.

Subsidiary: None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment N



Description: Essentially a southern extension of Compartment A but much drier, and with less alder. The northern part of this unit is more open with birch, a few large oaks, bracken below, and some coppiced alder. In the southern part the trees are much closer together with formerly much sycamore, hawthorns and field maple. Some of the sycamore had been coppiced in the past but all were eradicated on the recommendation of the Working Party in October 1981. Eradication failed and sycamore still grows here. Stubbled hornbeams, beech and two oaks occur on the ancient boundary bank adjoining M.

Regeneration: Sycamore was regenerating profusely towards the southern end. Natural regeneration of native trees can be expected to improve now the sycamores have been removed and planting should not prove necessary. Retain as mixed deciduous woodland but keeping the rather open aspect in the north.

Objective: Mixed deciduous woodland but keeping the rather open aspect in the north.

Work received : The sycamore was cut in 2010 and 2015.

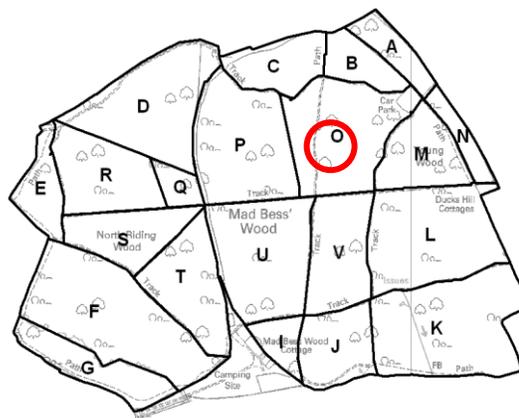
Work required: The sycamore should be cut every 5 years.

Subsidiary: Maintain the scrub/low growth area adjacent to Duck's Hill Road to act as a screen. Stubbled trees along the boundary bank (cf. A, M) should be retained. Keep the fence along Duck's Hill Road in good repair to reduce rubbish dumping.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment O



Description: Mainly standard Oaks with a few birches and scattered sweet chestnuts (near the car park), and further some coppiced hornbeam towards the southern and western boundaries.

Regeneration: Little regeneration in the immediate vicinity of the car park, perhaps due to trampling, but elsewhere there are sweet chestnuts, hornbeams, hollies, cherries and beech regenerating.

Objective: Mixture hornbeam coppice and open mixed deciduous woodland.

Work received 2017 - 2022: R84 was scalloped in 2015.

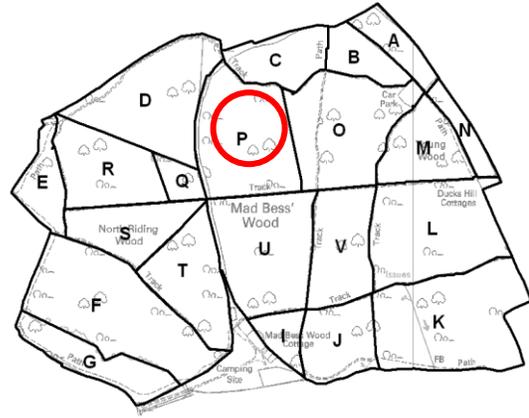
Work required: Maintain R83, 84 and 85 as open paths.

Subsidiary: Heavy public pressure arises from its proximity to the car park; restriction of access points from the car park helps encourage some regeneration close to it.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment P



Description: This contains the two areas cleared of coppiced hornbeam in the summer of 1979, following recommendations of this Working Party parts of these have been replanted with oak and larch (as nurse trees) and fenced (Figs 10-11). The enclosures also include standard oak trees and some mature as well as naturally regenerating birches, and chemically 'killed' hornbeam stools, some of which are now shooting (see Table 2, p.112). The rest of the unit is long-neglected oak hornbeam coppice. The western boundary is the old bank of the Main Drive which also supports field maple, elm suckers, and dogwood (in the south-west). Another boundary bank runs north-south across the eastern half of the unit.

Regeneration: Prolific in the opened areas, almost absent in the neglected coppice sections.

Objective: The cleared areas to develop into mixed deciduous woodland, the remainder to be retained as oak-hornbeam coppice.

Work received: R83 and bridlepath scalloped and widened.

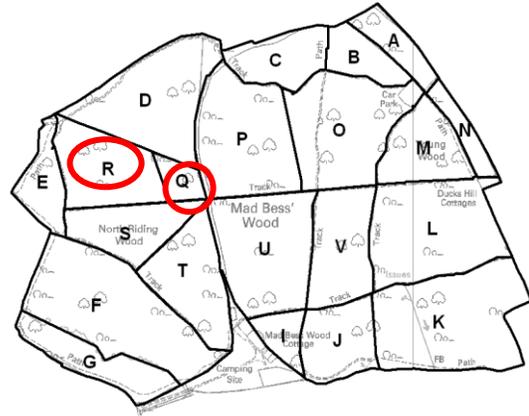
Work required: Keep all statutory paths and the bridlepath open.

Subsidiary: Care should be taken not to damage the boundary banks. That within the unit would be best marked by stubbing the hornbeams on it when that area is treated.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment Q & R



Compartments Q and R

Description: Long-neglected oak-hornbeam coppice. These units are treated together as there is no vegetation boundary between them and the dividing path used by Crooks (1970) to separate them is now very poorly defined. Many stools are dead and there are dead standing poles. Very little ground flora at all.

Regeneration: Almost no regeneration is taking place.

Objective: Mixed deciduous woodland

Work received 2017 - 2022: R78 was widened in 2017.

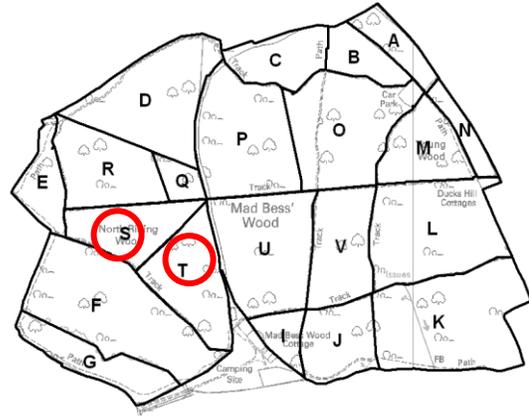
Work required: It could be that singling some of the hornbeam stools could encourage more ground flora. This would also provide some mature maiden hornbeams.

Subsidiary: The north-east boundary is an old bank which should be preserved and marked by stubbed hornbeams.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment S & T



Description: Mainly neglected oak-hornbeam coppice with scattered birch. Some bracken occurs near the Warren Ride Boundary and there is an American red oak near the Scout chapel.

Regeneration: Hornbeam is regenerating, particularly in the south, and there are also scattered young hollies.

Objective: Mixed deciduous woodland.

Work received : None received.

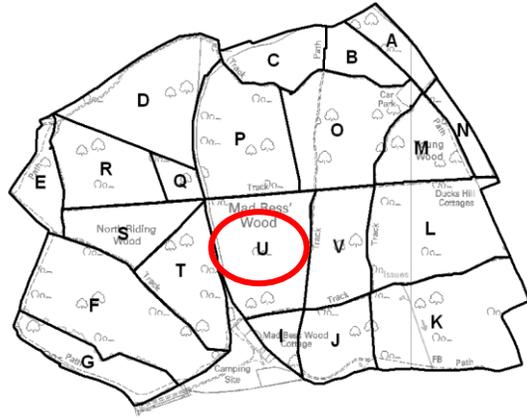
Work required: Coppice along statutory paths to keep wide and open.

Subsidiary: The hornbeams along the boundary bank of Main Drive were stubbed in 1961 to prevent toppling and damage to the bank (Figs 14-15, LTMP). They were again stubbed in 2004/5, but were cut too near to the stump. Consequently, some stumps died.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment U



Description: Coppiced hornbeam with oak becoming dominant in the eastern and southern parts. The remainder mainly standard oaks with some birch and coppiced sweet chestnut. A more open bracken area is present in the north-west quarter and there is a grassy area between the stream and Main Drive; a patch of alders occurs here, one of which has a girth of 132 cm (52 ins) and is probably the largest in the woods. There is also a crab apple near the Scout chapel.

Regeneration: Good regeneration of hornbeam, birch, oak and also scattered hollies.

Objective: Mixed open deciduous woodland except along the statutory paths which should be coppiced on rotation to keep open.

Work received : No work carried out apart from occasional path widening.

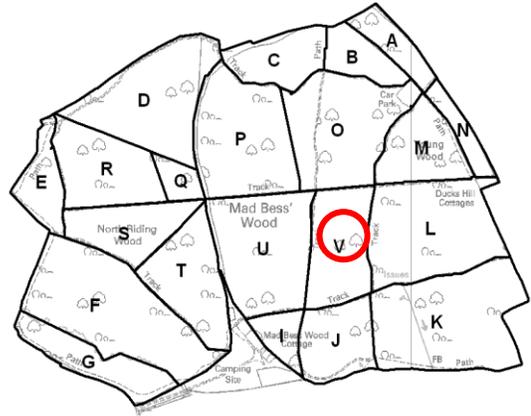
Work required: Coppice along paths on rotation to keep statutory paths open.

Subsidiary: The hornbeams along the bank of Main Drive were stubbed in 1981 (Figs 14-15 to reduce the risk of them toppling and damaging the bank. The old boundary bank on the east should also be carefully preserved but it should be noted that most of this is within unit V and not U as was indicated by Crooks (1970). This is a pleasant and varied part of the wood and its appeal should be maintained, keeping the stream margins well-lit. The old gravel workings in the east also merit retention as they are damp and important for mosses and plants these would benefit from their margins being opened to allow in extra light.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

MAD BESS WOOD

Compartment V



Description: Some old hornbeam coppice occurs in the west and north. The area is largely an open birch-oak-bracken area. On the eastern side bordering Chestnut Drive there are some sweet chestnuts. Hawthorns are present on the western bank.

Regeneration: Dense hornbeam regeneration in the north. Other young trees include hawthorn, birch, oak and sweet chestnut.

Objective: Mixed deciduous woodland.

Work received : All statutory paths were kept clear annually.

Work required: Coppice along statutory paths on rotation to keep open.

Subsidiary: The blocks to be coppiced may be most conveniently treated with those in the adjoining compartments to prevent the paths forming stark vegetation boundaries. Any chestnut in the area should be coppiced for use in fencing and flood management.

Section 6

PARK WOOD

6.1 GENERAL INFORMATION

History

This forms part of the park for wild beasts of the forest mentioned in the Domesday Survey of 1086. The wood formerly extended north in the centre of what is now Ruislip Lido, south to Eastcote Road, west to Bury Street and east to Fore Street. The changes in the southern boundaries arose during the suburban expansion of the early 1930's.

Tenure

It is entirely under the control of Hillingdon Borough Council. It lies entirely within the Ruislip Woods National Nature Reserve.

Map Coverage

Ordnance Survey Sheet 176 (1:50,000 series) national grid
Reference TQ (51)/095.890 (approx. Centre of the wood)

Size

100.28 hectares (250.69 acres).
This is the largest of the Ruislip Woods National Nature Reserve.

Physical Features

Rising almost imperceptibly from circa 45m in altitude to a north-east/south-west ridge which is about 90m at its north-east limit close to St Vincent's Nursing home. To the north-east the wood drops quickly to the shores of the Ruislip Lido at about 40m.

Geology, Geomorphology and Soils

The wood is on London Clay (Eocene) which gives rise to very heavy acid soils with some gravel on the higher ground.

Hydrology and Drainage

The southern slope is drained by a stream flowing from a permanent pond on the east side of compartment H through to the centre of D where the outflow through drains, to the River Pinn is controlled; the area near the outflow is very wet and should be retained as such except immediately on the adjacent paths. Ditches enter this stream from compartments L, J and R but those present are inadequate to drain the Pylon ride and main north-south track.

Vegetation

Mainly classic oak/hornbeam coppiced woodland except in the central and north-western parts where oak-birch-bracken in a more open aspect exists. For detailed information see the compartment descriptions below, and for a checklist of the flowering plants see Wrighton (1979). Mitchell (1951) includes maps showing the distribution of some plants and trees within this wood.

Access

The wood can be entered by footpaths or tracks from Bury Street, Fore Street, Broadwood Avenue, Kings College Road and St Vincent's Nursing home. It can also be entered directly from Haste Hill Golf course (which forms the northern boundary of compartment U), and Grub Ground (southern boundary of K and eastern boundary of E and H). Many houses backing onto the southern boundary of C, D and E have their own private access gates into the wood. There are also 2 entrances from Ruislip Lido.

Bridleways and Footpaths

The main footpaths shown on the map indicate those which are Statutory.

A bridleway runs from Compartment A along the old pylon line (P1-3): to the fore street entrance into K and also northwards through L, R, T and U and south parallel to the boundary with the Lido. From the north-west point of U the bridleway passes across the northern end of the Lido in front of the Ruislip Local Nature Reserve into Poor's Field.

Parking

No special parking facilities are provided. Space for about four cars is available just off the road at the Kings College Road entrance, otherwise, parking is on residential roads adjoining the access points where considerable congestion and inconvenience to residents can occur.

Fire Precautions

Considerable damage to the bracken dominated areas in the central parts of the wood occurred in 1976, particularly in part of Compartment R.

Access by fire engines is currently possible under dry conditions only from the Kings College Road entrance and then with difficulty to P. Otherwise, they would have to be parked near the main entrances (see above)

6.2 SPECIAL FEATURES OF INTEREST

Aesthetic and Artistic

1. When viewed from the north side of the Lido, the woods forms a backcloth to the Lido of particular aesthetic appeal and their overall appearance from this area should be retained.
2. The bracken areas and those with young beech are of special appeal for the colour they provide in the winter months.
3. Existing ponds and streams provide variety in the landscape and their margins should be maintained in a relatively open state to provide a varied range of attractive flowering plants and make them more readily visible.

Archaeological

1. The ancient boundary bank running from near the C-D junction to the centre of the wood may be pre-Domesday and particular attention should be paid to its preservation.
2. Other earthworks, especially the sunken way on the eastern side of U, and the eastern boundary of E and H, both of which mark former limits of the wood, also merit preservation.
3. The dates of some earthworks shown on the map are uncertain.

Natural History

1. Aspen (*Populus tremula*) a particular feature of the woods as a whole shows its optimum development in Park Wood and the adjacent Grub Ground (see p.88). Its distribution in the wood was mapped by Mitchell (1951) and it is still present in most of his sites and may well have expanded in some. Aspen is the food plant for a large number of species of insects. In Park Wood these include the rather scarce Chocolate Tip (*Clostina curtula*), Light Orange underwing (*Lobophora halterata*), Poplar Lutestring (*Tethea or*) and the increasingly elusive Poplar Kitten (*Harpyia bifida*).
2. The Silver-Washed Fritillary (*Argynnis paphia*) occurred in Park Wood until its natural decline. Maintenance along traditional lines will retain a habitat suitable for its re-establishment
3. The banks of the stream running through H, I and D are especially rich in mosses and liverworts including some conspicuous thalloid species (e.g *Pellia epiphylla*).

4. Alder (*Alnus glutinosus*) and alder buckthorn (*Framgula alnus*) should be retained in the marshy area in the central southern part of D. In addition to providing variation in the tree and shrub cover the former is host to some fungi and insects restricted to it. The only other major area of alder in the Ruislip Woods is in Mad Bess Wood but as it is much drier there it is in more danger of being lost from that site in the long term. This marshy area is also important for the range of marsh-loving flowering plants present. Alder buckthorn is the food-plant for the Brimstone butterfly. (*Gonepteryx rhamni*)
5. Colonies of Wood Anemone (*Anemone menorosa*) just wouth of the bracken area on the C-D boundary path, of Cow-wheat (*Melampyrum pratense*) in B, D, J and elsewhere, and both Goldilocks (*Ranunculus auricomus*) and Lesser Spearwort (*R.flammula*) in marshy areas wherever they occur should be retained in view of their scarcity in the woods as a whole.
6. The older oak trees to the east and west of the junction of the main north-south track with the previous pylon line (i.e western end of Compartments H and eastern end of I) should be retained for their lichen flora which is addition to a good cover of common species (for which the site forms a centre of propagules) includes the orange *Chaenotheca ferrunginea* which is better developed here than elsewhere in the woods (and fertile).
7. The old beech (*Fagus sylvatica*) near the east end of B has given rise to many young beech trees here and adjoining parts of compartments A,J and Q. These should be encouraged to promote the development of a small area of beech woodland which provides a habitat for a range of fungi scarcely developed elsewhere in the woods.
8. Scrub regenerating naturally in the old pylon ride, especially P4 is important for the nesting of various warblers including the Chiffchaff (*Phylloscopus collybia*), Willow Warbler (*P.atrochilis*), Garden Warbler (*Sylvia borin*), Blackcap (*S.atricapilla*) and Whitethroat (*S. Communis*). Sallows here are important for several insects including Osier Hornet Clearwing (*Specia bembeciformis*) and Lead-coloured Drab (*Orthosia populeti*)
9. The streams and ponds provide a habitat for the development of a range of invertebrates and should therefore be retained.

6.3 DESCRIPTION OF COMPARTMENTS

To include:

Map of Compartments

Description.

Regeneration

Objective

Work received

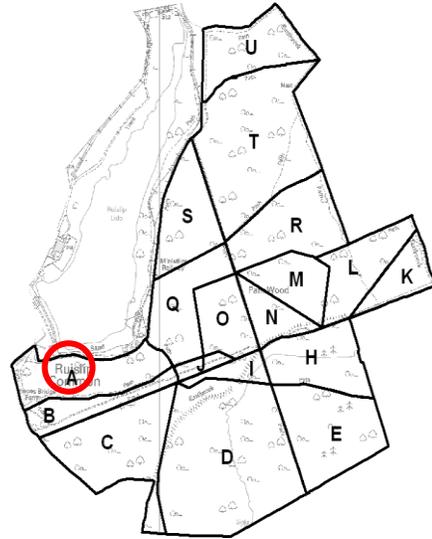
Work required

Subsidiary objectives

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment A



Description: Oak-hornbeam coppice. Some birch, especially to the west, coppiced oak, some bracken towards the eastern end. Some hornbeam stools are dead and rotten but most are in an acceptable condition. One two acre block was coppiced in 1981 on the recommendation of the Working Party. There is a large beech at the western end near the Lido, one stem of which fell in 2018. Some hawthorn towards the eastern end, two apples and some aspen and hazel. There are several small patches of cow wheat in this area.

Regeneration: Regeneration is limited to the occasional hornbeam where a stool has died to permit sufficient light to enter.

Objective: Retention as oak-hornbeam coppice, except in the bracken area.

Work received : An area between the bridlepath and the White Route was coppiced in 2012. Murphy's Field has been cut in some years to keep open and 2 small ponds have been dug for wildlife benefit. With continued maintenance this area could be utilised by schools and other groups for nature education in the future. It could be a useful nursery area for saplings of trees from the woods for hedgelaying or for donating to local schools.

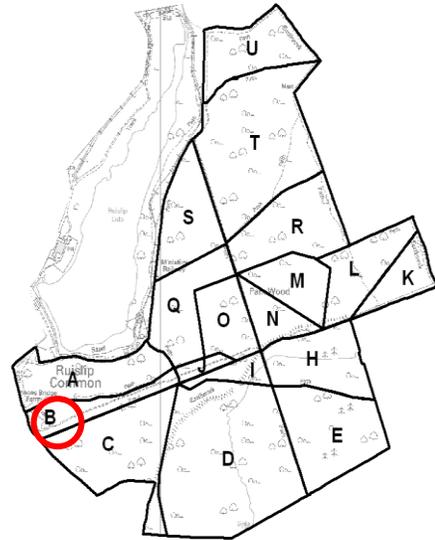
Work required: Keep paths and Pylon Ride open.

Subsidiary: None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment B



Description: Mainly oak-hornbeam coppice but younger than A with most poles under 9cm (4ins) diameter; almost no ground cover. A massive beech (estimated at over 200 years by Crooks, 1970) occurs in the eastern end of the unit which has given rise to many young beeches in this area and by the junction with A and Q.

N.B. The massive beech died in 2018 after suffering successive blow outs of its two main stems in 2012 and then in 2014.

Regeneration: Almost absent except for the beech (see above) and some hollies.

Objective: Retention as oak-hornbeam coppice, except in the eastern segment where the development of a beech area should be promoted. Keep aspen and scrub adjoining P1.

Work received: This section of the Pylon Ride has been widened and scalloped every 3 or 4 years and mown most years and every year since 2015.

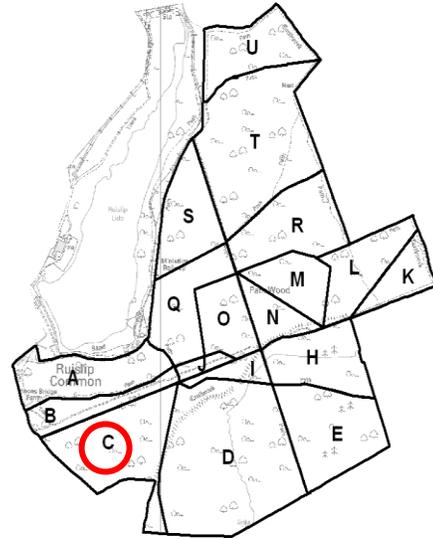
Work required: Continue to maintain as open and wide as possible with continued scalloping and mowing as this is by far the best ride in the woods for butterflies and flowers.

Subsidiary: None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment C



Description: Mainly oak-hornbeam coppice, with areas of aspen near the Pylon Ride. One of the best areas in the NNR for bluebells and wood anemones.

Regeneration: Good regeneration of oak, birch, hazel, hawthorn, and beech occurs in the bracken area, but there are almost none in the coppice areas apart from occasional young hollies, one yew, and sycamore in the west.

Objective: Retention as oak-hornbeam coppice with the exception of the oak-birch-bracken area. Keep and encourage aspen near P1.

Work received: Pylon Ride has been mown and widened in places. One area behind Keswick Gardens at the junction of R181 was coppiced in 2010

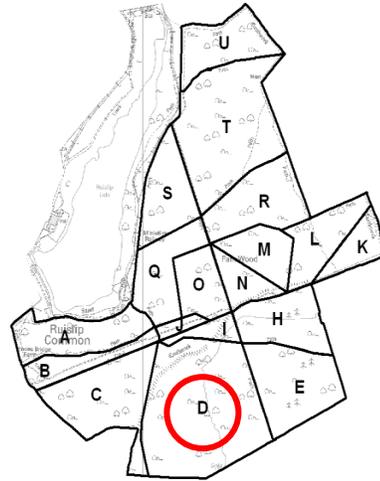
Work required: Maintain rotational scalping of the Pylon Ride to keep wide and open.

Subsidiary: Clear rubbish from the pond (bomb crater) and clear trees and shrubs from its margins to encourage bluebells, woodland grasses and other flowering plants and create an aesthetically appealing site. Rubbish from adjacent houses is not yet as serious a problem as in D and E, but cautionary notices should be sent to residents and existing rubbish and exotic flowering plants (from garden debris) removed.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment D



Description: A very varied and botanically very rich area, scientifically of paramount importance. The eastern side supports standard oak-hornbeam coppice contiguous with that in E, and there is also an oak-birch-bracken area on the west (continuous with that in C) and a similar oak-birch-bracken area near the northern end. The marshy area towards the southern end of the stream supports many alder trees and also alder buckthorn and various flowering plants characteristic of marshy habitats. Mature oaks along the stream are of interest for the lichens developing on them and the banks of the stream have rich moss and liverwort communities in places. The major part of the unit consists of dense trees of birch and oak with also aspen locally important, luxuriant growths of brambles and honeysuckle, much only penetrable with great difficulty in the summer. Elder well-developed near the southern boundary where there had been much dumping of rubbish from houses, until it was cleared by recommendation of the Working Party in 1980; also some mature ash and hazel. In the south-west corner by the entrance about 0.5 acre was cleared of underwood and grassed some years ago; this is now reverting to a mixed woodland with plenty of hornbeam (mainly about 1m but some to 5.5m tall), oak and also aspen. One two acre plot was coppiced in 1981 on the recommendation of the Working Party. The alder area was coppiced in 2004. The main body of the area is now the finest example of non-coppiced woodland with well-defined woodland layers containing numerous ancient woodland indicators, large amounts of dead wood and well-lit areas.

Regeneration: Oak aspen, hazel, hawthorn and birch all regenerating well. In addition holly to 4.5m tall as well as young hollies and one 3.5m fir.

Objective: Mixed woodland for the main part together with the alder marsh, birch-bracken-oak areas, and the coppiced hornbeam areas.

Work received: A boardwalk was installed along the wettest sections of R120. R12 and R125 were scalloped in 2016.

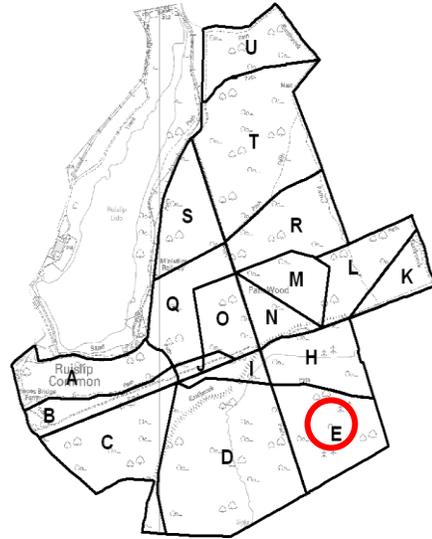
Work required: Clear some areas of scrub on the Park Pale whilst trying to protect the earthbank from further trampling by the public.

Subsidiary: As this area is more Ancient Woodland Indicators than any other in the NNR it should receive limited if any intervention apart from species surveys and information gathering.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment E



Description: Almost entirely oak-hornbeam coppice, including coppiced oaks as well as hornbeams; some stools very rotten or completely dead but most are in a satisfactory state. There are also some hornbeam trees, some evidently produced by singling in the past.

Regeneration: The stools coppiced in 1978 have regenerated and in addition, in this area, numerous oak seedlings have also established. Little regeneration through most of the remaining area but there are some small hollies and one laurel. Some aspen, oak, birch and hawthorn in the bracken area.

Objective: Retention as oak-hornbeam coppice, with stubbed hornbeams on the boundary bank on the east.

Work received : Widening work along R124 was carried out in 2016. In addition, several swales were dug to encourage water off of the path.

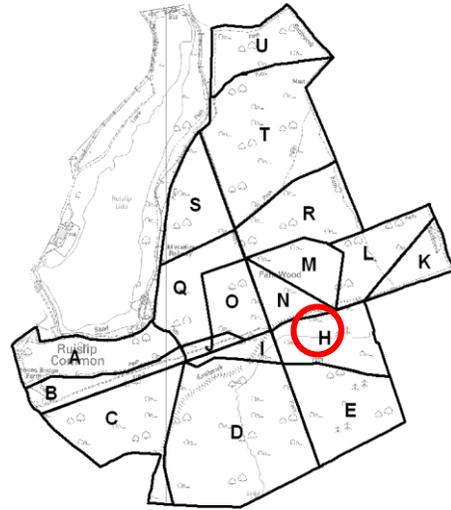
Work required: Maintain R124 as a wide path as it is very well used and is the main route through the woods to the Lido.

Subsidiary: Maintain the eastern boundary ditch for its archaeological interests.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment H



Description: Oak-hornbeam coppice in the eastern part but much dense undergrowth and hawthorn in the north-western part near the P3 boundary; some pollarded hornbeam now giving spreading heads. Oaks in the extreme north-west corner are in a more open setting and have good growths of lichens, including *Cladonia digitata* (the only known site in the wood). The stream running from the pond near the eastern margin is important for mosses and liverworts and supports *Pellia epiphylla* on its banks. Hazel is an important feature of the dense area in the north-west quarter and birch occurs sporadically throughout the area.

Regeneration: Oak and hornbeam is regenerating well in the more open western parts but there is little regeneration otherwise.

Objective: Retention of most as non – coppice.

Work received: The pond was cleared of some vegetation in 2019 and 2022. Several dams have been installed along the stream running from the pond to R124 for Natural Flood Management (NFM).

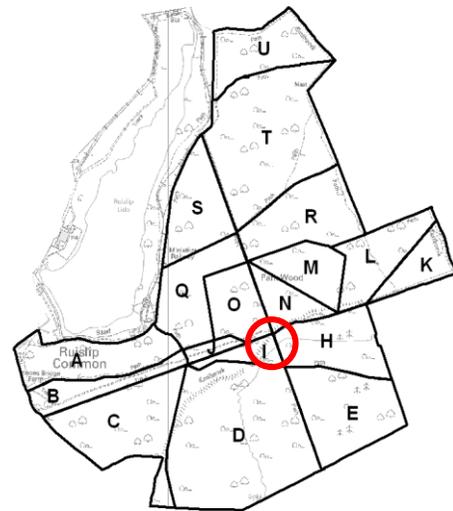
Work required: The pond will require regular clearance work to maintain it as a pond. Monitor effects of dams.

Subsidiary: The pond should be retained and its margins also kept open and the centre kept as open water. The eastern boundary ditch should be preserved for its archaeological interest.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment I



Description: Oak-birch-bracken, very thick in parts; also some hazel and hawthorn. The older oaks to the eastern end are of especial interest for lichens (it is here that fertile *Chaenotheca ferruginea* occurs; see p.68). Wood anemone is especially well developed around the stream banks; the streams are an aesthetically important part of the compartment presenting an aspect not seen as well elsewhere in the wood. The ancient boundary ditch traversing the unit is archaeologically important and in addition supports luxuriant moss communities on its cap and sides. Aspen is well developed adjacent to P2 particularly and is important for its entomological interest (see p.67 above).

Regeneration: Good regeneration of oak, aspen, hawthorn and birch.

Objective: Uneven-aged mixed deciduous woodland with an open character with more grassy areas along the stream banks and aspen along the northern limit.

Work received: R179 has been cleared of overgrowing vegetation, but not widened as it is light enough. The Pylon Ride has been scalloped and mown yearly. An information sign of the Park Pale was installed along R179

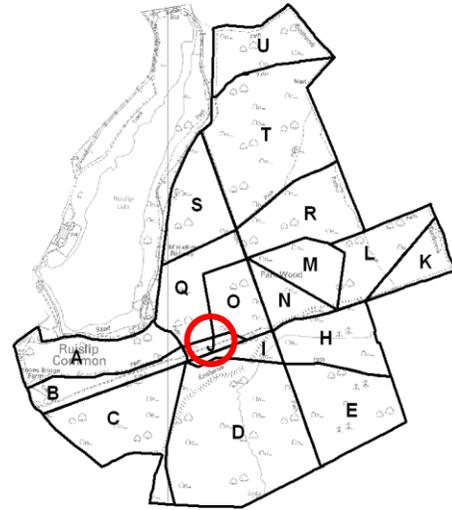
Work required: Mow Pylon on rotational basis yearly. Widen bridle path in places.

Subsidiary: Clearance of brambles and regenerating trees and shrubs from along the stream margins to accentuate this feature and encourage the growth of grasses and wood anemones. The ancient boundary ditch and bank should be maintained.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment J



Description: Mainly oak with bracken below but also containing some sweet chestnut, birch, hornbeam (self-sown) and hawthorn. Some young beech arising from the tree in B are also present.

Regeneration: Very good regeneration of oak and beech.

Objective: Open uneven-aged mixed deciduous woodland.

Work received: No work carried out.

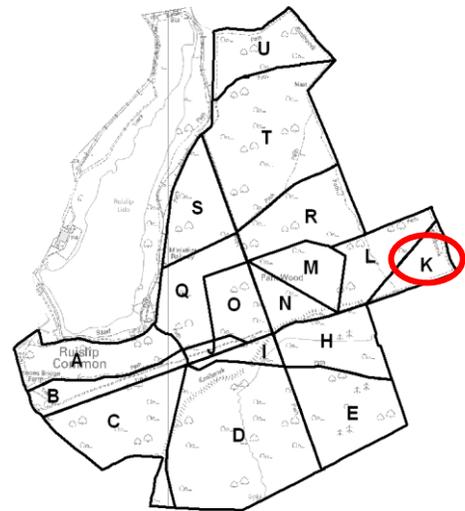
Work required: Light cutting should be carried out to prevent overhang of bridle path.

Subsidiary: Sweet chestnuts should be kept so they can be utilised for fencing purposes.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment K



Description: Long-neglected oak-hornbeam coppice although a small area at the south-east corner had some coppicing carried out relatively recently. Bramble and honeysuckle ground cover is dense in parts, a 6m holly (one of the largest in the wood) is present and hazel is also an important feature of the unit as are aged birch trees. Some aspen is present along the northern edge and there are also some hawthorns. The southern margin is the horse track from Fore Street which has been built up, covered with sand, and a ditch constructed along its northern edge. An ancient boundary ditch is on the east.

Regeneration: Aspen, hornbeam and birch regeneration has been good after coppicing.

Objective: Retention as oak-hornbeam coppice.

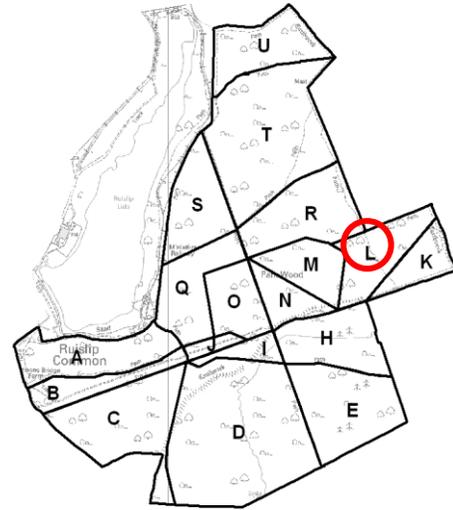
Work Received 2017 - 2022: The bridlepath and statutory footpaths have been kept clear annually.

Work Required: Scallop and widen the rest of the Pylon Ride in this section.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment L



Description: Oak-hornbeam coppice, long-neglected, with some 'poles' to about 0.5m thick. Thick birch with brambles forms an almost impenetrable thicket in the south-western part. Both species of birch are present. Where more light enters adjacent to P4 aspen, willow and hazel occur. Guelder rose (*Viburnum opulus*) is also known from the unit.

Regeneration: Regeneration of birch, aspen, willow, etc, occurs in the better lit southern and western margins and is dense in places. Some small hollies in more shaded parts but little regeneration otherwise.

Objective: Retention as oak-hornbeam coppice except for the south western part where mixed deciduous woodland is developing.

Work received: In 2017 a section of this unit was coppiced along the bridlepath.

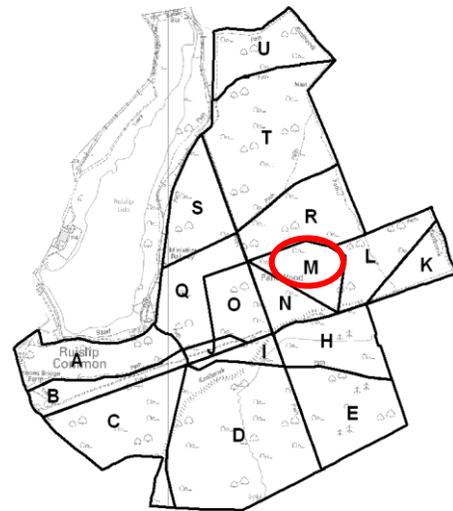
Work required: Improve bridlepath in this area by widening and diverting water from boggy areas. Maintain aspen area for its wildlife value.

Subsidiary: Encourage the aspen and willow along the P4 boundary, especially for its entomological interest (see pp.67-68 LTMP), and endeavour to retain both birch species in the western part of the compartment.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment M



Description: Birch-oak-bracken area with the birch becoming very dense in places but generally rather open.

Regeneration: Good regeneration of oak and birch is taking place.

Objective: Birch-oak-bracken open woodland.

Work received: Several dams were installed along the stream in this section for NFM.

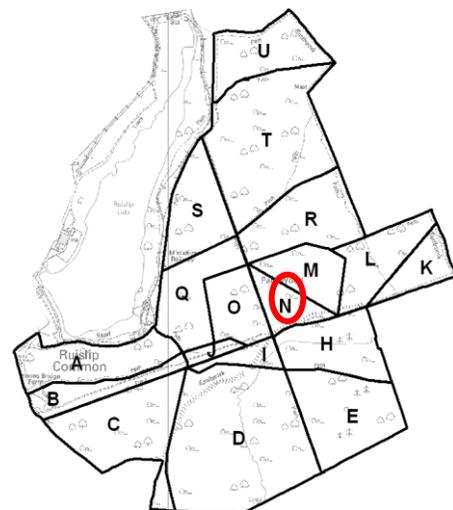
Work required: Monitor and maintain dams in this area.

Subsidiary: None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment N



Description: Birch-oak-bracken, mainly rather open and extended northwards as a grassy area. Dense regenerating oaks and some coppiced hornbeam occurs in the south-east corner in the vicinity of the former woodman's hut; some aspen is also present here, and the brambles and honeysuckle are dense in parts. Much burnt in 1976.

Regeneration: Good regeneration of oak and birch is taking place.

Objective: Birch-oak-bracken open woodland except in the strip near the site of the woodman's hut where mixed deciduous woodland should be encouraged.

Work received 2017 - 2022: Pylon Ride has been mown once annually. R126 was scalloped in 2017.

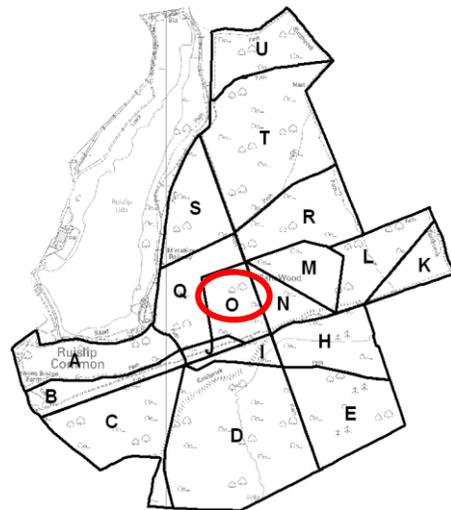
Work required: Maintain Pylon Ride as open and wide as possible. Maintain R126 as open path.

Subsidiary: It does get extremely wet along this section of the Pylon ride, so will dry out more quickly if it is more open.

EVALUATION OF MANAGEMENT REQUIREMENTS 2024

PARK WOOD

Compartment O



Description: Oak-birch-bracken with a number of well-developed presumably self-sown hornbeam trees. Several fine coppiced oaks are present and there are some old hawthorns near the boundary with J. The age structure is uneven. A single plane tree is present; Crooks (1970) noted a wild cherry in the south, and one coppiced sweet chestnut.

Regeneration: Good regeneration of oak and also some of hornbeam is taking place.

Objective: Birch-oak-bracken open woodland.

Work received 2017 - 2024 : R126 was scalloped and widened in 2017.

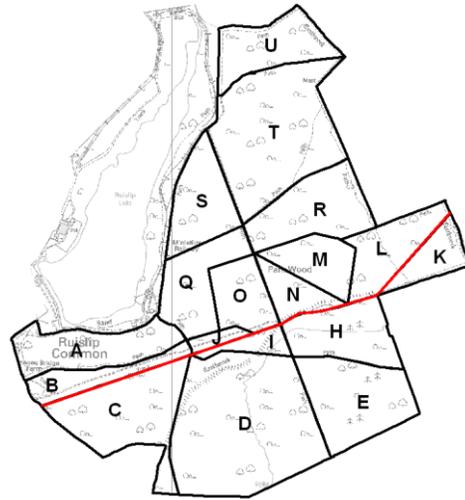
Work required: Continue regular widening and scalloping to keep the path open and to help dry it out.

Subsidiary: Some fallen birches are present; these can be left as providing a site for numerous insects and fungi.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartments P1 – P4



Description: Former route of an electricity pylon line but since the removal of the pylons extensive regeneration has taken place. Not shown on Map 5b but running along the boundaries B/C(=P1), J/I(=P2), N/H(=P3) and L/K(=P4). Large areas are almost impenetrable with even-aged birch now about 9m tall but also with willow, aspens and aspen very important locally in wetter areas and occasional young oaks throughout. A bridleway runs through P1-3 but is very poorly drained, especially in P1, with the consequent development of a flora characteristic of marshy areas.

Regeneration: Regeneration is currently under control.

Objective: Maintain as a scrubby regenerating area by cutting broad V-notches into the thickets.

Work received: Has been mown yearly in autumn and widened and scalloped in places.

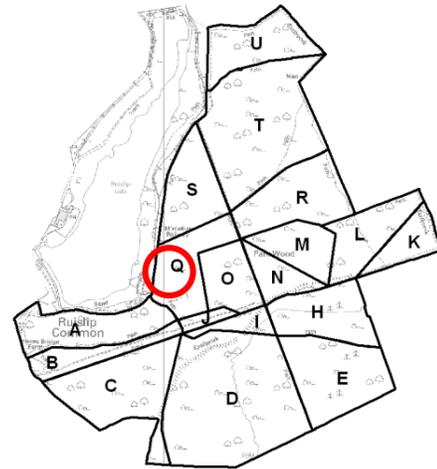
Work required: Continue with current management regime.

Subsidiary: Retention of marsh-loving plants.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment Q



Description: Oak-birch-bracken, but with some probably self-sown hornbeams, hawthorns and sweet chestnut. A single young yew was noted by Crooks (1970) as present in the south-west corner. Brambles and honeysuckle are dense locally and many of the trees are rather close giving the whole a scrubby aspect. There are several wild service trees along the bridle path.

Regeneration: Good regeneration of oaks and birches occurs, especially in the eastern part. Also a few young beeches spreading from the tree in B are present in the south-east corner.

Objective: Maintain the upper part as a birch-oak-bracken open area to encourage views of the Lido from the ridge, and the lower part of the ridge as mixed uneven-aged deciduous woodland.

Work received: Some coppicing of hornbeam was carried out along R127 and the bridlepath to help dry it out.

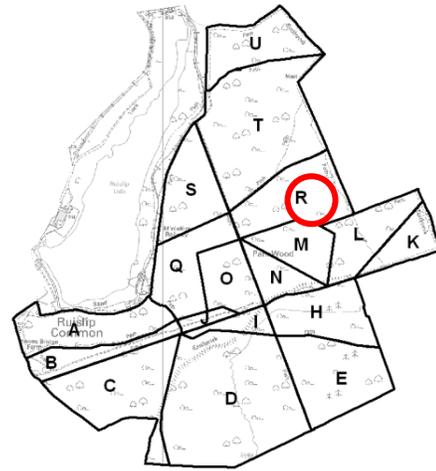
Work required: Periodic light thinning and some channelling work to divert water from boggy areas on the bridlepath.

Subsidiary: None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment R



Description: Oak-hornbeam coppice.

Regeneration: Regeneration is almost negligible though the occasional hornbeam or oak can be found where the death of a stool has allowed sufficient light through the canopy.

Objective: Maintain the area other than the picnic area as oak-hornbeam coppice, this latter segment to be retained as open oak woodland, initially with grass beneath (the grass is likely to be supplanted with bracken in time).

Work received: Picnic area long since disappeared. Path R114 was coppiced along its entire length in 2018.

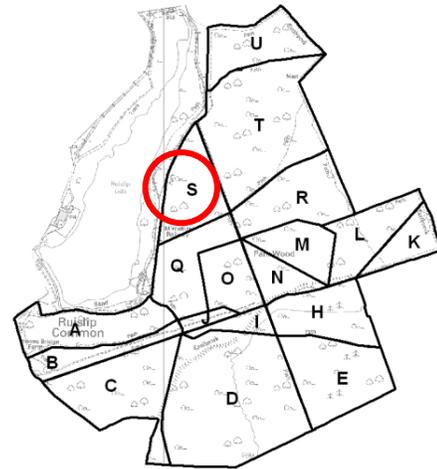
Work required: Monitor effects of coppicing along R114.

Subsidiary: None

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment S



Description: Oak-birch with hawthorn and bracken/brambles below occurs over most of this unit and the honeysuckle is locally spectacularly developed. Hornbeam, mostly self-sown, is also important towards the east. On the recommendation of the Working Party, five acres were lightly thinned in 1980. The boundary for the south of this unit was indicated by Crooks (1970) as a path extending directly west as a continuation of that separating R and T; such a path does not exist but the line he used is adopted in this treatment.

Regeneration: Oak and holly are regenerating well and self-sown hornbeams to about 4.5m tall are dense locally.

Objective: Oak-birch-hornbeam uneven-aged woodland with bracken below.

Work received : Coppicing along the bridlepath was carried out in 2016

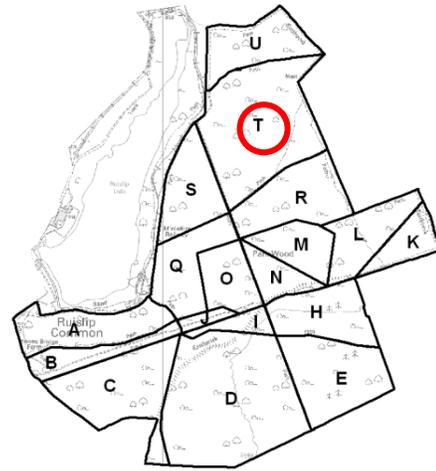
Work required: Continue to keep bridle path dry as possible by coppicing. Keep R127 as a wide ride to help dry it out and to encourage wildlife along its route.

Subsidiary: Leave to grow to high forest.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment T



Description: Almost entirely oak-hornbeam coppice though birches (often old) are scattered throughout. Long-neglected but the stools are generally sound although some dead and rotting ones were noted to the south of the ridge. There are some well-developed hornbeam trees (which should be left) along the ridge and under oaks the cushions ('polsters') of *Leucobryum qlaucum*, a rare moss characteristic of old woodland, should be preserved as it is probably extinct in Middlesex outside the Ruislip Woods (Kent, 1975). Some fine trees of the Midland hawthorn (*Crataegus laevigata*) occur just to the south-west of the ridge. The strip near the Lido boundary is very dense and scrubby. Some aspen is also present. Several coppiced wild service trees can be found along the White Route.

Regeneration: Some regeneration of oak and hollies (to 7.5m tall) sporadically in better-lit sites; hornbeams have established in sites where old stools have been lost. Regeneration is better on the south-facing than the north-facing slope.

Objective: Retention as oak-hornbeam coppice but on the ridge good hornbeam trees present should also be kept and the amount of light entering the area with *Leucobryum* always restricted to that filtering through an oak crown.

Work received : Small section of the permissive bridle path was coppiced along its edges to help dry out constantly wet area. A section along R127 was also coppiced in 2010.

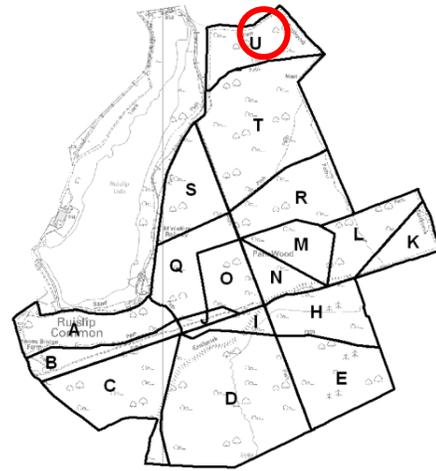
Work required: None

Subsidiary: Improve drainage of path and bridleway by the Lido boundary which is exceptionally poor, and also the T/U boundary path which now serves as a stream in parts.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

PARK WOOD

Compartment U



Description: Oak-hornbeam coppice, some blocks coppiced in December 1978 (1 acre; Fig. 7 and February 1980 (2.5 acres; Figs 4-5) by voluntary labour. Dead limbs were also removed from some oaks during the coppicing operations. The areas not coppiced recently have minimal ground cover and poles mainly under 15 cm thick from sound stools. Mature birches are scattered through the unit, especially big ones occurring on the eastern side, and a few wavers were left. An ancient sunken way with a ditch and a seasonal stream is a conspicuous feature of the northern and eastern margins and beyond this dense hawthorn scrub has developed.

Regeneration: Oak regeneration is prolific in this compartment in places.

Objective: Retention as oak-hornbeam coppice.

Work received: Minimal, apart from clearance work to keep red route, white route, yellow route and entrance open.

Work required: Keep White, Yellow and Red Routes well maintained.

Subsidiary: The dense marginal hawthorn adjacent to Haste Hill Golf Course should be retained and encouraged to both provide a potential roost and nesting area for birds and further discourage access by golfers searching for balls (vegetation is often damaged by thrashing clubs). The ancient sunken way requires clearing of rubbish, should be retained, and perhaps also eventually marked by stubbed hornbeams.

Section 7

BAYHURST WOOD

7.1 GENERAL INFORMATION

This is no longer managed as a Countryside Park and is fully within the Ruislip Woods NNR. The following sections bring this wood into line with the other three woods in terms of compartment descriptions.

Barbeque areas: There are now no areas for barbeques.

Tarleton's Lake Nature Reserve: Adjoining the wood at the northwest corner is now run by the Hillingdon Borough Council with the rest of the Ruislip Woods NNR. Management of it will be dealt with in the next planning review.

History

Previously Bayhurst Wood was quite separate from the other Ruislip woods considered in this report. It lies in the Parish of Harefield and was attached to the Manor of Moor Hall. Harefield lands were granted to the Knights Hospitallers by Beatrice de Bollens late in the twelfth century. From 1553 until 1877 the wood was owned by the Newdigate family of Harefield Place. In 1813 90 acres were known to have been standing and a document of 17 October 1877.

Tenure

Entirely within the Ruislip Woods Site of Special Scientific Interest and within the National Nature Reserve.

Map Coverage

See Map 9 accompanying this Report.

Ordnance Survey Sheet 176 (1:50,000 series)
National Grid Reference TQ (51)/068.889 (approximate centre of wood).

Size

39.5 hectares (97.6 acres)

Physical Features

Rising slightly westwards from Breakspear Road at about 67m in altitude to the centre of the wood. Sloping to the west where a pond has been excavated adjacent to neighbouring farmland.

Geology, Geomorphology and Soils

London clay, apparently throughout the woodland.

Vegetation

Essentially oak standards with hornbeam coppice, including some especially fine stubbed hornbeams along the track into the car park, and the best area of beech in the Borough. Wrighton (1979) lists 117 vascular plants from the northern and 126 from the southern sectors of the wood. It is one of only two units in the woods from which Dog's Mercury (*Mercurialis perennis*) has been recorded; a species thought to be characteristic of ancient woodland. The wood also contains some fine maiden hornbeam trees.

Access

From Breakspear Road North.

Bridleways, Cycle Route and Footpaths

The bridleway from Mad Bess Wood enters Bayhurst and after passing through it extends to the west across farmland. The surface of the horse ride has been improved in a number of places with stone chippings and declared an approved cycle route. There are numerous footpaths in the wood, but only one statutory.

Parking

A pleasant landscaped car park is located about 54m (60 years) west of the Breakspear road access. Standard trees, left when the car park was cut out from the wood, are a particularly attractive feature of it. The car park is also used by visitors to Mad Bess Wood wishing to approach it from the west.

7.2 SPECIAL FEATURES OF INTEREST

Aesthetic and Artistic

1. The most suitable woodland for the elderly or disabled because of its car park and large well-made main path.
2. Man made pond on the west side of the wood
3. Fine stands of beech trees.

7.3 DESCRIPTION OF COMPARTMENTS

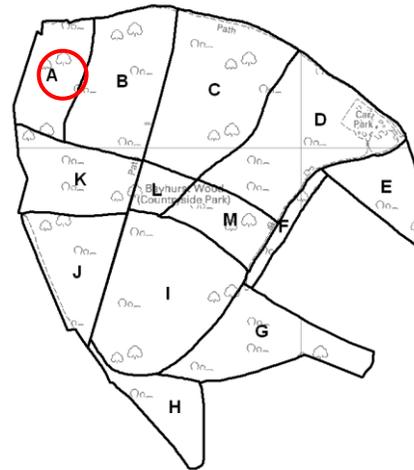
To include:

- Map of Compartments
- Description
- Regeneration
- Objective
- Work Required
- Subsidiary Objectives

EVALUATION OF MANAGEMENT REQUIREMENTS 2024

BAYHURST WOOD

Compartment A



Description: Mixed oak beech, hornbeam with some birch and widespread holly. Also four yews and a few hawthorns. As in most parts of the wood there are far more oak standards than beech (only 21 counted here). Hornbeam present both as standards and coppice. There are several large wild service trees in this section. Ground flora limited to patchy bramble, otherwise mainly bare ground covered with leaves. A few bluebells and one patch of moschatel (the only place in any of the NNR – apart from Tarleton’s Lake Reserve).

Regeneration: Hornbeam, beech, holly (a few), oak (two groups of 5).

Objective: Maintain as mixed woodland with coppiced hornbeam.

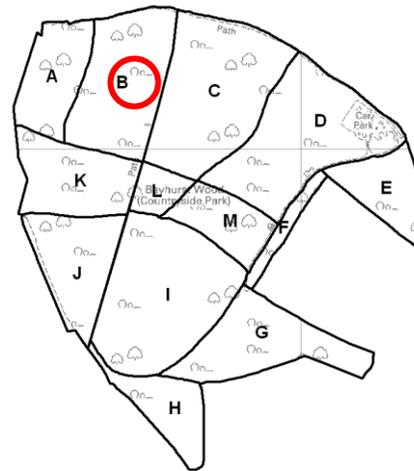
Work received: None received apart from clearance of encroaching vegetation on the bridlepath.

Work required: None required. Leave to succeed to high forest.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment B



Compartment B.

Description: Mixed oak, beech (16 standards), hornbeam, with holly dense in places, birch, 1 yew, 1 hybrid hawthorn. Several fine standard hornbeams.

Regeneration: Beech, hornbeam, holly (a few).

Objective: Maintain as mixed woodland and allow to succeed to high forest.

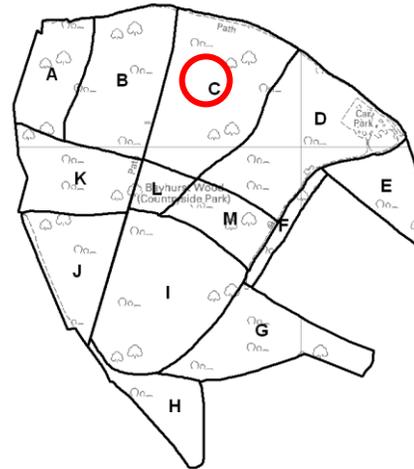
Work received : None.

Work required: None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment C



Compartment C.

Description: Mixed woodland with well spaced coppice stools. Oak, beech, holly, cherry, hornbeam (coppiced and several fine standards), birch, hawthorn. Sparse ground flora of mainly bramble.

Regeneration: Hornbeam, beech, holly, cherry, aspen (suckers).

Objective: Allow to grow to high forest.

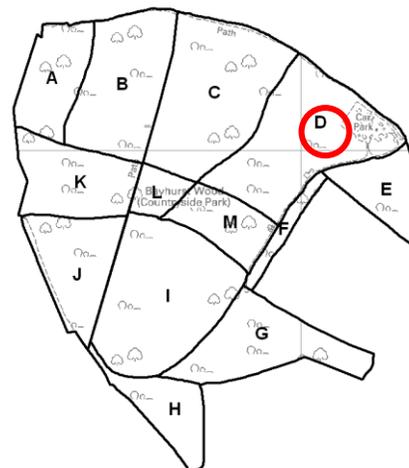
Work received : Bridlepath fence has been replaced in this section.

Work required: Some widening and scalloping may be required from time to time to keep U86 and the bridlepath open.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment D



Description: Mixed oak, beech, hornbeam, holly, Wood thorn, birch, hazel, field maple, several large hornbeam stools. Sparse ground flora of bramble and a few bluebells.

Regeneration: beech, hornbeam.

Objective: Maintain mixed woodland, and the large coppice stools.

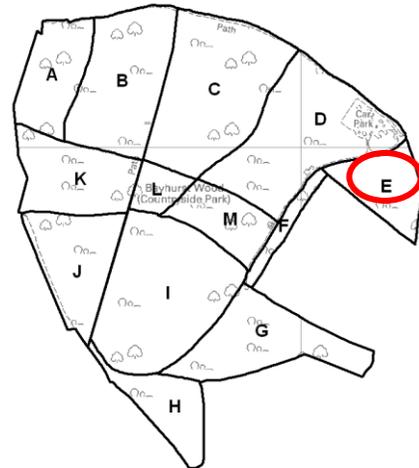
Work received : Bridlepath fence has been replaced in this section.

Work required: Bridlepath will require some widening and scalloping occasionally.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment E



Description: Former museum area. Largely coppiced hornbeam, with some other trees: oak, birch, holly, 2 good standard hornbeams. Mainly sparse ground flora of bramble and honeysuckle, but a fine spread of bluebells on north side.

Regeneration: Hornbeam regenerating well.

Objective: Maintain as coppiced woodland. Encourage and maintain, what is probably the largest concentration of bluebell in this wood.

Work received: The fenced area was coppiced in 2010 and a smaller section was coppiced along the bridle path in 2015.

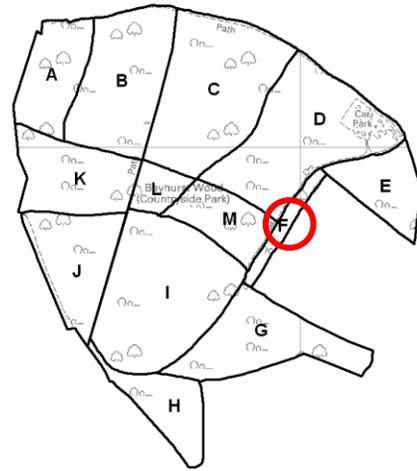
Work required : Maintain fence for health and safety when burning charcoal.

Subsidiary: The charcoal is sold from the woodland centre.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment F



Description: Widely spaced coppice stools with some standard oaks and hornbeams, holly, birch. Several old, large stubbed hornbeams and 1 wild service tree along the wood boundary.

Regeneration: Hornbeam (many in places), a few oaks, yew.

Objective: Mixed woodland strip.

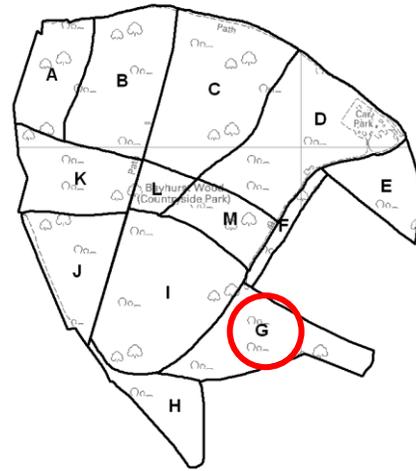
Work received : None.

Work required: Maintain bridlepath/cycle path in open condition.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment G



Description: Standard oaks, beech (some large dead standing), holly (several large), Yew, with scattered coppice. A number of stubbed hornbeams along wood boundary. Very wet on northwest side. Dense bramble in places, with bluebell at northern end of “finger”. Several wild service trees in this area. The largest of which blew down in 2023.

N.B. There are several wild service trees in this unit, including one large, maiden.

Regeneration: Oaks, beech, hornbeam, holly.

Objective: Leave to succeed to high forest.

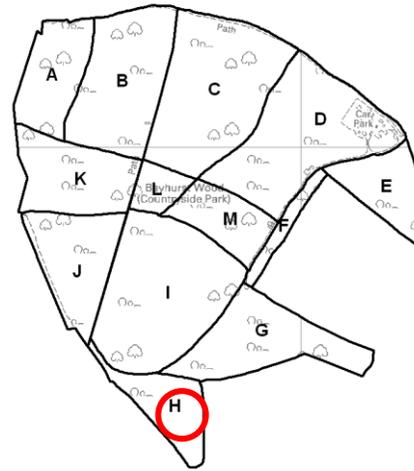
Work received : One small section was coppiced in 2011.

Work required : Bridle path to be kept open.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment H



Description: Recently coppiced with some standard trees. Dense bramble, with some bluebells at southern end.

N.B. This unit contains a large pond which is superb for wildlife. There is one wild service tree next to the pond. Also a small patch of wood anemones.

Regeneration: Beech (a few).

Objective: Leave to succeed to high forest.

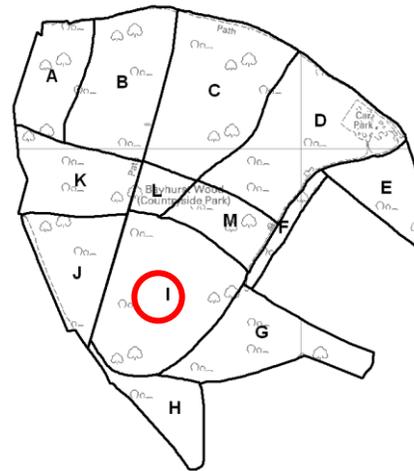
Work received : A section of the pond had silt removed in 2015 and willows were coppiced round its perimeter.

Work required: Keep bridlepath and U35 open as possible. Maintain pond as open water in parts and prevent from succeeding to woodland.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment I



Compartment I.

Description: Mixed woodland with oaks (many tall thin), hornbeams, holly (widespread), birch (a few), beech. Several large, dead oaks in southwest corner. Coppiced hornbeams, single tall coppiced rowan and several coppiced sweet chestnuts.

Regeneration: Hornbeams, beech, chestnuts, oak (several together).

Objective: Retain mixed wood.

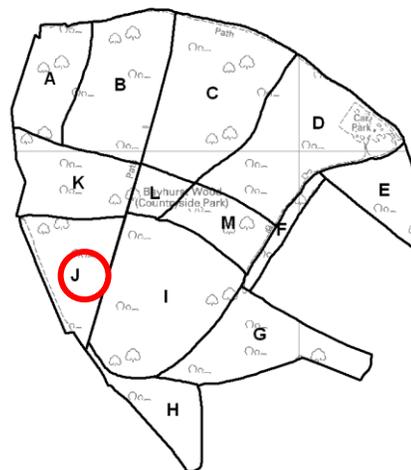
Work received: The bridlepath has been kept clear of vegetation annually.

Work required: None required.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment J



Description: Mixed woodland with some coppice. Oaks, holly (widespread). Birch (a few old, tall), beech. Generally sparse ground flora of bramble and honeysuckle.

Objective: Maintain as mainly mixed woodland and allow to succeed to high forest.

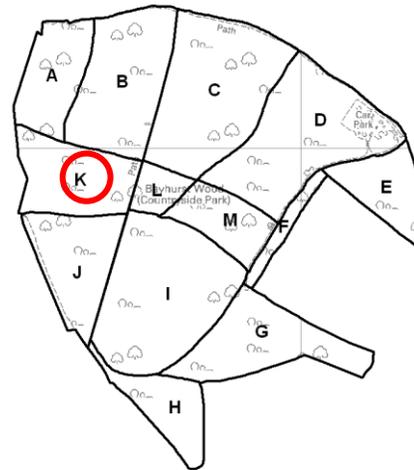
Work received: None.

Work required: Leave to succeed to high forest.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment K



Description: Mainly oak-hornbeam coppice, with holly, a few standard hornbeams, some birch. Dense brambles in southwest where some recent coppicing to allow light to horse-ride.

Regeneration: Beech, holly.

Objective: Maintain as coppiced woodland.

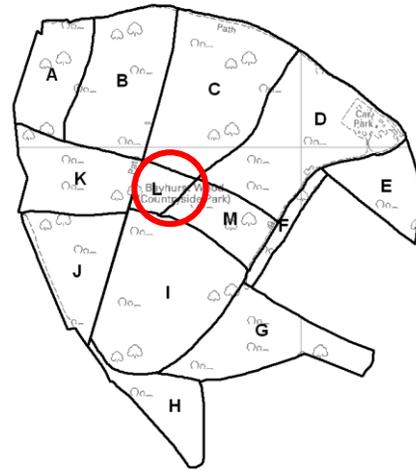
Work received : None

Work required: Allow to succeed to high forest.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment L



Description: Mixed woodland with no significant coppice. Oak, holly, birch. Widespread bramble.

Regeneration: Beech, hornbeam (a few), holly.

Objective: Maintain as mixed woodland.

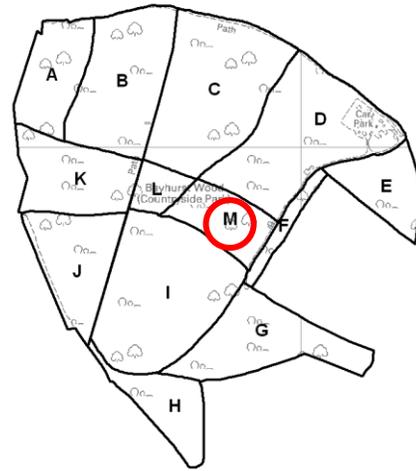
Work received : None

Work required: Leave to succeed to high forest.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment M



Description: Mixed woodland with some coppice. Oak, beech, holly (widely scattered), birch (a few), standard hornbeams (several).

Regeneration: Little, a few beech.

Objective: Maintain existing coppice.

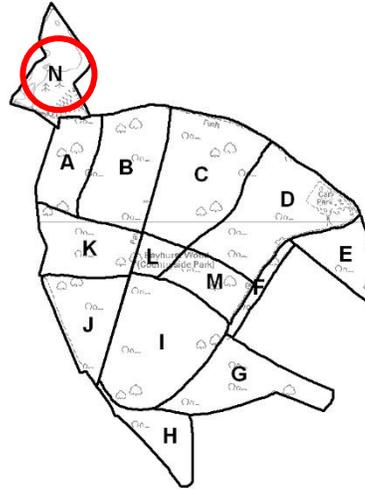
Work received: An area was coppiced in 2016

Work required: None required.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2024

BAYHURST WOOD

Compartment N



Compartment N (Tarlton's Lake).

This area of 2.8 hectares in size, was formerly managed by the Hertfordshire and Middlesex Wildlife Trust under an agreement with Hillingdon Borough Council. It is included in the Ruislip Woods NNR and now managed by the Hillingdon Borough Council.

History.

Tarlton's Lake appears to have been formed in the second half of the eighteenth century. It was part of the estate belonging to the nearby Breakspear House until the death of Captain Tarlton's widow in 1951, when it was acquired by Middlesex County

Description

The site is centred around an artificial lake created by the damming of a small stream. This now dries up in most summers. A mixture of naturalised and native flora. Includes Wild Tulips (*Tulipa sylvestris*) for which Harefield is the only site for the London area, and Moschatel (*Adoxa moschatellina*), an increasingly declining plant in the London area. A number of uncommon bryophytes have also been recorded from here. There are several wild service trees. There is an extensive Badger sett of long standing.

Objective: Maintain in present condition.

Work received: The path around the unit has been cleared as required and a new fence has been erected to replace old one.

Work required: Maintain path and fence.

Section 8

POOR'S FIELD

8.1 GENERAL INFORMATION

History

The last remaining relic of the common wasteland which used to cover a substantial area in the north of the Parish of Ruislip and was of considerable importance in the local economy from medieval times until the nineteenth century. The waste is first recorded in 1295 being termed the out-wood (to distinguish it from the enclosed area of Park Wood). Trees appear to have originally existed in considerable numbers but grazing and cutting would have gradually reduced them until by the early seventeenth century the common waste was generally denuded of trees when Robert-Cecil, Earl of Salisbury in 1608 sold all the wood and timber and was termed the open common (as distinct from common wood such as the, by then, enclosed Copse Wood).

Poor's Field was the largest of three fragments of the open common set aside at the enclosure under an Act of Parliament of 1804 for the use, as common grazing land, of "the real and true occupiers of cottages only, as their share and interest of the said common and waste lands, in respect to their occupation and residence therein only whose rents shall not exceed five pounds per annum, and having no other house or place of residence". The cottager's commons were vested in trustees who were given power to make regulations for good management. The Enclosure Act stipulated the provision of a right-of-way of breadth of 25ft (7.6M) for the purpose of carrying gravel during the month of May.

In 1909 the Ruislip & Northwood Urban District Council became responsible for electing eight of the thirteen trustees. By this time only five or six people were still exercising their rights and by 1938 there were no applications for grazing rights. In July 1939 this largest Poor's Field was conveyed to the Urban District Council without payment, in fee simple subject to the rights of pasture, and the Council covenanted with the trustees that the land would be used and maintained as an open space for the purpose of recreation and no other.

Some grazing with farm cattle continued but finally ceased following a widespread outbreak of foot and mouth disease in 1956.

Poor's Field was registered as common land by the Hillingdon Borough Council following the introduction of the Commons registration Act of 1965.

POOR'S FIELD (Up-date to the 1982 LTMP).

GENERAL INFORMATION

1. Removal of invasive scrub and some sizeable trees has continued. The redevelopment of the grassland has created what is perhaps the greatest extent of lowland heath vegetation here for fifty years.

2. Grazing with cattle since 1997 has contributed to this, although, with the number of cows currently grazing it has been found necessary to cut and bale at the end of the growing season to contain rank vegetation.

3. The cattle have been present from spring to autumn and have been a great attraction with the public. Currently they are the attractive old breed of sussex browns.

4. A number of seedling apple trees had become established (see LTMP p.81). After the deaths of two cows (different years), apparently from eating the apples, it was decided to remove the trees which are not commensurate with the heathland flora.

5. An interesting conservation problem has emerged with the grazing by cattle. Certain plant species have suffered by being eaten, notable spotted orchids (*Dactylorhiza fuchsii*), seedling heather (*Calluna vulgaris*), harebells (*Campanula rotundifolia*), and possibly pignut (*Conopodium majus*). This has been solved for the orchids by protection with temporary fencing. Fastening down pieces of gorse over young heather with wooden pegs through which it can grow has proved a successful protection. Harebells are very difficult to find until they bloom. They are one of the important species on Poor's Field. Keeping them out of the first field will solve the problem.

6. The historic track way along the east side of compartment B and continuing along the west side of compartment A (see LTMP pp 77, 80 and 81) has gradually been cleared and now exists as a sheltered grassy ride with bushes on either side, suitable for birds and butterflies.

Tenure

Entirely under the control of the London Borough of Hillingdon. Entirely within the Ruislip Woods Site of Special Scientific Interest and from 1997 within the Ruislip Woods National Nature Reserve. **(Map 1)**.

Map Coverage

See **Maps ???** accompanying this report.

Ordnance Survey Sheet 176 (1:50,000 series); national grid reference TQ (51)/088898 (approximate centre of common).

Size

16.20 hectares (40.9 acres)

Physical Features

Rising from just under 55m along its eastern boundary to a crest of just over 61m in the middle of the western side.

Post Pond at the extreme northern end, about 15 x 6m (50 x 20ft) fed by streams from Copse wood. Another pond of about 9m (30ft) diameter, the Round Pond existed at the southern end, west of the main path; this was destroyed in about 1970 during the laying of a main gas pipe, but re-instated in 1980 on the recommendation of this working party.

Geology, Geomorphology and Soils

The Ruislip Lido valley exposes the Reading Beds (**Map??**). On Poor's Field these occur as gravelly clay changing to soft orange sand at the northern end. These are over washed to some extent on the western side by silt from the London Clay which is exposed in Copse Wood.

Chalk lies within 9m (30ft) of the surface in the lower part of the field and has resulted in several shallow swallow holes appearing.

Over most of the field only a thin acid soil exists. In the wetter areas on the western side a turfy-peat layer has accrued. The growth of oak/hawthorn scrub, particularly in the central area, which existed until being mostly cleared in 1980 has resulted in some parts having a leaf-mould top soil.

Hydrology and Drainage

The main drainage stream of Copse wood flows into the Post Pond at the north end from which it flows directly into "The Finger" of Ruislip Marsh at the northern tip of the Ruislip Local Nature Reserve. The south-western portion bordering Copse Wood is wetter. Water from here drains away via a ditch running across the field to the Reservoir. Ditches bordering Copse Wood, the track way and the Reservoir boundary were re-excavated during 1980.

Vegetation

The vegetation is essentially that of a typical acid soil heathland with bent (*Agrostis*) and fescue (*Festuca*) grasses with heather (*Calluna vulgaris*) and gorse (*Ulex europaeus*) in the drier areas, and tufted hair grass (*Deschampsia caespitosa*) and soft rush (*Juncus effusus*) in the wetter parts. Some hawthorn had probably been present of a very long time, particularly on the higher ground, but the growth of dense oak/hawthorn/birch scrub (particularly since the cessation of all grazing in 1956) eliminated large areas of heath and practically all the ground flora. Some attempts were made to clear small parts of the scrubby the Hertfordshire and Middlesex Trust for Nature Conservation but these soon regenerated. On the recommendation of this Working Party, to return the area to its traditional open aspect (**Fig 23**) during the spring and summer of 1980 almost all the scrub was removed, leaving only some of the larger oaks and birches. During 1980 the exposed bare ground was colonised mainly by creeping soft grass (*Holcus lanatus*), black nightshade (*Solanum nigrum*) and elder (*Sambucus nigra*). Most of the stumps of the cut trees have started to sprout and further action to prevent this is recommended below.

If the re-growth of scrub can be prevented gradual recolonisation by typical heathland plants is expected to occur but the rate of this might be affected by the leaf-mould which developed under the scrub.

A detailed account of the flora as it existed only a few years after grazing ceased is given by Wrighton (1959). For a checklist of the flowering plants recorded see Wrighton (1979).

Access

The main point of access is via the gate from Reservoir Road. Entry to Poor's Field can also be made from Copse Wood at a number of places along the boundary and also from the public footpath across Northwood Golf Course at the extreme northern end.

Bridleways and Footpaths

The main path traverses the length of Poor's Field from the gate at Reservoir Road to the stile by the Post Pond leading to the public footpath across Northwood Golf Course which continues to the Rickmansworth Road. This path is made up with loose aggregate from the gate to the top of the rise. Other less well defined paths follows the eastern boundary.

A permitted bridleway, established in 1981, runs along the eastern side of the common from the south end of the Nature Reserve, crossing into Copse Wood compartment H.

Parking

There are two car parks available to the public. Both are situated at the end of Reservoir Road.

Fire Precautions

Access for fire engines is possible through the gate from Reservoir Road. However, it should be noted that it is unlikely that a fire would have any long term effect owing to the type of vegetation growing on heathland. Indeed periodic burning would tend to encourage the spread of heather.

8.2 SPECIAL FEATURES OF INTEREST

Aesthetic and Artistic

1. Heathland with its gorse, heather (particularly when in bloom) and other characteristic plants has certain wild charm and beauty all of its own that for many is additionally evocative of earlier times when this type of scene was more widespread.
2. Maintenance of Poor's Field as short heathland (rather than scrub with trees) provides suitable open setting for the waters of the Lido and provides good views over the north-west facing slope of Park Wood.
3. Large open spaces are scarce in the Borough and here it is possible to roam freely now that the scrub has been removed.

Archaeological

1. Poor's Field is the last remaining portion of the waste on which common rights of grazing were exercised by the inhabitants of the Parish of Ruislip from medieval times onwards.

2. Additionally it was the area set aside at the Enclosures in 1804 for use by cottagers for grazing and hence acquired its present name.
3. The 7.6m (25ft) wide track way stipulated in the Enclosure Award for carrying gravel from the pits at Northwood is still present (but unused) to the west of the present main path.
4. The ponds were formed in 1809, after the enclosure, as drinking pools for grazing animals.

Natural History

1. Heathland is a habitat that is rapidly decreasing particularly in the south of England.
2. About 180 species of flowering plant have been recorded on Poor's Field.
3. These include:
 - a) Heather or ling (*Calluna vulgaris*) – a decreasing plant in the London area.
 - b) Harebell (*Campanula rotundifolia*) – a typical heath plant.
 - c) Common spotted orchid (*Dactylorhiza fuchsii*) – very rare in the London area.
 - d) Heath lousewort (*Pedicularis sylvatica*) – extremely rare in the London area.
 - e) Petty Whin (*Genista anglica*) – an increasingly rare and decreasing plant of the London area.
 - f) Dwarf gorse (*Ulex minor*) – rare in the London area and of particular interest in view of its northern European distribution, being particularly limited to south-east England.
4. Butterflies include resident populations of the Small Skipper (*Thymelicus sylvestris*), Small Copper (*Lycaena phlaes*) and Common Blue (*Polommatus icarus*). Ringlets re-colonised after an absence of more than 40 years.
5. Breeding Birds include the Long Tailed Tit (*Aegithalos caudatus*) and several species of Warbler.
6. The ant-hills in the open grassy area are important feeding places for Green Woodpeckers (*Picus viridis*).
7. Because of its long continuity as rough pasture, also important for larger fungi confined to undisturbed grasslands, such as the Parasol mushroom (*Macrolepiota procera*).

8.3 DESCRIPTION OF COMPARTMENTS

To include:

Map of Compartments

Description

Regeneration

Objective

Work received

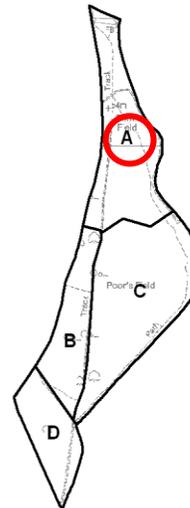
Work required

Subsidiary objective

Prescription

EVALUATION OF MANAGEMENT REQUIREMENTS 2024

POOR'S FIELD **Compartment A**



Description: Basically fescue (*Festuca*) – bent (*Agrostis*) grassland with some Yorkshire fog (*Holcus lanatus*) in the centre. Common gorse in the northern half and dwarf gorse towards the southern edge. The best stand of heather grow in the extreme north end and includes water plantain (*Alisma lanceolata*), least marshwort (*Apium inundatum*) and water forget-me-not (*Myosotis scorpioides*). Scrub growth of oak/hawthorn along the western edge and birch on the eastern side had built up during the last 30 years; this was largely removed during 1980. A seeding apple is growing near the centre. Oak, birch and hawthorn regeneration was formerly excessive and to the detriment of the heath plants. Seedling heather plants noted to the south of the main growth.

Update to the RWLTMP

This remains largely open heathland with many anthills, and a few tall birch trees. This compartment holds a majority of the populations of some of the more interesting plants, such as heather, petty whin (*Genista anglica*) and dwarf gorse (*Ulex minor*).

The patches of dwarf gorse have increased in recent years in spite of the loss of an area in the fire of 1996. The burning area was surrounded by a strip of rotovation to contain it. Subsequently ling regenerated in the disturbed soil, but grew very slowly due to grazing. This has now been corrected (see above). The compartment now has ling at all stages of development.

Regeneration: Some scrub has been cleared but shows signs of sprouting. Gorse has re-grown well after coppicing.

Objective: Open heathy grassland with heather and gorses.

Control of scrub on a rotational basis.

Reinstatement of hawthorn boundary hedges to produce a suitable habitat for nesting birds, hedgerow plants e.g. greater stitchwort, (*Stellaria holostea*) and insects.

Work received: In 2009 Poor's Field was given unfavourable status by Natural England. Since then much work has been carried out, including yearly mowing of scrub and scrub removal in some areas. In addition, cows have grazed the field every year since 2012. In 2019 Poor's Field was once again awarded favourable condition.

Work required: Continue to mow yearly and to clear scrub on rotation. Some scrub should be kept at all times. Coppice the old gravel route on rotation.

Subsidiary objective: The old way to the gravel pits is particularly obvious with its boundary banks, along the western side and should be retained.

EVALUATION OF MANAGEMENT REQUIREMENTS 2024

POOR'S FIELD **Compartment B**



Description: Wet grassland with such plants as soft rush, devil's-bit scabious (*Succisa pratensis*), sedges (*Carex* species), eyebrights and common spotted orchid. Formerly smothered by largely impenetrable oak/birch/hawthorn/bramble scrub until cleared in 1980. By the end of 1980 the cleared areas were being recolonized by a variety of plants such as creeping soft grass (*Holcus mollis*) and black nightshade (*Solanum nigrum*). Common spotted orchids have been increasing for a number of years. In the northwest corner is a colony of cow-wheat (*Melampyrum pratense*). This is the only part of the NNR apart from Park Wood where this unusual plant occurs. This is the main area for reptiles.

Regeneration: The southern end is more open grassland, with scrub developing more rapidly farther north.

Objective: Maintain as damp heathland with a few silver birch trees strategically positioned for the best visual effect.

All but the largest oaks to be eliminated.

Groups of up to three birches not closer than 20m apart to be encouraged.

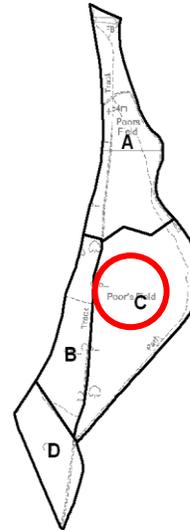
Work received: As with most of Poor's Field, this section has been mown yearly. Large sections of secondary woodland and tall scrub have been cut short enough to mow in recent years.

Work required: Deal with re-growth from stumps, reinstate the western boundary hedge and cut the grassland as described below.

Subsidiary objective: The old way in the eastern side to be maintained.

EVALUATION OF MANAGEMENT REQUIREMENTS 2024

POOR'S FIELD **Compartment C**



Description: Heathy grassland with some gorse. Dense oak/hawthorn scrub occurred over most of the western part until it was cleared in 1980. The area has been colonised by a variety of species but predominantly creeping soft grass, elder and black nightshade. This is the only section that contains broom (Genisteae). The south east section has developed into wood pasture. The north west corner is now fairly well developed woodland of mainly birch, oak and hawthorn and provides a valuable shelter for cows and deer.

Regeneration: Gorse has re-grown in profusion after scrub was cleared in small area next to D.

This compartment developed extensive scrub/secondary woodland at times in the past. Much of this has gradually been removed, particularly on the eastern side. .

Grassland has re-established in a satisfactory way with heathland plants gradually appearing.

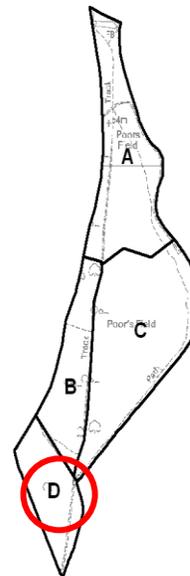
Objective: Maintain as grassy heathland with small groups of birches on the higher ground, and a few sallows on the lower ground. Retain remaining oaks to maintain the wood pasture aspect of this area.

Work received: This area has been mowed continuously and is slowly resembling heathland with patches of gorse and a few broom. The southern section has developed into a wood pasture with nicely spaced spreading oaks. The area of secondary woodland is mostly mixed hawthorn and birch and has been conserved as such but prevented from spreading.

Work required: Continue to mow yearly and cut scrub islands on rotation when they become too big.

EVALUATION OF MANAGEMENT REQUIREMENTS 2024

POOR'S FIELD **Compartment C**



Description: Largely grassland with some gorse and broom (*Sarothamnus scoparius*) towards the north and west. The north-west sector is wet and formerly included a small pond which was reinstated in 1980. Several attractive plants grow here including the aromatic water mint (*Mentha aquatica*) and Sphagnum moss. Some scrub was cleared from the western side in 1980. The Round Pond, which was destroyed in about 1970 was re-instated on the recommendation of the Working Party but slightly to the north of its former site to avoid interference with the gas pipe line. Ditches were also cleared and re-shaped to divert water into the pond and take water away from footpaths. Unfortunately the pond was again mistakenly re-instated on the pipe line and in 2021 was dug up by the energy company in order to put a protective covering over it. It is still a valuable temporary pond for wildlife. This is the best area for pignut, harebell and heath bedstraw. This section contains the core reptile area and the core harebell field.

Regeneration: The coppiced gorse in this area has regenerated well.

Objective: Maintain as heathy grassland with trees confined to the boundary hedge. The wet area to be maintained around the now re-instated pond.

Work received : Management in this compartment has concentrated on maintaining and enhancing a small area for reptiles. There was no grazing in 2023 to allow harebells and heather to grow.

Work required: Control scrub in the reptile area annually in late autumn and winter. Keep the cows out of this field from June to October to allow harebells to flower.

Section 9

GRUB GROUND

9.1 GENERAL INFORMATION

History

Original entry in RWLTMP

Formerly part of Park Wood until it was cleared sometime between 1865 and 1897. During World War II an American military camp was sited at the extreme southern part of the area. At an unknown date the area was purchased by Wembley Hill Estates Ltd, a company which intended to erect housing on the site. Permission to erect buildings was never given to the company and the London Borough of Hillingdon was obliged to purchase the land. The sale to the Council took place on 6th September 1971 and it was envisaged that the area would be used for the creation of school playing fields. This development has not taken place but in 1978-79 Grangewood School was erected on the southern end of the site; the remainder is still allocated for educational purposes. However, it should be noted that there are no restrictive covenants on the area.

Update to the RWLTMP

Grub Ground is now officially part of the Ruislip Woods National Nature Reserve and managed by the Council with the rest of the Woods and Poor's Field. The following sections bring it into line with the rest of the NNR in terms of compartment descriptions. Basic information is as detailed in the LTMP p. 88-91, with any changes listed here. Sixty years ago Grub Ground was basically an open heathy area with a few trees and bushes.

The development of the largely oak scrub has been remarkable, particularly in Compartment C where it has progressed into secondary woodland. It is difficult to believe that Woodlarks nested in this southern part in the 1950's.

Grub Ground is much used by dog-walkers who are increasingly constrained by the developing scrub/secondary woodland. Gradual clearance of this through cutting paths will increase their walking choices in addition to enhancing the wildlife. The area is arguably the best place in the NNR to see butterflies and its current three species of migrant warblers indicates its potential for birdlife.

Tenure

Entirely under the control of Hillingdon Borough Council. Not designated as a public open space, currently not within the Site of Special Scientific Interest.

Map Coverage

See Maps accompanying this report.

Ordnance Survey Sheet 176 (1:50,000 series)

National Grid Reference TQ(51)/099.888 (approx centre of area).

Size

11.9 hectares (29.5 acres), less the area occupied by Grangewood School.

Physical Features

Rising from about 46m in altitude in the extreme south-west corner to a largish flat area in the north-east at 56m altitude.

Geology, Geomorphology and Soils

London Clay except for the lower area to the south where the Reading Beds are exposed. Clay soil with gravel mixtures on higher ground.

Hydrology and Drainage

A wet band stretches from east to west just north of the middle of the area giving rise to marsh-type vegetation. An old man-made pond lies in the boundary with compartment H of Park Wood which feeds a stream running through that wood. It is separated by an earth bank from the wet area which helps to maintain the marsh conditions.

Vegetation

Basically grassland becoming increasingly dominated by hawthorn/oak scrub. A few large oaks (probably relics from the former wood) are scattered particularly in the southern part. The damper areas contain rushes (*Juncus* species) and bur-marigold (*Bidens cernua*) whilst a few heather (ling) plants occur in the south-west. During 1979 a strip some 9m (10 yards) wide, along the northern boundary adjoining part of the bridleway was cleared of scrub. By 1981 the area was covered by a thick growth of cow-wheat, a distinctive rare plant in Middlesex. See Wrighton (1979) for additional information on the flora.

Access

The area can be entered from Park Wood at several points. A short footpath between houses joins it with Park Avenue. Access from Fore Street can be obtained near the entrance to Grangewood School and also down Ten-pound lane into the north-east corner.

Parking

On residential roads, Park Avenue or Fore Street.

Fire Precautions

Access for a fire engine exists down the recently surfaced Ten-pound lane.

9.2 SPECIAL FEATURES OF INTEREST

Aesthetic and Artistic

1. The grassy areas provide attractive views with Park Wood as a back-drop and are very popular with walkers.
2. The pond attracts many, especially youngsters.

Archaeological

Contains probably the best preserved section of the massive ancient Park boundary bank. It is of great historical importance almost certainly predating the Domesday survey. It is also of considerable interest to local history in that it shows the north-east corner section of the ancient 'park for wild beasts' and how this determined the later field shapes (as the south-east corner appears to have given rise to the very pronounced bend in Eastcote Road). The later northern extension of Park Wood required an additional boundary bank. This straight, smaller bank can also be seen where it joined up to the earlier Park bank some half-way down the eastern side, leaving the redundant northern part of the ancient bank just discernible.

Natural History

1. The grassland supports a typical flora and one of the largest populations of Meadow Brown (*Maniola jurtina*), Gatekeeper (*Pyronia tithonus*) and Small skipper (*Thymelicus sylvestris*) butterflies in the area.
2. In the 1950's both Red-backed Shrikes (*Lanius collurio*) and Woodlarks (*Lullula arborea*) bred here. Both these birds have now become rare in Britain but the fact that such birds found the area attractive shows its potential. Apart from some increase in scrub the area remains much as it was then and should be suitable for these birds should they increase in numbers as has happened with several other species.
3. The large area of uncommon cow-wheat has already been mentioned and devil's bit scabious (*Succisa pratensis*) and zig-zag clover (*Trifolium medium*).

PRESCRIPTION

1. Because of the great archaeological interest (**see page 170**), its attraction for walkers and use for Scout/Guide activities (see above) we recommend that the remaining open area of Grub Ground be designated as a public open space by the Council.
2. As a contrast to the other areas covered in this report, Grub Ground should be maintained as mixed scrub/grassland.
3. This does not mean that no maintenance will be required. The scrub will need to be held in check.

4. It is recommended that one new path be cut through the scrub each year. The path to be 8-10 yards wide and to connect two easily accessible points to encourage use by walkers.
5. The exposed ground should develop into healthy turf within two or three years which the treading by walkers will help to maintain.
6. The large oak trees should be maintained. Several have had fires lit inside them. These victims should be suitably treated to prevent this recurring.
7. The eastern boundary hedge should be cut and maintained to provide the best public presentation of the ancient boundary banks and a view across the adjoining grazing meadow.

9.3 DESCRIPTION OF COMPARTMENTS

To include:

Map of Compartments

Description

Objective

Work received 2017 - 2024

Work required

Subsidiary objective

DESCRIPTION OF COMPARTMENTS

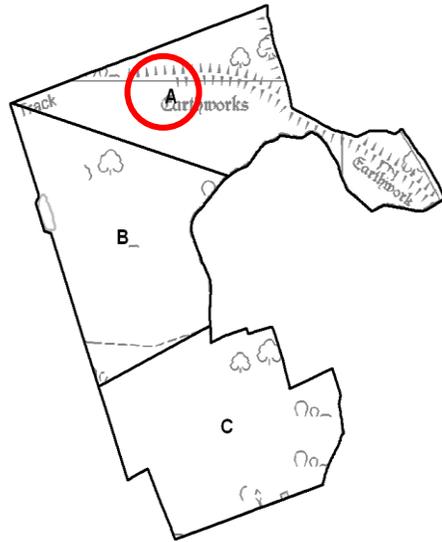
Compartment boundaries are as shown on Map.

The objectives for each unit derive from the principles to be adhered to in the management plan for the woods (pp.29-31) of the LTMP plus any alterations listed in this extension.

COMPARTMENT A

EVALUATION OF MANAGEMENT REQUIREMENTS 2024

Grub Ground Compartment A



Description: Areas of scrub (mostly oak but some birch, rowan, and patches of aspen) with secondary woodland in the eastern finger. Several cleared areas, particularly along the northern boundary. Some dense stands of rosebay (*Chamerion angustifolium*) have developed. Cow-wheat (*Melampyrum pratense*) is widespread. Open grassland with tormentil (*Potentilla erecta*) with slender St John's-wort (*Hypericum pulchrum*). Patch of five alder buckthorn (*Frangula alnus*) in northern cleared area c. 2.5m high.

Objective: Maintain open areas and remove some scrub on the Park Pale to enable the public to see it.

Work received: The vegetation along the Park Pale earthbank was partly cleared in this section in 2019. The main open areas were mown annually.

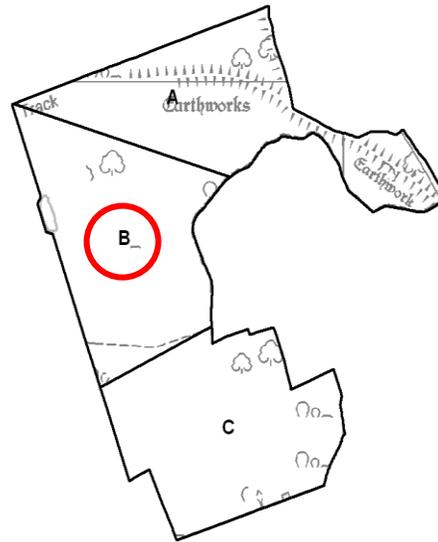
Work required: Open areas should be cut annually to remove tree seedlings and to control Rosebay Willowherb.

Subsidiary objective: Any work should recognise the existence of the English Heritage Scheduled Domesday Park boundary (Park Pale) across the N.E. section of the site.

COMPARTMENT B

EVALUATION OF MANAGEMENT REQUIREMENTS 2024

Grub Ground **Compartment C**



Description: Old open grass area running the length of the western boundary with Park Wood and the southern end of this compartment. Heath type flora includes tormentil and heath milkwort (*Polygala serpyllifolia*) which is rare in the London Area. Some broom (*Cytisus scoparius*) of possible garden origin in the NW corner and an increasing stand of devilsbit scabious (*Succisa pratensis*). Dense stands of rosebay and some bracken are developing along the western side. The area near the pond is less damp than formerly. Bur-marigold (*Bidens tripartita*) seems to have been lost, but lesser spearwort (*Ranunculus flammula*) survives.

The central cleared area is largely of taller grass species, rushes and a few sallows, but includes greater birdsfoot trefoil (*Lotus pedunculatus*) and cow-wheat.

The rest of the area is scrub (largely oak, but with a few cherry, birch, holly, yew, aspen, rowan, hawthorn) of varying degrees of density and spreading.

All three species of British newts have been recorded in the pond.

Objective: Maintain heathy open areas, and central clearing. Reduce areas of rosebay along western side by annual cutting.

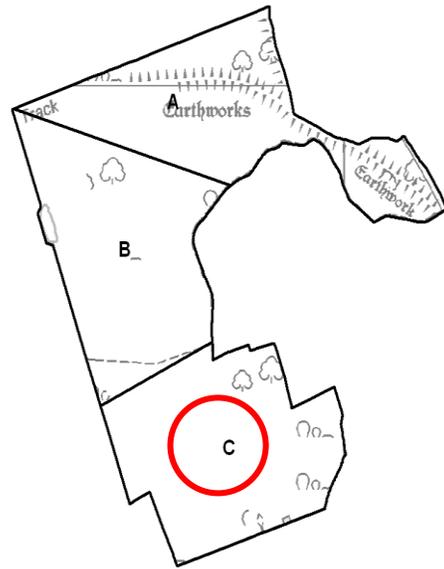
Work received : Open areas were cut annually.

Work required: Cut back scrub at edges of heathy areas. Continue annual mowing of open areas. Stub hornbeams on western boundary to try to create a laid hedge.

COMPARTMENT C

EVALUATION OF MANAGEMENT REQUIREMENTS 2024

Grub Ground Compartment C



Description: Dense secondary woodland, which has largely developed in the last 60 years. Tall young oaks (diameters to c.35cm), with an understory of a variety of tree species. A couple of old sessile oaks (*Q. petraea*) remain.

Objective: Keep statutory paths wide and open and maintain existing grassland areas.

Work received : This area was mown annually and sapling oaks were cut in the grassland area.

Work required: Mow the paths and grassland areas annually.

Subsidiary objective: Along the eastern boundary there is some of the 19th century iron fencing (see Compartment A subsidiary objective) in good condition. This should be maintained as an interesting historic feature as well as continuing to mark the boundary. See B.

Section 10

LOCAL NATURE RESERVE

10.1 GENERAL INFORMATION

History

The Ruislip Local Nature Reserve is thought originally to date from the construction of Ruislip Lido in the early 1800's when the lake extended into the Reserve. A stream was present prior to the establishment of the Lido and some of the oldest willows may well be relicts from that time. The site was established as a Local Nature Reserve under Section 19 of the National Parks and Access to the Countryside Act 1949 on 6th May 1959. The site is designated an SSSI and in May 1997 it became part of the Ruislip Woods National Nature Reserve. The Reserve is owned by the London Borough of Hillingdon and managed by The Friends of Ruislip Nature Reserve.

Tenure

1. The site is owned by the London Borough of Hillingdon and is located beyond the northern end of Ruislip Lido. It lies in a valley of a tributary to the Grand Union Canal and is fed by two main streams, one rising in Copse Wood and the other in Northwood Hills. To the north and east is Haste Hill Golf course and to the west is Poor's Field. The site is an SSSI and forms part of the Ruislip Woods National Nature Reserve.
2. Since 1992 the Reserve has been managed by The Friends of Ruislip Nature Reserve. From 1959 to 1992 the Reserve was managed by the Ruislip Natural History Society who still maintains close links to it – the present warden since 1985, Mark Morgan, serves on the committee of this society.
3. The conditions controlling the management arrangements of the Reserve were notified by the then Urban District Council of the Ruislip-Northwood to the Nature Conservancy Council on the 1st August 1958 and copied to the Ruislip and District Natural History Society on 15th May 1959. These have now passed to the Friends of Ruislip Nature Reserve. The Council agrees to maintain the fence and gates, while the Friends group assume responsibility for controlling access, building bird hides and carrying out management of the varied habitats contained within the Reserve. The Friends of Ruislip Nature Reserve is a non-profit making organisation and is grant aided annually by the London Borough of Hillingdon.

Map Coverage

See Maps of Reserve accompanying this report
Ordnance Survey Sheet 176 (1:50,000 series)
National Grid Reference 089899 (approximate centre of Reserve)

Size

4.25 hectares

Physical Features

Mainly about 2m higher than Ruislip Lido at the southern end achieved in the 1950's by the deposition of rubble and soil to create a bank/causeway separating the Nature Reserve from Ruislip Lido. The land continues to rise slightly to the northeast. About 25% of the area is open water or waterlogged. Previously the level of the water was controlled by a sluice gate at the southeast corner however this is now kept closed and water finds its true level through seepage through the clay and some swallow holes in the south-west corner.

Geology, Geomorphology and Soils

The major part of the Reserve is on London Clay but silt deposits in the southern areas overlie this. In 1989/90 the main pond was excavated to a depth of one metre, a substantial amount of silt banked around the eastern edge, and an island created in the centre.

Hydrology and Drainage

The new enlarged pond is now approximately 1 acre in area. To the west, chalky material resulting from the excavation of an artesian well was distributed over the clay. Several sizeable swallow holes are present in this area.

Vegetation

Open Water

Marsh

Chalk and Acid Grasslands

Willow Coppice

Scrub

Woodland

Heathland

Streams and Ponds

Paths

Boundaries and Banks

Conservation of the habitats for native local and rare species of plant, bryophytes, fungi, lichens.

Mammals, Birds, Invertebrates,

Access

The Reserve is locked to keep disturbance of wildlife to a minimum however access can be gained by contacting the Warden or London Borough of Hillingdon's Community Woodlands Officer. Entry is made through the gate on Poor's Field. It is accessible by public transport – Bus H13 to Ruislip Lido

Bridleways and Footpaths

There is no statutory footpath through the Reserve, though the volunteers do maintain a system of paths within the Reserve for the use of authorised visitors.

Parking

Ruislip Lido car park is the nearest but 4 wheel drive vehicles can, weather permitting and by arrangement approach close to the gate of the Reserve across Poor's Field or through the grounds of Ruislip Lido.

10.2 SPECIAL FEATURES OF INTEREST

Natural History

The natural history of the Reserve is extensively documented and earlier studies on it are listed by subject in Snow (1970). The most important papers to appear since that time are those of Wrighton (1979) on the vascular plants, Hawksworth and Rose (1979) on the lichens and regular reports on birds appearing in the Journal of the Ruislip and District Natural History Society, (RDNHS). The establishment and aims of the Reserve are discussed in Anon (1960).

The varied soils and marshy area result in a very rich flora and fauna. The following have been recorded.

1. 195 species of flowering plants and ferns (Spooner 1988, RDNHS Journal 28)
2. 39 species of lichens (Hawksworth & Rose 1979, RDNHS Journal 22)
3. 8 slime moulds (Ing 1965, RDNHS Journal 14)
4. 150 fungi (Hawksworth 1993, RDNHS Journal 29)
5. 15 species of dragonfly (Spooner 1990, RDNHS Journal 28)
6. 95 species of hoverfly (Spooner 1990 –1992, RDNHS Journal 29)
7. Between 1975-80 1735 birds of 50 species were ringed at the Reserve (Morgan 1981, RDNHS Journal 23).
8. 248 varied species of Insects (Merrifield 1998-2002, private circulation list)
9. 12 species of Water snail (D C Seel 1964, London Naturalist)
10. In 2004 a specimen of *Lipsothrix nervosa* ("Southern Yellow Splinter") was found on the RLNR. This is a small yellowish Crane fly (daddy long-legs). It is a UK BAP Priority species and regarded as UK near-endemic.

Section 11

NORTHERN FINGER

11.1 GENERAL INFORMATION

History

The Northern Finger is the name given to the narrow strip of land through which runs the stream from Post Pond on Poor's Field to the north-western corner of the RLNR. "In the 1960's this area was a wide expanse of open though shallow water when it formed part of the local schools cross-country course" (personal recollection of Mr Ian Cantley". However since then succession has taken place and most of the area is reed/sedge marsh with many large crack willows. Since the introduction of cattle grazing on Poor's Field the whole area has been fenced off on this side. Here some oak regeneration has taken place together with oak stump re-growth. Elm regeneration is present however this is being slowed by some mature oaks in this area. In the centre area along the stream there are some large clumps of snowdrops (*Galanthus nivalis*)

Tenure

It is entirely under the control of Hillingdon Borough Council. It lies entirely within the Ruislip Woods National Nature Reserve.

Map Coverage

Ordnance Survey Sheet 176 (1:50,000 series)
National Grid Reference 088902 (Centre of area)

Size

0.75 hectares

Physical Features

52m of altitude and sloping to the south

Geology, Geomorphology and Soils

London clay and Reading beds. Some swallow holes. A thick layer of silt

Hydrology and Drainage

An intermittent stream runs through the site however due to damming caused by rubbish the water often disappears down the swallow holes without reaching the local nature reserve. One stream enters from the Post Pond on Poor's Field and another from across Haste Hill Golf course to the north

Vegetation

Crack Willows, sallows and snowdrops in the centre of the area. Oak, holly, hawthorn and elm on the western edge. On the east edge is a layered hawthorn hedge. In the summer there is evidence of an invasive species – Himalayan Balsam which is pulled out regularly by Ruislip Woods Volunteers

Access

From Poor's Field and Haste Hill Golf Course.

Bridleways and Footpaths

A footpath from Poor's Field runs along the northern end and eastern boundary

Parking

A car park is located by the entrance to Poor's Field from Reservoir Road

11.2 SPECIAL FEATURES OF INTEREST

Natural History

The old willows in the centre and northern end. Many lichens, some of which are locally rare. Elm regeneration. Reed/sedge marsh.

11.3 DESCRIPTION OF AREA

To include:

Objectives

Work received

Work required

Objectives:

- a. Manage the water entering the area so that it is allowed to disperse over the area thus achieving the first objective without adversely affecting the grounds of the golf course.
- b. Remove wind damaged trees from statutory path
- c. Control Invasive Species.

- d. Undertake flora and fauna surveys of the area.

Work received : No work has been carried out in the last 5 years apart from boardwalk repair and removal of several fallen limbs from the path.

Work required:

1. Breaches in the stream bank need to be maintained along its course to allow the water to enter the whole of the Northern Finger and achieve a flooded wetland area.
2. The stream should be prevented from damming up completely.
3. Himalayan Balsam removal by pulling out from June onwards to the end of the flowering season to prevent seed being formed. This needs to be carried out annually to prevent this plant entering the LNR.

Section 12

SURROUNDING AREAS

12.1 Description of areas

Relevant interests outside the boundary

**Ruislip Lido – wholly owned by LBH
Scout Campsite – wholly owned by LBH**

Map 1 in appendix 2 highlights the land owned by London Borough of Hillingdon adjacent to Ruislip Woods NNR. Much of this land is under Agricultural Tenancies, but departments within the Council directly manage some of the other land. Scope exists for negotiations with these departments to ensure the land is managed sympathetically and in keeping with the land adjacent to a NNR.

The possibility could exist for some adjacent land to be included, in future Environmental Stewardship Schemes.

Reference to and location of copies of leases and nature reserve agreements are included in the Ruislip Woods Management Plan 2003 – 08 (Appendix 2).

12.2 Prescription - if necessary

The possibility exists for some adjacent land to be included, in future Environmental Stewardship Schemes

Appendices

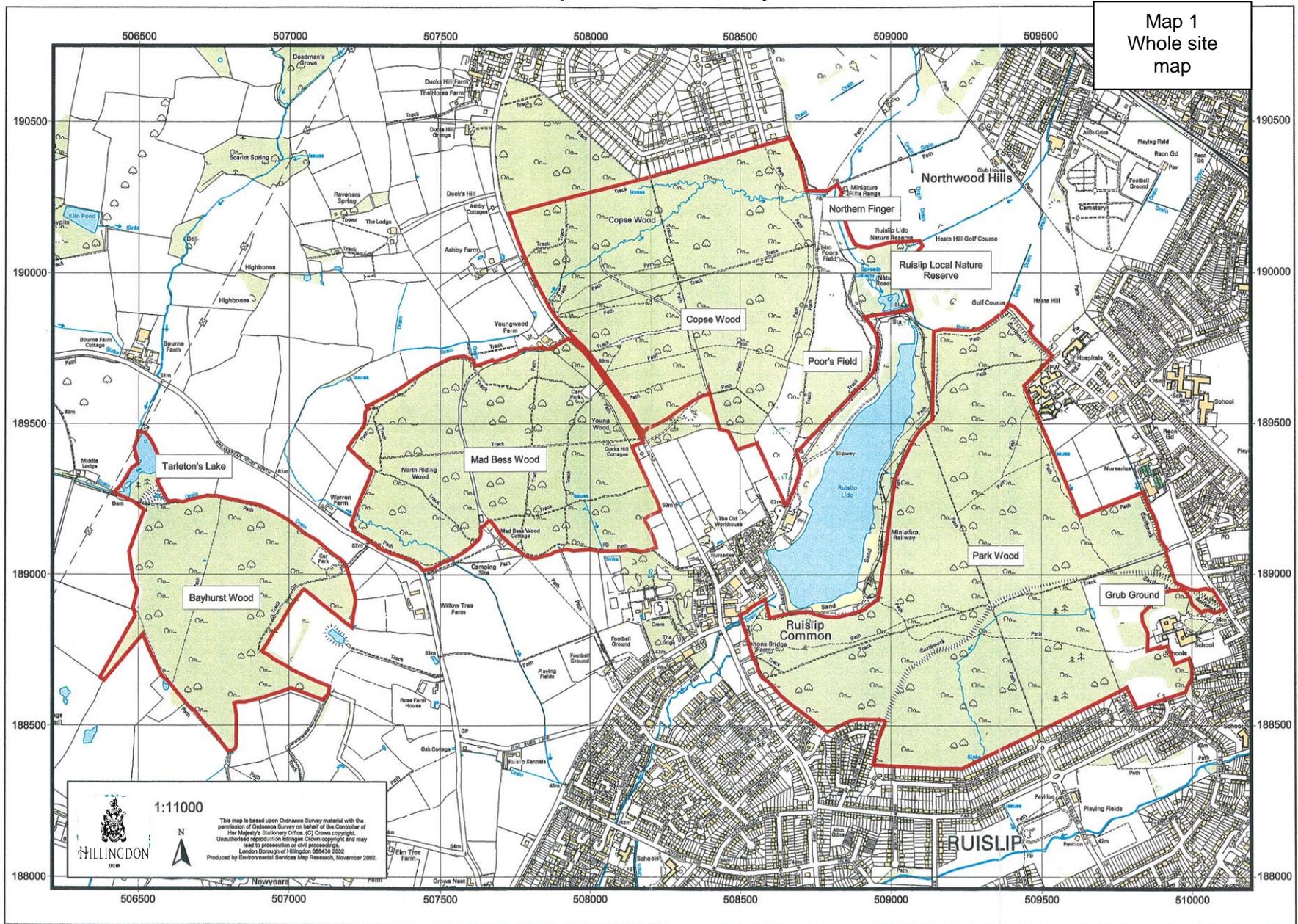
Appendix 1 Estate Assets

Inventory

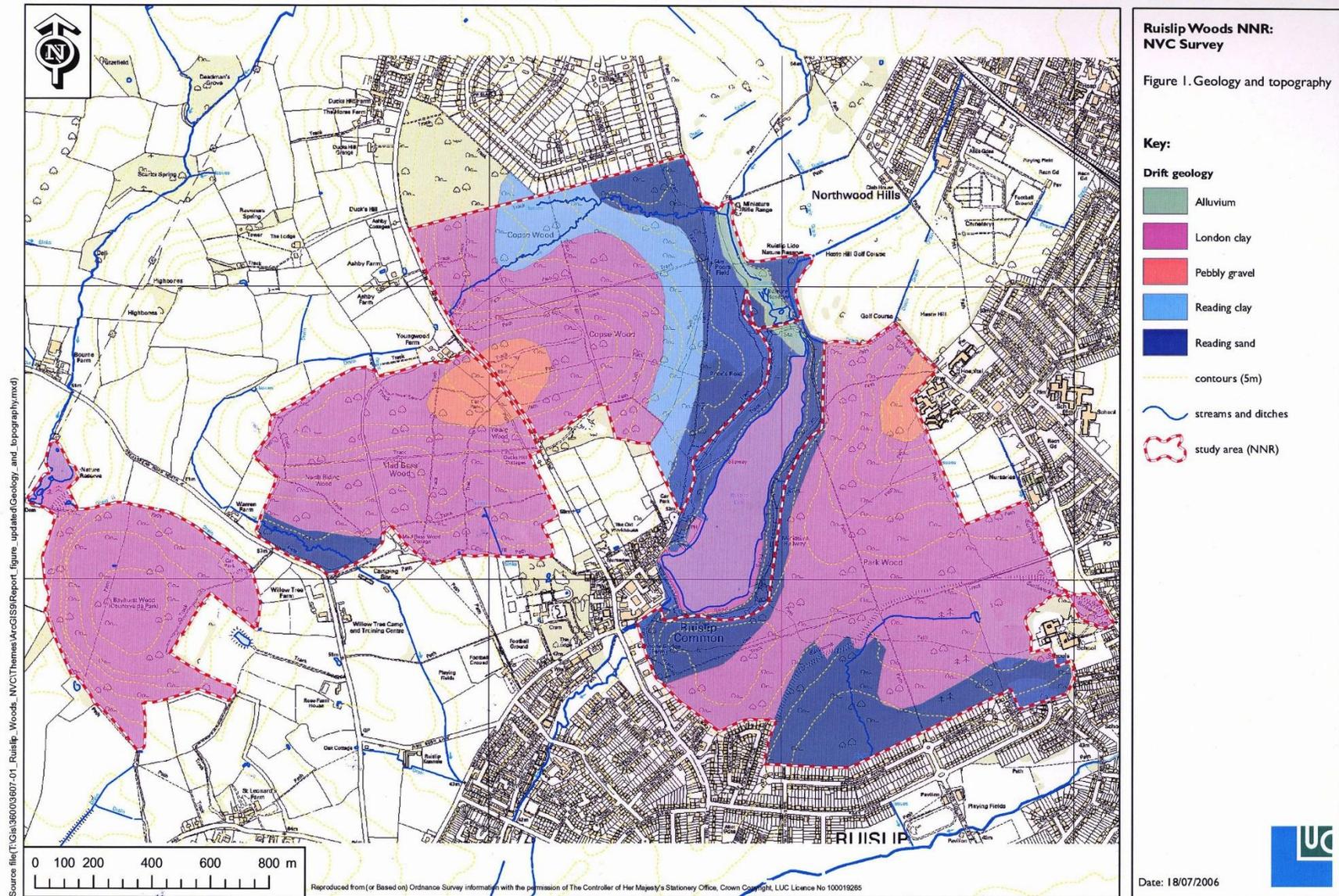
Asset	Location	Description
Car Park	Bayhurst Wood	Car parking for 100+ cars, Type 1 base, access by tarmac road. 2 No Height barriers
Wooden classroom/hut	Bayhurst Wood	Timber clad building once used as a classroom during wet weather
Shipping container	Bayhurst Wood	Storage container for small tools and equipment
Four picnic sites	Bayhurst Wood	Picnic tables and benches
Trough and water supply	Bayhurst Wood	Water trough and water supply for bridleway users
Car Park	Mad Bess Wood	Tarmac car park for 50+ cars, height barrier
Brick built shed	Mad Bess Wood	Brick built shed/stable. Converted into a badger hide in 2009. Also occasionally used by special needs group for storage.
Cattle trough and water supply	Poor's Field	Trough and water supply for grazing animals
Woodbanks	Whole site	Whole site is traversed by wood banks
Boundary Banks	Whole site	Approx 5000m of boundary banks
Earth Bank Earth	Park Wood	Work currently being registered with English Heritage as an ancient monument
Areas not in NNR		
Various	Ruislip Lido	Buildings currently leased to Whitbread PLC and Ruislip Lido Railway Society
Boat House	Ruislip Lido	Building currently used by Woodland staff and volunteers as mess room and storage.
Camp Site	Mad Bess Wood	Camping facility for up to 100 people
Camp site – Toilet and showers	Mad Bess Wood Camp Site	Prefabricated Male and Female/disabled toilet/shower blocks
Camp Site – stand pipes	Mad Bess Wood Camp Site	2 No stand pipes
Mad Bess Wood Cottage	Adj. Mad Bess Wood Camp Site	Brick built dwelling – Currently occupied by member of Green Spaces team under a service tenancy.

Appendix 2 – Maps

Map 1 – Site boundary

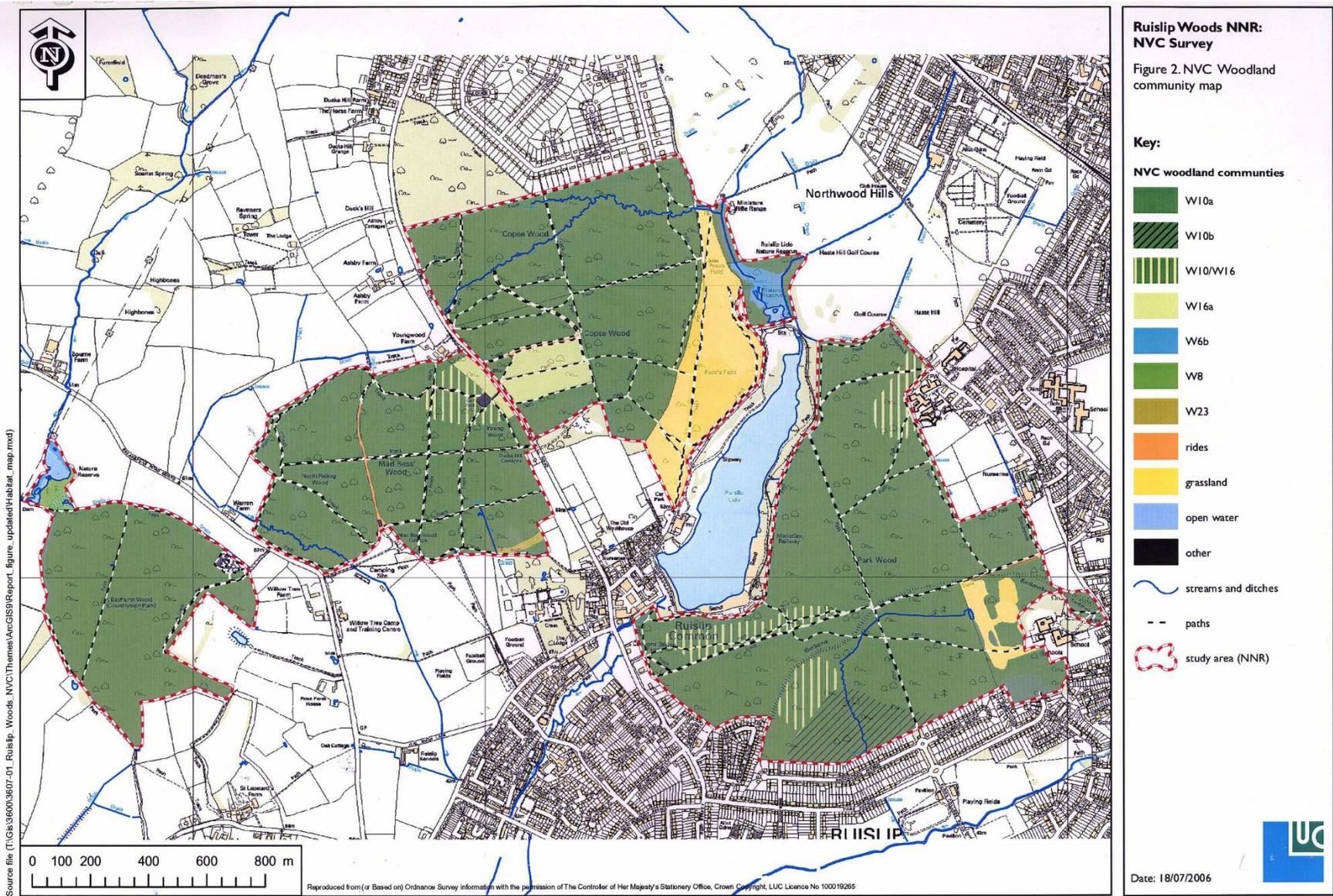


Map 2 – Geology and topography



Map 3 - Footpaths and bridlepaths

Map 4 - NVC Woodland Community Map



Ruislip Woods NNR: NVC Survey

Figure 2. NVC Woodland community map

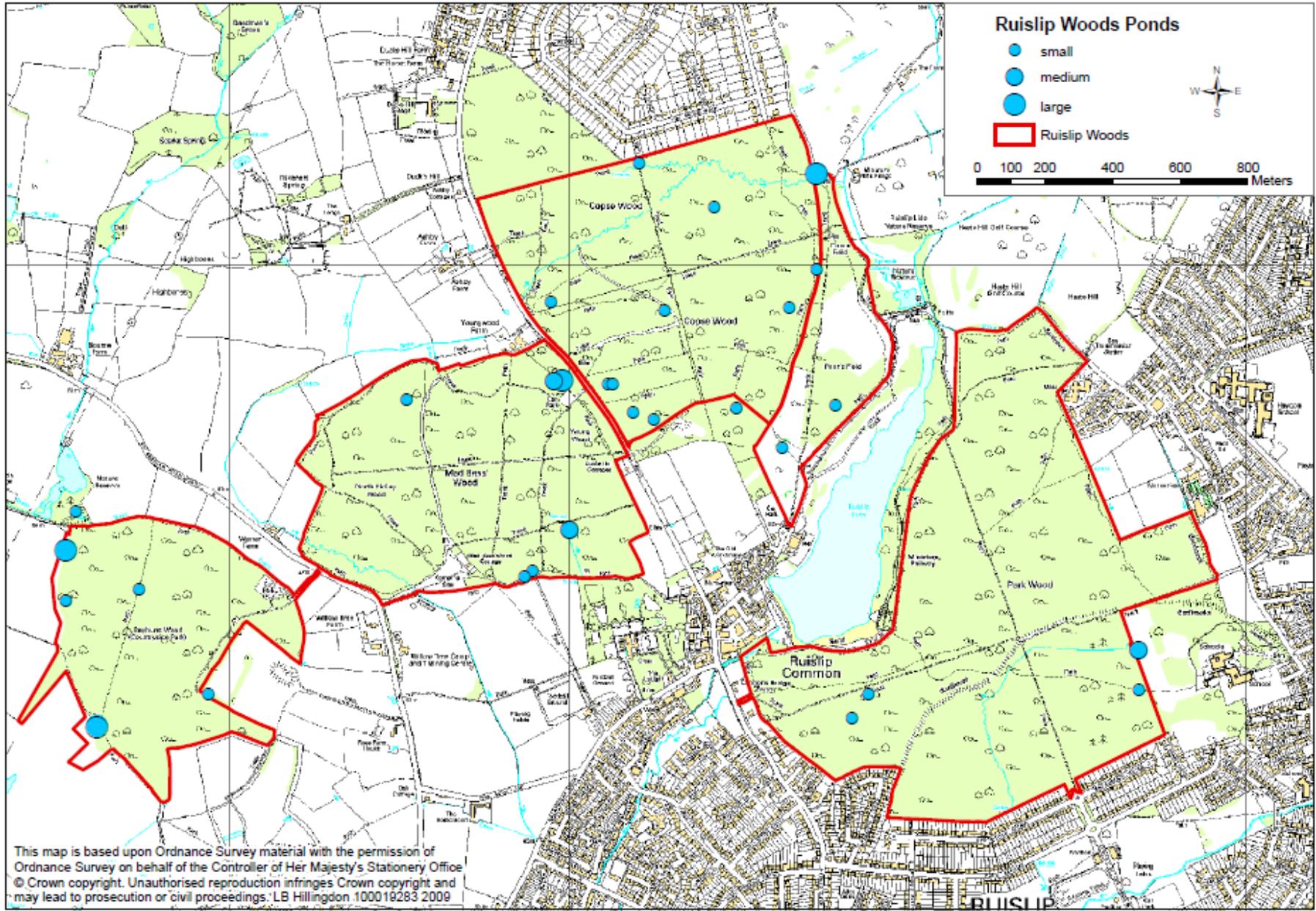
Key:

NVC woodland communities

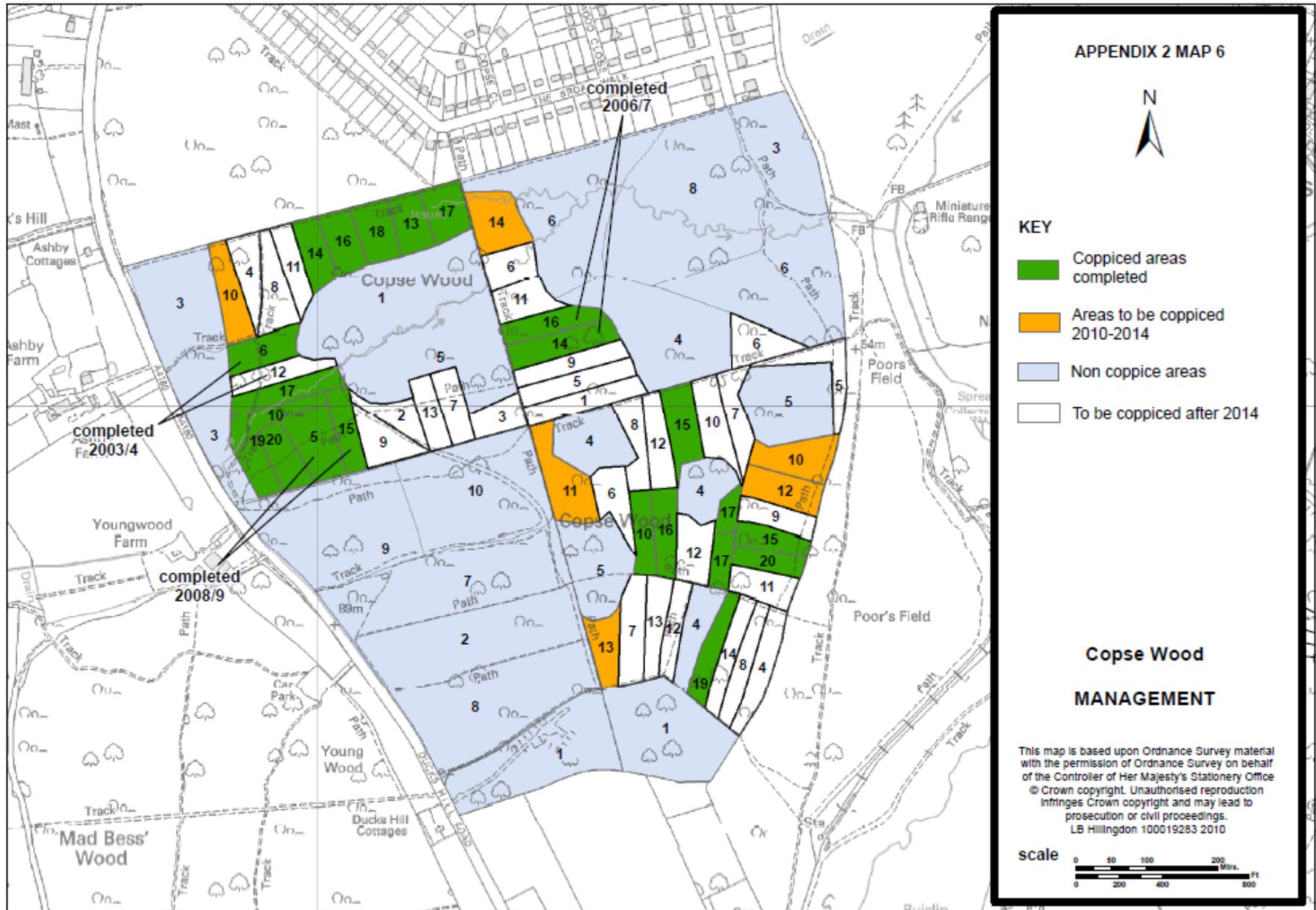
- W10a
- W10b
- W10/W16
- W16a
- W6b
- W8
- W23
- rides
- grassland
- open water
- other
- streams and ditches
- paths
- study area (NNR)



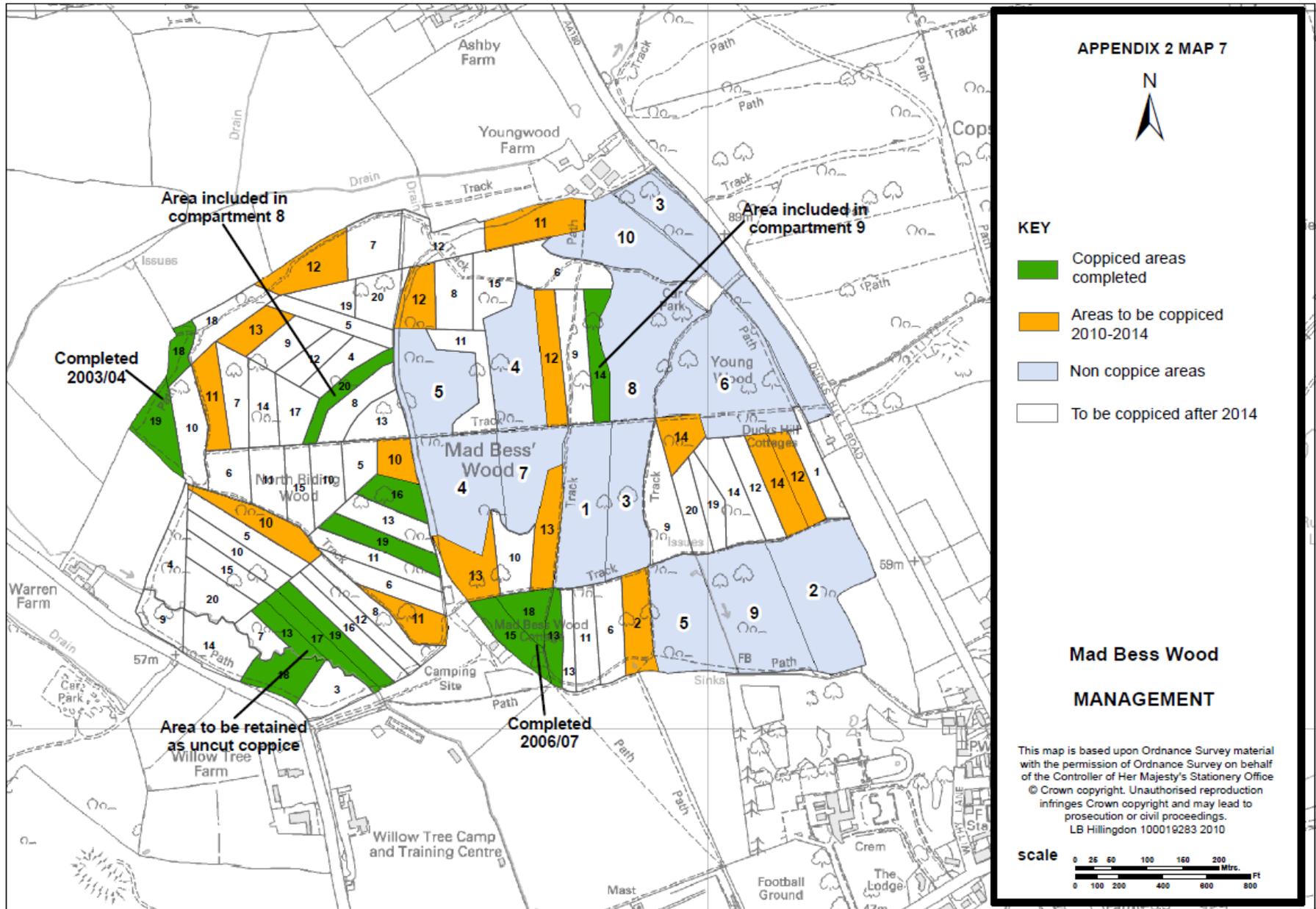
Map 5 – Ruislip Woods ponds



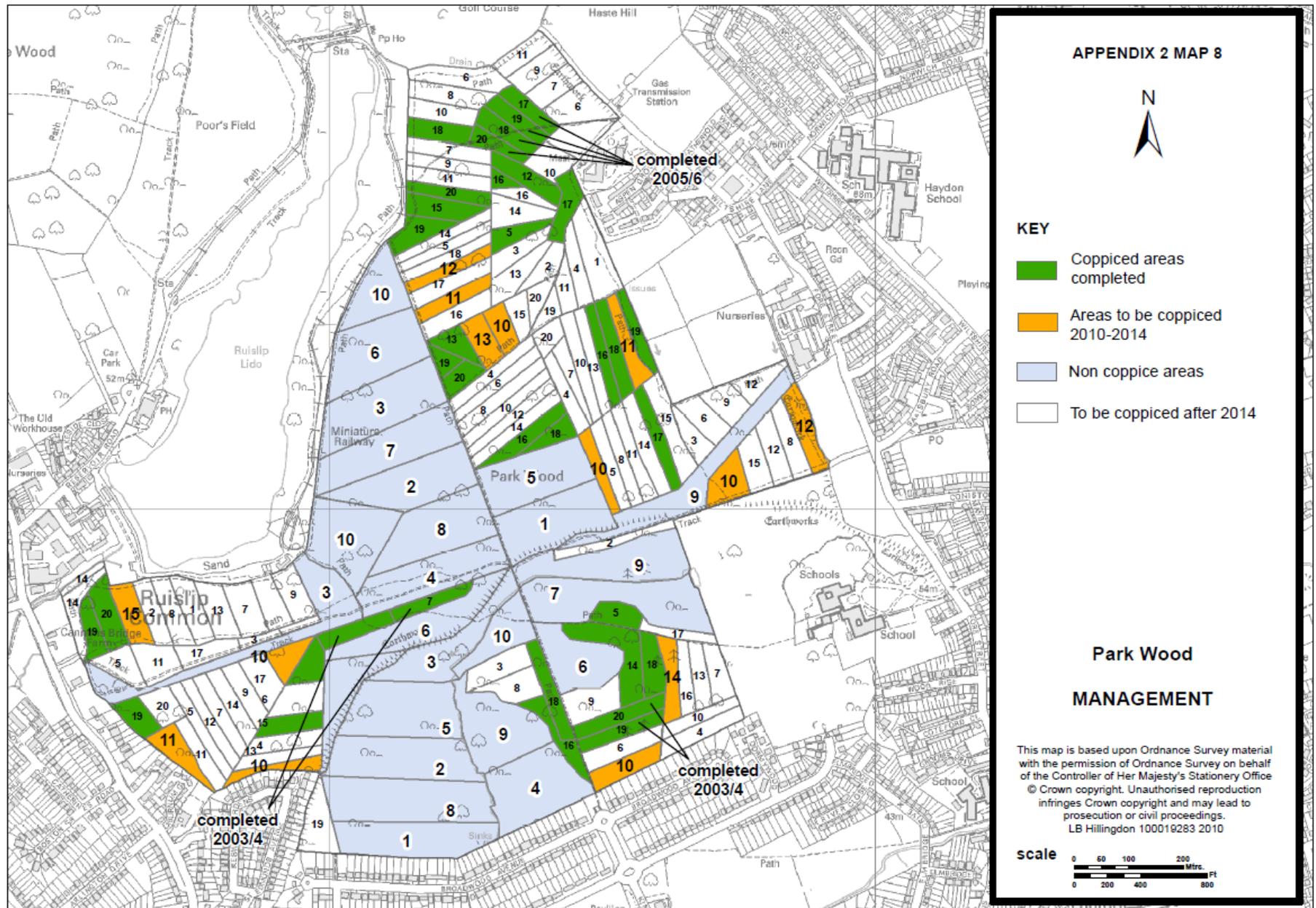
Map 6 – Copse Wood



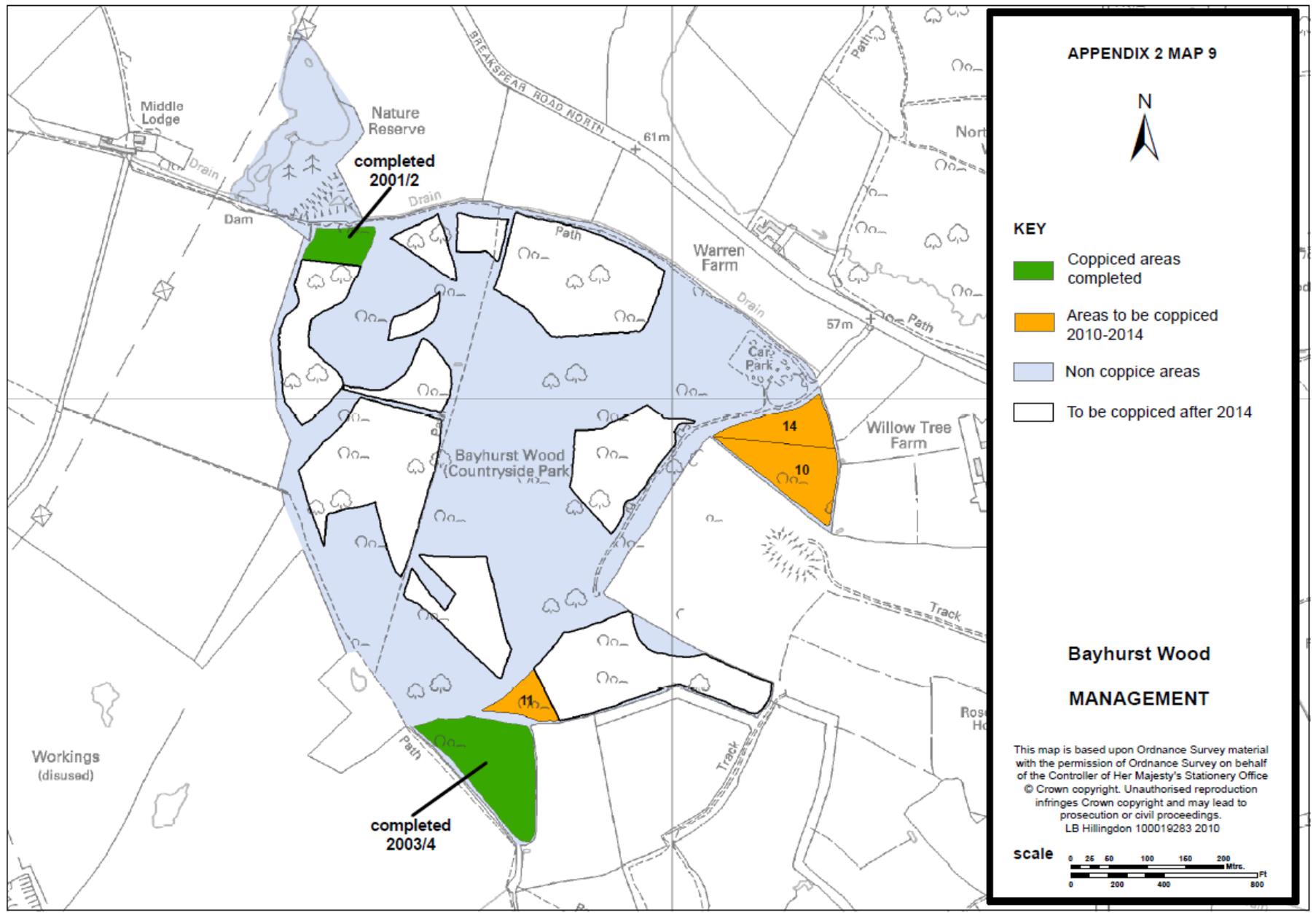
Map 7 – Mad Bess Wood



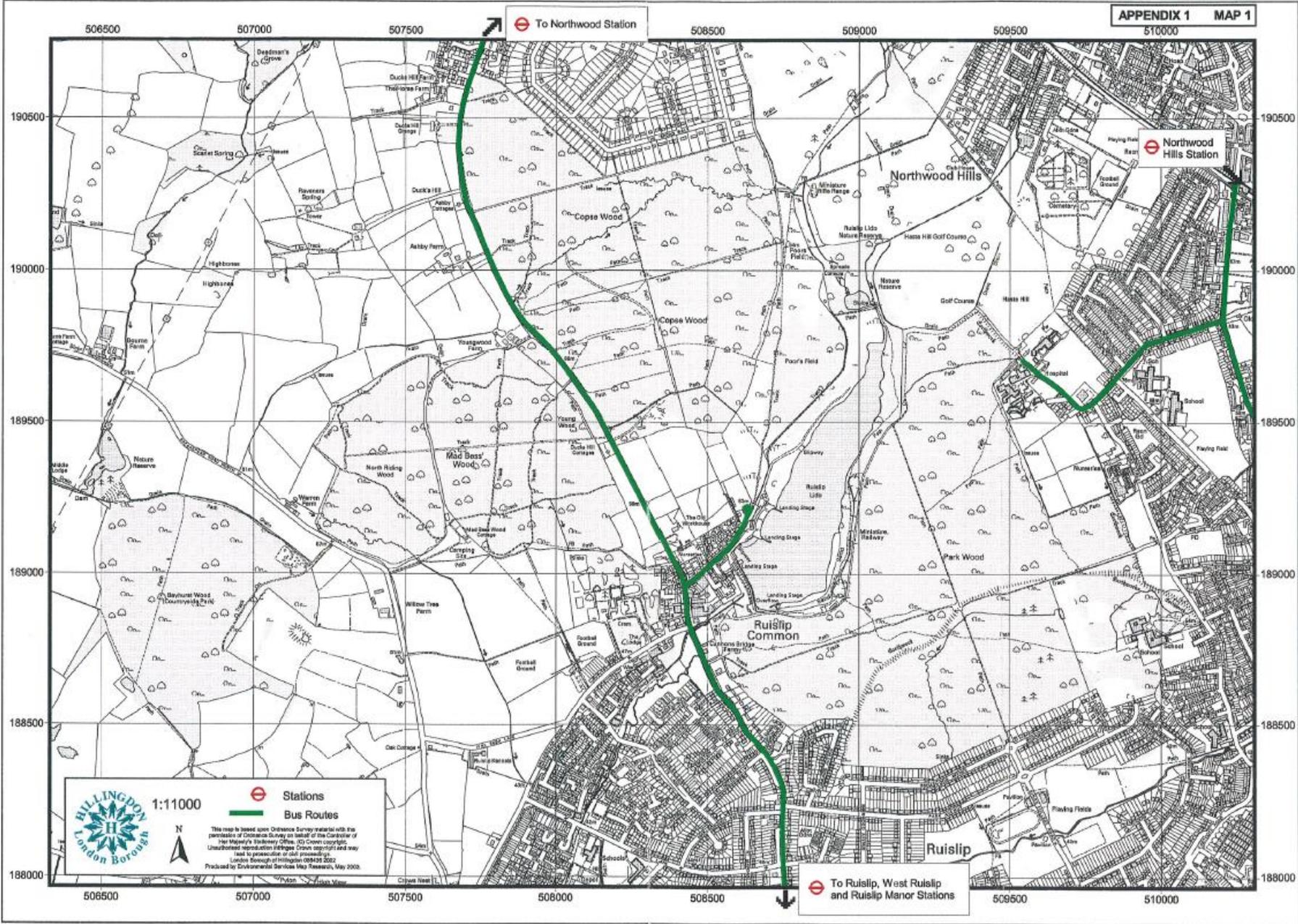
Map 8 – Park Wood



Map 9 – Bayhurst Wood



Map 10 – Whole Transport Links



Appendix 3

Identification of operational objectives, and selection of management options and outline prescriptions

Operational Objective	Management option	Outline prescription
1. To maintain geological features and earthworks	A1 – Non - intervention	<ol style="list-style-type: none"> 1. Gather geological information for the site 2. Monitor vulnerable areas 3. Carry out management works to prevent damage occurring
2. To maintain and enhance areas of grass/heathland	A3 – Active management	<ol style="list-style-type: none"> 4. Carry out NVC level 2 survey 5. Record current mosaic of habitats. 6. Carry out scrub clearance at a rate that will reverse succession 7. Carry out post clearance mowing to allow grass-heathland to develop. 8. Graze (Poor's Field) to a density that arrests succession 9. Survey and monitor effect of management 10. Record areas treated
3. Maintenance of deciduous woodland	A2 – Limited intervention	<ol style="list-style-type: none"> 11. Carry out inspection to assess whether thinning/removal of invasive species is required to achieve LTMP objectives (Appendix 5) 12. The inspection and habitat types to be recorded. (NVC Level 2) 13. Carry out limited thinning works as necessary 14. Carry out ride maintenance for invertebrate interest and creation of permanent open space 15. Record areas treated and treatment received 16. Control non native/invasive species 17. Monitor effect of

		management
4. Maintenance of coppiced woodland	A3 - Active management	<p>18. Survey coppiced compartments that have received no treatment in the last cycle. (Particularly Bayhurst Wood)</p> <p>19. Prepare a schedule of coupes based upon agreed criteria, (extraction and potential damage)</p> <p>20. Record proposals and circulate</p> <p>21. Carry out treatments</p> <p>22. Monitor effect of works</p>
5. To maintain and improve condition of streams and maintain current diversity of open water habitats	A3 – Active management	<p>23. Survey site for water courses and ponds, mapping features</p> <p>24. Assess need for dredging/clearing areas of open water.</p> <p>25. Collect species abundance in canalised and natural stream and monitor vegetation, invertebrate and herptile populations.</p> <p>26. Natural streams should not be re-profiled</p> <p>27. Streams that have been re profiled/canalised should have hydrobreaks to reduce speed and attrition of the streams flow</p> <p>28. Temporary ponds should remain untouched</p>
6. Maintain Ruislip Local Nature Reserve as an area of wetland/woodland/open water. Managed under agreement with Friends of Ruislip Local Nature Reserve	A3 – Active management	<p>29. Carry out NVC level 2 survey</p> <p>30. Gather historical records of management works undertaken</p> <p>31. Maintain existing areas of open water</p> <p>32. Maintain existing areas of swamp</p> <p>33. Maintain existing areas of woodland cover</p> <p>34. Monitor effects of</p>

		management received
7. Maintain Tarleton's Lake as an area of woodland/open water/swamp.	A3 – Active management	35. Carry out NVC level 2 survey 36. Improve source and water retention 37. Manage woodland to promote native tree mix 38. Manage sand pit by scrub control 39. Management of badger area through non - intervention 40. Monitor effects of management works
8. Conserve the current diversity of habitats including a) Hornbeam coppice b)oak-birch woodland c)oak-hornbeam woodland d)beech woodland e)open bracken areas f)alder and aspen areas g)grass-heathland h)scrub l)fallen and standing dead and rotting timber j)open water k)marsh l)streams and ponds m)rides and glades n)boundaries and banks o)any micro habitats uncovered in any survey p)habitat features of importance to protected species	A3 – Active management	41. NVC level 2 survey carried out 42. Re-survey and monitor areas on a five year basis
9. Key species	B1 – Non intervention	43. Encourage the natural regeneration of <i>Melampyrum pratense</i> 44. Survey and record bat activity in the site 45. Ensure <i>Meles meles</i> remain as undisturbed as possible 46. Survey herpto fauna 47. Seek specialist advice on key invertebrates

<p>10. Research site species and impact of management activities</p>	<p>C3 – Controlled facilities</p>	<p>48. Investigate and list groups/individuals responsible for research projects. Obtain data from groups/individuals where possible 49. Set up list of surveys required for site 50. Enable surveys to be carried out through interested groups/individuals 51. Ensure centrally held records are maintained and updated annually</p>
<p>11. Encourage the learning of the natural environment and to take an interest in nature conservation. Contribute to healthier borough</p>	<p>D2 – Low key publicity</p>	<p>52. Gather historical data of site users 53. Identify target groups 54. Enable site specific information to be produced that links to the national curriculum 55. Publicise site and manage bookings/visitors 56. Record numbers and subjects covered</p>
<p>12. Promotion of site as an example of good woodland practice</p>	<p>D4 – Special promotion</p>	<p>57. Compare current standard of management with Comparable sites. 58. Identify areas of improvement 59. Carry out improvements 60. Publicise methods and results</p>
<p>13. Maintain full public access to facility for all. Contribute to a healthier borough</p>	<p>E4 – Open</p>	<p>61. Carry out footpath/bridleway survey 62. Identify problem areas and assess severity 63. Carry out necessary works 64. Monitor results 65. Provide way marking 66. Carry out maintenance to path vegetation to ensure access</p>

<p>14. Encourage community involvement in the site</p>	<p>D4 – Special promotion</p>	<p>67. Liaise with advisory group on a regular basis 68. Set up and maintain database of interested parties within the community 69. Organise work days/community events to encourage and enhance interest in the site 70. Seek to broaden range of user groups actively involved in the woods</p>
<p>15. Ensure user groups and the wider public are aware and appreciate the sensitivity of the site</p>	<p>D4 – Special promotion</p>	<p>71. Provide and maintain interpretation boards at all major entrances 72. Produce and distribute a range of leaflets 73. Undertake visitor survey on a five yearly basis 74. Carry out guided walks 75. Carry out a talks programme 76. Publish articles in local press 77. Modify existing interpretation centre to make better use of visible area 78. Investigate possibility of relocating interpretation centre through partnerships/grant aid</p>
<p>16. Ensure level of site safety appropriate to full access public woodland</p>	<p>E4 – Open</p>	<p>79. Carry out annual safety inspection of all statutory footpaths/bridleways, entrances, car parks 80. Carry out necessary safety works. E.g.: tree surgery <i>NNR Plan Stage 2</i> 17. Maintain estate fabric in a manner befitting a National Nature Reserve and the sites importance as a key</p>

		<p>amenity feature in the London Borough of Hillingdon</p> <p>E4 – Open</p> <p>81. Inspect car parks and major entrances weekly to ensure they are litter free</p> <p>82. Carry out litter clearance as necessary</p> <p>83. Maintain fences and gates to a useable standard</p> <p>84. Ensure toilet facility is in an appropriate state</p> <p>85. Oversee use of BBQ facility and ensure sites are maintained litter free.</p> <p>86. Record all site assets and carry out a condition survey</p> <p>87. Carry out any works highlighted from the survey</p>
<p>17. Maintain estate fabric in a manner befitting a National Nature Reserve and the sites importance as a key amenity feature in the London Borough of Hillingdon</p>	<p>E4 - Open</p>	<p>81. Inspect car parks and major entrances weekly to ensure they are litter free</p> <p>82. Carry out litter clearance as necessary</p> <p>83. Maintain fences and gates to a useable standard</p> <p>84. Record all site assets and carry out a condition survey</p> <p>85. Carry out works highlighted from the survey</p>

Appendix 4

Achievement against 1982 Long Term Management Plan recommendations

Recommendation	Status	Further Action
1. Carefully planned visitor surveys are carried out in the summer at intervals of five years (p. 17),	Not yet undertaken. Green Stat surveys are carried out at key Green Spaces to advise on customer views. These surveys are undertaken by in house staff twice yearly April and October.	Targeted visitor survey to be undertaken and visitor numbers assessed.
2. Organisers of recreational events are instructed to use only temporary signs and markers not attached to trees and remove them after the events have taken place (p. 17).	All recreational events are now undertaken in this way and very positive relationships have been set up with key clubs and users.	Continue with the close liaisons and continue to follow recommendations.
3. Any applications to use the woods or common for activities or organised events other than those noted are judged initially by their actual or possible impact on the characteristic habitats and other users of the woods (p. 17).	Organised events are all judged by the possible impact on the reserve.	Continue
4. The Education Committee of the London Borough of Hillingdon explore the possibility of establishing a field and interpretation centre to take full advantage of the educational potential of the woodlands and adjacent area (P. 21).	Ruislip Woodland Centre opened in 1997.	The centre is located in the grounds of the Lido and not the woods so therefore has limitations. Work has been done to improve the facilities of the centre and further work is needed.
5. Whenever management work is being carried out in the woodlands notices explaining precisely what is being done and the reason why should be displayed at	Temporary notices are displayed at all key work sites explaining the operation and informing of contact points.	Continue this with updated signage where applicable.

the place of work (p. 21),		
6. The procedure to be followed in the treatment of coppice is (for full recommendation see p. 29),	<p>Recommendation 1 – During the early years of coppicing the maps were followed strictly. Environmental factors and additional knowledge gained has enabled a more flexible approach to be taken. Larger areas have been selected and in some years variations from the expected year of works.</p> <p>Recommendation 2 – All coppicing is carried out in accordance with recommendation 2</p> <p>Recommendation 3 – This recommendation was followed in the early years, but proved to hamper re-growth and be prone to wind throw. The management committee reviewed the practice and it was considered to be over sensitive and wavers are now not left. Some group selection was then undertaken and again this resulted in some wind throw and is being moved away from.</p> <p>Recommendation 4 – This practice has not been carried out and has proved unnecessary.</p> <p>Recommendation 5 – The few areas which have been returned to all wavers have been removed.</p> <p>Recommendation 6 – Initially timber produced from the coppicing was used for a variety of commercial opportunities. Oak was sold and cordwood sent to a wood pulp paper factory. The extraction of the timber and cordwood continued to cause local people to be concerned over the damage to haul routes and the practice became uneconomical due to more recycled paper being used in the production of paper. The only mill being in Wales.</p>	<p>Continue to follow the broad recommendations taking into account the learning gained. Specific points of note – Coppice areas can be larger or smaller than original prescription</p> <p>Wavers should not be left.</p> <p>Lay hedges and stub trees adjacent to compartments as a single operation.</p> <p>Continue to look for timber uses whilst considering the value of the cordwood as a deadwood resource.</p>
7. The procedure to be followed in the treatment of standard trees is (For full	Recommendation 1 – All standard trees which require any work are dealt with at the time of coppicing.	Continue with the broad aims of the recommendations and the learning gained :

<p>Recommendation see p. 31).</p>	<p>Recommendation 2 – Density of maiden oaks is maintained as described with environmental factors influencing the felling of oak trees. Regeneration is an area of concern as oaks are only regenerating in certain areas of the woods.</p> <p>Recommendation 3 – The oldest trees in the compartments are left to succeed.</p> <p>Recommendation 4 – This practice was carried out in the early years of coppicing but has now been altered as an over cautious approach.</p> <p>Recommendation 5 – Regeneration in all compartments has been excellent. Standard hornbeam and other species are assessed on individual merit within the compartment</p> <p>Recommendation 6 – Sessile oak have been selected where present where they predominate.</p> <p>Recommendation 7 – Dead branches are only dealt with when they constitute a danger over a path.</p> <p>Recommendation 8 – Whilst trunks have not been used in building restoration, they have been sold to generate income and are now used to provide sustainable timber for the estate in the form of fencing and timber products.</p>	<p>Oaks should be left for the time being. Alternatives should first be sought on the grass/heathlands</p> <p>Continue</p> <p>Continue</p> <p>Continue</p> <p>Continue</p> <p>Continue to source oak from grass/heath areas to provide for boardwalks and bridges.</p>
<p>8. In uncoppiced areas the procedure to be followed is (for full Recommendation see p. 32),</p>	<p>Recommendation 1 – Individual prescriptions have guided works in all compartments</p> <p>Recommendation 2 – The compartments have had periodic inspection and work implemented</p> <p>Recommendation 3 – N/A</p> <p>Recommendation 4 – Majority of work in the uncoppiced areas has revolved around opening rides and wildlife corridors as opposed to forest style thinning</p>	<p>Change this regime to be less prescriptive and allow areas to be dealt with individually.</p> <p>Continue</p> <p>Continue</p>

	Recommendation 5 – The recommendations for standards are followed in these areas	
9. Planting is not carried out except under exceptional circumstances where natural regeneration is insufficient to achieve the long-term objective for a compartment (p. 33).	No planting has occurred on the site.	Continue with this recommendation
10. Any seedlings or saplings planted originate from the woods and do not represent new genetic types (p. 33),	A project to grow from seed/seedlings various tree species is being proposed to gap up hedges for the coming years.	Continue with this recommendation
11. The larch nurse-trees used in plantings is removed in 1995, fifteen years after planting regardless of the success of the tree being nursed (p. 33).	All larch nurse trees were removed in 2000 and seedlings being removed as they appear	Continue to remove larch seedlings as they appear
12. Birch is maintained in oak/bracken communities in selected compartments, but in other areas that it is severely thinned at each coppicing/inspectional visit to one third of the existing number of trees, old fallen birches and standing dead birches should be left up to a maximum of about 10 per acre in each case (p. 33).	Birch is severely thinned during coppice operations and dealt with	Continue to thin birch in coppiced areas, but dead standing are left unless a danger to the public, i.e. leaning over a statutory footpath or bridle path
13. Hollies are eradicated to the extent that they are never closer than about 23m (75 ft) to one another (p. 33).	Hollies have been dealt with to greater and lesser degrees over the period of the plans. On inspection there appears to be a growing problem with hollies seeding	Carry out removal of hollies in coppice and non coppice areas to ensure that they are no closer than recommended.

<p>14. All sycamore is eradicated and if necessary regenerating shoots are treated with a chemical such as Krenite which is harmless to man, animals, non-woody plants, and inactivated in soil (p. 33).</p>	<p>Sycamore has been dealt with throughout the period of the plan and will continue to be dealt with by felling and poisoning using appropriate chemicals as laid down by current legislation and Natural England</p>	<p>Continue to eradicate sycamore where it appears.</p>
<p>15. Yew trees are permitted but never closer than about 23m (75 ft) to one another (P. 34).</p>	<p>Yew has been dealt with as works have taken place i.e.: within coppice compartments and areas of thinning.</p>	<p>Carry out removal of yew in coppice and non coppice areas to ensure that they are no closer than recommended.</p>
<p>16. All trees and shrubs not native in this part of the British Isles and which occasionally arise as garden escapes should be eradicated except for the existing conifers in Mad Bess wood and Copse Wood (p. 34).</p>	<p>Garden escapees have been dealt with throughout the life of this plan to greater and lesser degrees.</p>	<p>Draw up a list using a traffic light system of species and the level acceptability</p>
<p>17. During management work wood and timber is not left haphazard for long periods of time (p. 34).</p>	<p>During the life of the long term management plans various methods of dealing with wood timber, lop and top have been used including chipping, burning and stacking. It has proved unacceptable to users of the site for lop and top to be left and this is now being burnt as the most cost effective. Cordwood is currently being stacked and uses for some of the timber being explored. All timber is stacked neatly until it can be converted into a useable resource.</p>	<p>Continue to explore uses for the timber product and ensure that the appearance of the woods remains 'recreational' and not as in a timber production wood. Most coppiced material should be left for dead wood resource</p>
<p>18. Lop and top cuttings and fallen branches (with leaves particularly) be cut and stacked away from major paths and tracks (p. 34).</p>	<p>Lop and top in coppice compartments is mostly burned. Coppiced hazel is mostly saved for fencing materials.</p>	<p>Continue</p>
<p>19. Fallen trees resting against others should be removed (p. 34).</p>	<p>Fallen trees resting against others are only removed where they constitute a danger.</p>	<p>Continue this practice</p>

<p>20. Rotting and decaying wood should be left only where it does not block major paths and tracks, and in a way permitting unimpeded walking through the major parts of the area (p. 34).</p>	<p>Fallen trees and rotting and decaying timber is left unless it is over a footpath where it will be moved to a more suitable position</p>	<p>Continue</p>
<p>21. Attention is paid to litter deposited by the public, both during coppicing and thinning and at other times by staff particularly responsible for this aspect (p. 34).</p>	<p>Litter collections are undertaken by the in house staff on a weekly basis at key locations and periodically throughout the remaining areas</p>	<p>Continue with litter collections and monitor levels</p>
<p>22. Households backing onto the woodlands should be served with notices advising them not to deposit litter and garden debris in the woods (p. 34).</p>	<p>Notices have periodically been sent to the adjoining properties when issues have arisen</p>	<p>Continue</p>
<p>23. Boundary stubbed hornbeams are treated every 20 years. . (see p. 35 for full Recommendation) (p, 35).</p>	<p>These are re-stubbed when due for coppicing</p>	
<p>24. Bomb craters are retained as ponds after opening their margins and the removal of rubbish (p. 35).</p>	<p>All bomb craters have been retained as temporary ponds</p>	<p>Continue</p>
<p>25. Where practicable boundaries are maintained as layered hedges (p. 38).</p>	<p>Laying of hedges has continued where practicable and linked to adjacent works</p>	<p>Continue</p>
<p>26. The heathland on Poor's Field is maintained by mowing with a flail or similar mower at a height of 15cm; we suggest that half the total area is mowed each year (P. 82).</p>	<p>Mowing was undertaken on Poor's Field until grazing was re introduced in 1997. Areas which have been subsequently cleared are now mowed in the autumn to arrest the growth of the scrub and rough grasses.</p>	<p>Introduce strip grazing and continue to mow/forage harvest in autumn, leaving small areas of scrub and long grass on a rotational basis</p>

27. The remaining stumps on Poor's Field are removed by chipping in 1982 (p 83)	Stumps on Poor's Field were removed.	Continue as stumps appear
28. Hawthorn hedges be maintained around Poor's Field (p. 83).	Some areas have been hedgelayed	Continue
29. The impact of adjacent areas on the woods is considered prior to any approval for development being given (p. 85).	Natural England is a statutory consultee for all developments adjacent to the National Nature Reserve and should be consulted.	This area has had limited success and more work with the council's planning department is required to ensure that there is consistency of approach through changing staff.
30. The Council endeavour to purchase the northern part of Copse Wood as a public open space (p. 88).	The privately owned portion of Ruislip Woods NNR has not been purchased	RWT are looking into the possibility of purchase
31. The remaining open area of Grub Ground be designated as a public open space by the Council (p. 91).	Grub ground whilst still within the Education portfolio is now included in the National Nature Reserve and managed as part of the wider site.	Explore transfer to ECP
32. Responsibility for the woodlands be vested in a single Council officer with executive powers (p. 99).	The management of the woods now falls entirely with Environment and Consumer Protection Group and current responsibility sits with Green Spaces.	Continue
33. A Woodlands Management Committee be established (p. 99).	RWMAG established and thriving. The group is formally constituted and council members form part of the group	Continue
34. Voluntary labour be encouraged to undertake scrub and footpath clearance, maintain the pylon ride in Park Wood and other work as approved by and under the supervision of the Woodlands Officer (p. 100).	Voluntary labour is used throughout our work within the site with a range of activities undertaken	Continue to grow the involvement of volunteers in all the tasks we carry out
35. The work schedule presented in Maps 3c, 4c and 5c is adhered to (p. 101)	As described above the schedules described in 3c, 4c and 5c have been modified but the overall aims and objectives adhered to.	Continue

<p>36. The major part of the coppicing work is undertaken in the autumn and winter (p. 101)</p>	<p>All coppicing work is undertaken in the Autumn and winter.</p>	<p>Continue with this practice</p>
<p>37. The Council derives the maximum income from the sale of wood necessarily removed in the course of the implementation of this plan and endeavours to ensure that sufficient funds are available to maintain the coppicing and thinning cycles in the woods each year (p. 102).</p>	<p>The fluctuating value of timber and wood has been used to derive income in the past and consideration will be given to timber sale or conversion in the future. Current practice is to use all oak timber for estate works and hornbeam coppice material is left on site to increase the deadwood resource in coppice compartments. A survey undertaken proved that the deadwood in coppice compartments was very low. Hillingdon continue to provide funds to carry out the aims and objectives contained with the Long term management plan and together with the Ruislip Woods Trust search for additional resources to enhance our work. The work of volunteers will also continue to provide a huge resource which will continue to assist with the work undertaken.</p>	<p>Continue to review how the resulting timber from our operations is used and the relative merits of conversion sale or deadwood resource.</p> <p>Continue to use some of the coppiced hornbeam to produce charcoal</p>

Appendix 5

Achievements against SMART targets from 2003 - 2009

Smart target	Recommendations	Status	Further action
To maintain geological features and earthworks	1. Inspect all earthworks/woodbanks annually	Inspections are made on a regular basis	
	2. Stub trees on boundary banks approx. 300m per annum	Those earthbanks that have been included in coppicing have been stubbed. Also section adjacent to Ducks Hill Road	Continue
Maintain and enhance areas of grass/heathland	1. Annually graze Poor's Field to a level that arrests succession	Poors Field has been grazed every year and has successfully prevented any more scrub from spreading	Continue
	2. Carry out scrub clearance on Grub Ground.	An area of scrub has been cleared every year	Continue
	3. Carry out post clearance mowing during Oct/Nov until grassland develops	Poors Field, Grub Ground and Pylon Ride have been mown every year in Autumn	Continue
Maintain deciduous woodland	1. To carry out 14ha, per year, of inspection and treatment if necessary following above criteria for evaluation	Areas of sycamore, laurel and holly have been cleared	
Maintain coppice woodland	1. To carry out a survey of remaining coppice areas to establish the extent of coppicing to be done based on the above criteria of evaluation	The areas coppiced are shown on map....	Coppice what is achievable using staff, volunteers and contractors
	2. Carry out approximately 5.8ha of coppicing each year for five years	At least 1ha of coppicing was carried out each year.	The target of 5.8ha is desirable, but may not always be achievable. The aim should be to do as much coppicing each year as time and staff allow.

	3. In order to inform the next phase of the plan, re-coppice in a year 1 or 2 an area of 1ha of 20-year coppice. Recording and photographing before work is undertaken and recording yield		
	4. Treat an area totaling 1ha for bramble and/or bracken in year 1 or 2. Recording and photographing before work is undertaken.	This practice has not been necessary or desirable	
Maintain and improve condition of streams and maintain current diversity of open water habitats	1. Carry out survey of all water courses and ponds mapping features in year 1	Pond survey was started in year 1 and completed in year 3	Thirty two ponds were located in the Reserve, many of which need some degree of management
	2. Collect species abundance in streams in year 2	Not carried out	This could be done in the next 5 years
	3. Assess need for hydro breaks in streams in year 1 and install in either year 2 of 3 in consultation with the Environment Agency	Not carried out Streams and ditches are left unmanaged in order to retain water during dry spells	Continue
Maintain Ruislip Local Nature Reserve as an area of wetland/woodland/open water	1. Carry out a survey mapping habitats to enable an ideal state map to be produced and worked towards in year 1		
	2. Ensure management plan is updated and in line with the conservation objectives of this plan		

	3. Monitor activities through close liaison with warden	The Woodland Officer and the Warden have made frequent visits to the LNR	
Maintain Tarleton's Lake as an area of woodland/swamp/open water	1. Carry out a survey mapping habitats to enable an ideal state map to be produced and worked towards in year 1.	Area has been surveyed but not mapped. Tareleton's Lake has received minimum management due to presence of the badgers. A small patch of Japanese knotweed has been cut every year, as has sycamore.	Continue to cut invasive species and prevent spreading. Maintain path from entrance to lake, but allow rest of path to overgrow to protect badgers.
	2. Ensure management plan is updated and in line with the conservation objectives of this plan		All updates will be added to next 5 year plan
	3. Monitor activities through close liaison with warden	Tareleton's Lake has been managed by Hillingdon Council since 2004	Continue
Conserve the current diversity of habitats	1. Carry out a survey mapping habitats to enable ideal state map to be produced and worked towards in year 1	The range and distribution of woodland communities were identified and mapped in the NVC 11 survey carried out in 2006. Pond survey was completed in 2007	

	2. Re-survey in year 5 or 6		
<i>Key species</i>	1. Survey and record bat activity on the site through a partner, project to begin in either Year 2 or 3	A small-scale survey was carried out in Bayhurst Wood in 2006. Due to the difficulty of surveying bats, a more comprehensive survey has not been completed.	More regular bat surveys should be carried out during the next 5 years. This action should be given a high priority.
	2. Carry out ride management works to encourage the regeneration of cow-wheat. Biennially flail ride in Park Wood. Carry out scrub clearance 0.5 ha per annum.	Work organized by Ched George has been carried out yearly to encourage the regeneration of cow wheat. The Pylon Ride and Grub Ground have been mown 4 out of 5 years. In addition, new areas have been opened up	Still more work could be carried out to further open up Grub Ground, which along with the Pylon Ride should be continued to be mown every year. However, small islands of scrub should be left more frequently to aid the spread of the heath fritillary butterfly. The scrub can be cut on a rotational basis so there is always enough left for the heath frits
	3. Carry out a herpto fauna survey in year 3 through a partner organization or as an individually funded project		
	4. Seek specialist advice for key invertebrates through a partner organization or as an individually funded project	Local specialists have provided a comprehensive Lepidoptera list surveyed in the Woods during the last 10 years.	More surveys should be carried out during the next 5 years, with particular attention given to surveying invertebrates under logs and leaf litter.
Research site species and impact of management activities	1. Prepare a list of surveys required for the site in year 3	Not carried out	
Encourage the learning of the natural environment and to take an interest in nature	1. Produce site specific material which links to the National Curriculum	Materials have been produced.	Continue to build on materials to widen the choice of activities that can be offered to schools.

conservation. Contribute to a healthier borough			
	2. Identify possible partner organization/external funding	The Ruislip Woods Trust produced a Classroom in the Woods leaflet which was sent to many of the Borough's schools. This achieved a very good response.	Continue to seek funding for an education assistant.
	3. Arrange and guide 5 school visits in year 1	This target has been met	Continue to deliver education lessons to schools and to target schools south of the borough
	4. Increase visits by five per year during the life of the plan	This target was met and exceeded	Continue to reach as many schools as is possible, but no number should be set as in some years there may be less time than in others due to other projects.
Maintain full public access to facility for all. Contribute to a healthier borough	1. Carry out footpath/bridlepath survey year 1	Surveying the paths has been ongoing during lifetime of the plan	Should be a continuous process
	2. Carry out footway and bridleway improvements highlighted by survey. 200m of bridleway and 500m of footpath to improved annually	A total of 1474metres of bridlepath have been improved with hard surfacing. In addition, many areas along the bridlepaths have been opened up to allow in light to dry areas out	
	3. All footpaths to be maintained at 1.5m wide	All statutory footpaths have been maintained by mowing and cutting back overhanging vegetation.	Continue

	4. All bridlepaths to be maintained at 3m wide	All bridlepaths have been maintained by mowing and cutting back overhanging vegetation	Continue
	5. Install bridleway fencing where required. 400m annually	Fencing has been installed in some sections of Bayhurst, Mad Bess and Copse Woods, where required	Continue to install where required
	6. Provide waymarking where paths leave the metalled road by year 5	Waymarkers have been replaced or installed where required	Continue
	7. Maintain waymarking on Hillingdon Trail		
	8. Promote and waymark one additional path in each year of this plan	Three Easy Access paths have been created	Leaflets need to be produced. It may be necessary for the Ruislip Woods Trust to produce.
Encourage community involvement in the site	1. Meet with RWMAG four times per year	This target has been met. In addition, the Woodland Officer has worked closely with members of RWMAG on regular basis	Continue
	2. Produce an Annual Report for each year of this plan	Updated works for the year have been produced every year. A review of the 5 year management plan was produced in 2008	A more detailed and concise report needs to be produced yearly
	3. Ensure an open day is held each year of this plan	Open Day has been held and improved every year.	Continue to find new acts for the Open Day
	4. Recruit a Community Woodland Officer	Woodland Officer was recruited in 2003	Continue to seek funding for Environmental Education Assistant

	5. Increase Ruislip Community Ranger Service in numbers and work days	The Voluntary Woodland Rangers have increased in number to a total of 12. In addition, a Saturday group was formed in 2004 and includes 12 volunteers	Continue to increase numbers of midweek and weekend group.
	6. Produce a multi language leaflet for BBQ users in year 2	BBQs were banned throughout the borough in 2006 due to the increase in people having bbqs in nature conservation areas and causing damage and leaving unacceptable quantities of rubbish	
Ensure user groups and the wider public are aware and appreciate the sensitivity of the site	1. Ensure 33 interpretation boards are maintained at major entrances	All maintained apart from St. Vincent's board which was constantly being vandalized.	It is now time to renew all boards and remove any mention of bbqs
	2. Undertake guided walks (12 per year)	This number has been met most years if walks by Ruislip Woods Trust and Ruislip Natural History Society are included	Continue to deliver as many walks for the public as possible. A minimum number is not needed as it is not always possible to meet such targets
	3. Modify existing interpretation centre to be more visible in year 1	Woodland Centre was modified in 2004 when 2 murals were painted and interactive displays added. The Centre has had more displays added year after year.	Re-open tea hut/information centre at Bayhurst.
	4. Undertake visitor survey in year 3	This was not undertaken	Visitor surveys should be undertaken every year of lifetime of the next plan

Ensure level of site safety appropriate to full public accessible public woodland	1. Carry out safety inspection of statutory footpaths, bridleways, entrances and car parks in each year of this plan	Safety inspections have been carried out on weekly basis	Continue
	2. Undertake highlighted works	Works are carried out as soon as they are highlighted if causing safety issue	Continue
Maintain estate fabric in a manner befitting a National Nature Reserve	1. Inspect major entrances and car parks weekly to ensure they are litter free and carry out litter clearance	Litter is has been picked on weekly basis. Car park night closures and banning of bbqs has led to significant decrease in litter	Continue
	2. Remove abandoned vehicles in line with the Council's policy	Problem has all but ceased since car park night closures were introduced	Continue
	3. In Bayhurst Wood clean toilets twice weekly	Toilets were removed in 2006	
	4. Ensure BBQ sites remain litter free and grass is maintained below 75mm	BBQs were banned in Borough in 2006	
	5. Carry out asset survey and review in year 1		

Appendix 6

NVC woodland communities and associate coverage in Ruislip Woods (ha)

NVC woodland communities	Area (ha) within each composite woodland				Total area (ha)
	Bayhurst Wood	Mad Bess Wood	Copse Wood	Park Wood	
W10a <i>Quercus robur</i> – <i>Pteridium aquilinum</i> – <i>Rubus fruticosus</i> woodland, typical sub-community	36.5	50.0	63.7	89.5	239.7
W10b <i>Quercus robur</i> – <i>Pteridium aquilinum</i> – <i>Rubus fruticosus</i> woodland, <i>Anemone nemorosa</i> sub-community	-	-	-	7.7	7.7
W10/W16 Transitional woodland community	-	3.4	-	10.7	14.1
W16 <i>Quercus spp.</i> – <i>Betula spp.</i> – <i>Deschampsia flexuosa</i> woodland, <i>Quercus robur</i> sub-community	-	1.2	4.6	-	5.8
W6b <i>Alnus glutinosa</i> – <i>Urtica dioica</i> woodland: <i>Salix fragilis</i> sub-community	0.4	-	1.7	-	2.1
W8 <i>Fraxinus excelsior</i> – <i>Acer campestre</i> - <i>Mercurialis perennis</i> woodland	1.2	-	-	-	1.2
W23 <i>Ulex europaeus</i> – <i>Rubus fruticosus</i> scrub	-	0.4	-	-	0.4
Total woodland	38.1	55.0	70.0	107.9	271.0
Other habitat types					
rides (includes wide rides only)	-	1.7	1.1	1.0	3.8
grassland	-	-	16.2	3.1	19.3
open water	0.7	-	0.3	-	1.0
other (man-made)	0.6	0.2	-	-	0.8
Total area	39.4	56.9	87.6	112.0	295.9

Appendix 7

Natural England management objectives

2.4 Site Objectives

i) Objectives

Management plan objectives set out what we want to do during the period of the plan to move the site towards realisation of the Vision.

Individual objectives should be specific to a feature or group of features, measurable and achievable within the plan period. To allow us to monitor achievement of objectives, one or more measurable attributes are identified for each interest feature. A site-specific target, which defines the desired condition of the feature, is then assigned to each attribute.

Attributes

An attribute is defined as a characteristic of a feature which can be monitored to provide an indication of its condition. For each feature of interest it should be possible to define one or more attributes for which targets can be set to allow us to monitor achievement of objectives. Examples of typical attributes are listed in the following table:

Feature	Examples of Attributes
Geological/geomorphological	<ul style="list-style-type: none">• Extent of exposure/landform• Integrity of exposure/landform• Visibility, e.g. vegetation cover, obscuring trees
Biological habitats	<ul style="list-style-type: none">• Extent• Distribution• Habitat structure• Physical characteristics, e.g. sward height• Floristic composition, e.g. presence or absence of positive/negative indicator species
Species	<ul style="list-style-type: none">• Population size• Species distribution• Habitat factors
Archaeological/historical features	<ul style="list-style-type: none">• Fabric condition• Sward structure• Scrub cover• Other structures, e.g. no fence posts
Buildings	<ul style="list-style-type: none">• Fabric condition• Status of tenure
Public access	<ul style="list-style-type: none">• Visitor levels, trends and/or types• Numbers of events/type of events• Accessibility for various users
Education, Research Demonstration	<ul style="list-style-type: none">• Number of events/users• Accessibility
Estate assets	<ul style="list-style-type: none">• Fabric condition• Compliance with legal obligations

For further information on biological and geological/geomorphological attributes, see Natural England's Intranet site or the JNCC website: www.jncc.gov.uk

Targets

Targets describe the desired state of an attribute under normal conditions. Because wildlife populations are subject to natural change it may be necessary to set targets within a range, rather than fixed upper or lower limits.

ii) Methods

This section explains how we intend to implement the objectives. Achievement of objectives may be possible via a range of methods, of which one or more may be deemed suitable for this site. The preferred way of approaching this section is therefore to briefly describe the range of management options and then, by reviewing constraints and other factors, identify the most appropriate method. References used to support decisions or, for biological objectives, appropriate case studies described on www.conservationevidence.com, should be listed at the end of the section. When deciding on methods, particular consideration should be given to social, environmental and economic sustainability.

Likely Significant Effect

On cSAC, SPA and Ramsar sites the method statement should assess the likely significant effect of the management proposals on the internationally important features of the site (see Section A.1.b). This should therefore confirm that either;

- the works proposed are necessary for the nature conservation management of the site
- the proposals are not necessary for nature conservation management but will have no significant effect on the internationally important nature conservation features of the site

A text box is provided in the templates for this purpose.

iii) Monitoring

The final stage of objective setting is to outline how achievement of this objective will be monitored. This should comprise a brief statement describing the method of monitoring that will be used for each of the targets described.

2.4.1 Geological and Biological Objectives

Each of the key features shaded grey in Section 1.8.1 needs to be addressed within the Site Objectives. In some cases a single feature may require a single objective; more commonly it should be possible to group features into a limited number of objectives, using the BAP Broad Habitat groupings as a guide. For example, a range of neutral grassland communities within a hay meadow reserve may all need identical management, in which case a single objective can be used to cover a number of habitat and species features (see example below).

Separate objectives should only be written for non-priority features (unshaded cells in Table 1.8.1) when they cannot be incorporated into objectives for the key features.

Geological and biological objectives and their associated attributes and targets should closely follow the site-specific standard Conservation Objectives for the constituent SSSI (see Common Standards Monitoring, Section A.1.c). However, as targets for achievement of favourable condition may be on a shorter or longer timescale than the plan period, and because aspirations for NNRs may extend beyond favourable condition, management plan targets need not necessarily be identical to those derived for CSM.

The full set of standard Conservation Objectives for the site should be referenced or hyperlinked or may be appended to the main plan.

There is no requirement to set individual attributes and targets for non-priority features but their management should be encompassed in the Objective Methods.

Example: 2.4.1 Biological Objective

Objective 1:

Subject to natural change, to maintain the unimproved neutral grassland in favourable condition, with particular reference to the internationally important lowland haymeadow community (MG4: *Alopecurus pratensis* - *Sanguisorba officinalis* grassland) and its associated species.

Features addressed by this objective:

1, 2, 3

Attributes/targets for key features:

Feature 1: MG4 grassland

Attribute: Extent

Target: MG4 present over 60-75% of whole site area (approx. 26-33ha) (see Map xx)

Attribute: Sward structure

Target: Sward height <10cm in summer, no more than 5% bare ground or 25% litter cover

Attribute: Sward composition

Target: 40-90% herbs in sward prior to hay cut

Feature 2: MG8 grassland

Attribute: Extent

Target: MG8 present over 5-15% of whole site area (approx 2-7 ha) (see Map xx)

Attribute: Sward structure

Target: Sward height 5-15cm in June-August, no more than 15% bare ground in May & 5% in July, no more than 25% litter cover

Feature 3: Snakeshead fritillary

Attribute: Extent

Target: Sub-populations present in at least 5 meadows

Attribute: Population size

Target: A minimum of 250 flowering plants with 75% producing seedheads

Objective Methods:

MG4 grassland is traditionally managed as hay meadow with a late hay cut followed by aftermath grazing. MG8 grassland is characteristically managed as summer grazed pasture, with ground conditions often being too wet in the summer months to permit the taking of a hay crop. However, as much of the MG8 at Mottey occurs as mosaics within the MG4 it is not possible to manage the communities differently.

The hay meadows should ideally be mown after the rare/local plants have set seed around the middle of July. However, hay may be cut earlier to accommodate agricultural practices if the crop is far enough advanced to permit this to take place. Aftermath grazing by cattle or sheep should generally follow from early September to the end of October, but stock may need to be removed earlier if wet ground conditions start to cause poaching. Shading of the community by overhanging branches should be prevented by appropriate hedgerow management.

Other management practices, such as chain harrowing, may be continued on the hay meadows, to remove dead grass, clear the ground and rejuvenate the sward, but only before the breeding waders have arrived (i.e. before 31 March) and if the ground is dry enough to support the farm machinery. However, this should only take place when justified on sound conservation grounds or to prevent proven damage to farm machinery. This will prevent disturbance to the nesting birds, damage to early-flowering plants, e.g. snakeshead fritillary, and rutting of the fields.

Management of the grassland communities will also necessitate maintaining appropriate water table levels (high winter water levels but a lowering of the water table in late spring) by controlling the system of underground drains and surface drainage ditches, and by liaising with neighbouring landowners and other statutory agencies to prevent activities leading either to the drawdown of the water table or diversion of the water supply away from the reserve.

Occasional applications of well-rotted farmyard manure should be tolerated in the hay meadows to maintain yields, at a rate not exceeding 3 tonnes per hectare per 5 years. No other inputs of fertilizer are necessary or desirable.

As a component of the MG4 grassland, the snakeshead fritillary has identical management requirements. Additional management is therefore restricted to avoidance of trampling of flowering plants in April and early May and possible protection from browsing hares to ensure seed production.

Likely Significant Effect: These proposals are necessary for the nature conservation management of the site.

Monitoring Methods:

Monitoring of vegetation communities will be undertaken as part of the standard site condition assessment. The snakeshead fritillary population will be monitored by annual counts of flowering plants and seedheads. Regular monitoring of water table levels and occasional monitoring of soil and water chemistry should also be undertaken.

2.4.2 Landscape and Cultural Objectives

When writing objectives for conservation of landscape features, bear in mind that landscapes are dynamic features subject to change and modification. Future change should therefore be accepted, but the rate and scale of change may need to be considered in the plan.

Objectives should be written for all the key features ticked in the grey cells of Tables 1.8.2 and 1.8.3, as for biological features. Separate objectives should only be written for non-priority features (unshaded cells) when they cannot be incorporated into objectives for the key features. As for geological and biological objectives there is no requirement to set individual attributes and targets for non-priority features.

Objectives for scheduled monuments and other historic buildings can be written as for biological objectives, with a goal of achieving and maintaining good condition.

Every plan should include an objective which addresses the socio-economic use of the site. This should consider Natural England's relationships with other users and how we manage those relationships.

Similarly, every plan should include one or more objectives which address education, research, demonstration and public access, drawing from access and interpretation plans for the site as appropriate.

Example: 2.4.2 Landscape & Cultural Objectives - Public Access

Objective 4:

To encourage low-key public access to the site at a level that is compatible with the conservation requirements of the reserve's wildlife and historical features.

Features addressed by this objective:

16

Attributes/targets for key features

Feature 16: Public access

Attribute: Visitor numbers

Target: 3000-5000 visitors p.a.

Attribute: Visitor satisfaction

Target: 90% of visitors satisfied with the experience of their visit.

Objective Methods:

Public access to the site is currently provided via the network of public footpaths and bridleways (see Access Provision map) and through a programme of escorted visits. The access policy for the reserve identifies a restricted area for visitors to the south and west of the lake; this objective will therefore be achieved through the development of access facilities in the northern and eastern parts of the reserve.

Whilst access to the reserve via public transport is relatively easy, a lack of car parking makes development of further access difficult. The main priority for the period of this management plan is for the provision of a small car park off Wood Lane and the provision of an easy-access path to the public hide at the east end of the lake. Interpretation of the reserve's wildlife, the important glacial landscape formations and historical features should be enhanced through interpretation panels in appropriate places and through the provision of a local walks leaflet, which should be made available at appropriate outlets in the neighbourhood.

Natural England will participate in the local access initiative currently being developed by the County Council which seeks to provide a variety of opportunities for sustainable access in the area.

Likely Significant Effect: These proposals are not necessary for nature conservation management but will have no significant effect on the internationally important nature conservation features of the site.

Monitoring Methods:

Visitor numbers will be monitored following the installation of a visitor counter in the Wood Lane car park. Visitor satisfaction will be measured via a questionnaire to site visitors.

2.4.3 Estate Asset Objectives

Estate Asset Objectives should cover all items listed in Table 1.8.7 and should also address health and safety compliance on the reserve. An individual objective should be included for the latter.

A chartered surveyor must be consulted when assessing the status of property assets.

Example: 2.4.3 Estate Asset Objective

Objective 7:

To maintain reserve buildings and estate structures not addressed by other objectives in an appropriate condition

Features addressed by this objective:

23, 24, 25, 26

Attributes/targets

Feature 23: Access drive and bridge

Attribute: Fabric condition

Target: Maintain in good serviceable condition

Feature 24: Reserve Base

Attribute: Fabric condition

Target: Maintain in good serviceable condition

Feature 25: Old Pumphouse

Attribute: Fabric condition

Target: Keep weatherproof

Feature 26: Fishing Rights

Attribute: Lease expiry

Target: Renew in Year 4

Objective Methods:

Regular maintenance of all the above is required to keep them in desired condition.

Under the terms of the NNR lease Natural England is required to maintain the main access track and the old railway bridge. Potholes appearing in the track should be infilled with crushed stone and compacted and the bridge should be repointed as and when required

The reserve base should be treated with a water-based preservative on a 3 year rolling programme.

Maintenance of the old Pumphouse, which is used as a materials store will require occasional repointing and replacement of roof tiles, as appropriate, to maintain it in a weatherproof condition.

The fishing lease expires in 2009; renewal negotiations should seek to establish a no-fishing zone at the west end of the lake to reduce disturbance of wildfowl.

Likely Significant Effect: These proposals are not necessary for nature conservation management but will have no significant effect on the internationally important nature conservation features of the site.

Monitoring Methods:

All buildings/structures will inspected as part of six-monthly reserve safety inspection and as part of triennial audit by the Buildings Manager. A full structural survey of the bridge should be undertaken every 10 years. In addition, the electrical installations at the reserve base will be checked every three years by a qualified electrician.