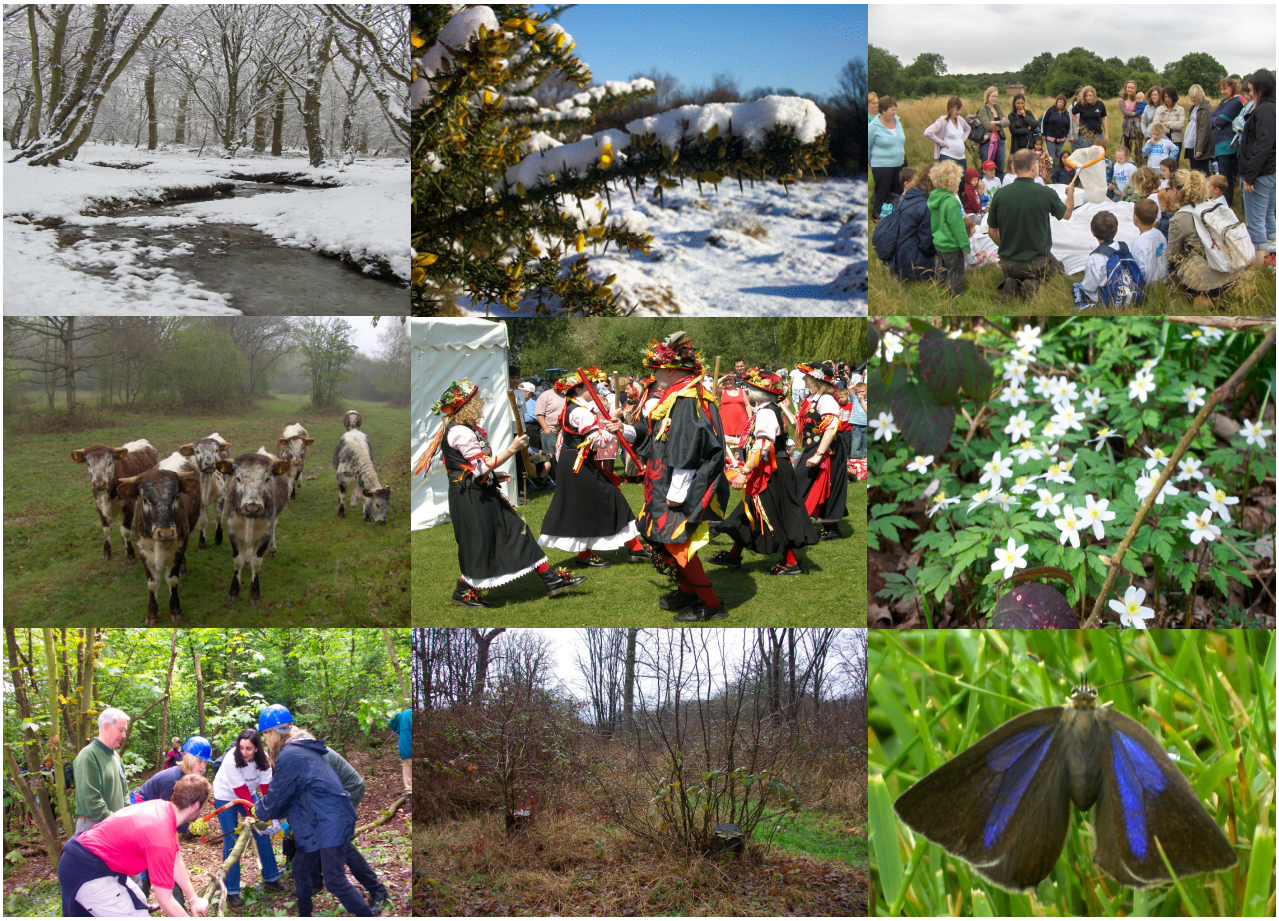
# Ruislip Woods National Nature Reserve



# Management Plan 2010 – 2015

HILLINGDON
LONDON

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## 1.1 Introduction

| | |
|---|---|
| **Site name** | **Ruislip Woods National Nature Reserve** |
| **Author(s) of plan** | **Richard Hutton**<br>Community Woodland Officer – Ruislip/Northwood<br>London Borough of Hillingdon (LBH)<br><br>**Stuart Hunt**<br>Green Spaces Area Manager– LBH<br><br>**Colin Bowlt**<br>**Mark Morgan**<br>Ruislip Woods Management Advisory Group |
| **Date written** | March 2010 |
| **Area of site** | NNR Declaration – 295.0 ha |

**Key Natural Features**

| Feature | Date acquired by LBH | Date Designated |
|---|---|---|
| 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 | April1965 | May 1997 |
| Tarleton's Lake | April 1986 | May 1997 |

## 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 |

This information is summarised on Map 10 in Appendix 2

| **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 | 63.23 | 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** | **294.20** | | |

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## 1.3 Summary Description

Four extensive woodlands (295.0 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* 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 and alder with aspen. 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

There is one management agreement
"The Friends of Ruislip Nature Reserve" manage Ruislip Local Nature Reserve (De-designated 1997 name retained). This group is partially grant aided by LBH.

### 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.

# 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: 305.4 ha. (54.6 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 and is managed by the Friends of Ruislip Nature Reserve. There are several boundary amendments from the former SSSI, including extensions.

**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. Maintain open glades and create new ones where possible | Canopy layer and ground flora good. Deadwood –improved since coppiced wood has been left to rot. 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.<br>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.<br>FAVOURABLE |
| Structure/Natural processes | At least two age classes present in coppice areas | Across site many different age ranges.<br>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<br><br>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 no Himalayan Balsam in Northern Finger or LNR, but threat remains from Copse Wood<br>FAVOURABLE |
| Species | To maintain and enhance conditions for key species, particularly *Meles meles* 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<br><br>FAVOURABLE |
| Structure/Natural processes | Varied structure across the site:<br>Canopy layer min 40% -70% max. Shrub layer min 20% -40% max.<br>Fallen/standing dead trees<br>Maintain mature/veteran trees<br>5% permanent open space<br>10% temporary open space | Canopy layer and ground flora good.<br><br>Dead wood – good in areas coppiced in last 5 years<br><br>Overall<br>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<br><br>UNFAVOURABLE |
| Structure/Natural processes | Varied structure across area | |
| Regeneration | Regeneration of heathland species | Through scrub clearance and follow up mowing, areas have converted to grassland from woody scrub<br>FAVOURABLE |

* Note - These are not Natural England objectives which are appended as appendix 7

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*. "

(Epping Forest Management Plan year 1998, p3-1)

## 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 and Natural England. 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"*

## 2.5 Natural Area context

Ruislip Woods forms a significant portion of the northern Hillingdon Green Belt. (See Hillingdon Unitary Development Plan Proposals Map-Northern Sheet.)(Appendix 4) and falls within the English Nature London Basin Natural Area 66. Priority habitats in the London Basin include: ancient woodland, lowland heathland (includes acid grassland) and river valley habitats.

## 2.6 Identification/Confirmation of Important Features

**1. Geology & Geomorphology**

International National Local
Undisturbed profiles
Thames levels

**2. Habitats/Vegetation types**

Lowland birch –sessile oak woodland
SSSI LBAP
Pendunculate oak – hornbeam woodland SSSI LBAP
Acidic sessile oak – hornbeam woodland SSSI LBAP

**3. Species**

***Plants***

Vascular *Melampyrum pratense* - Cow Wheat LBAP
*Tulipa sylvestris* – Wild tulip

***Lichens***

(data to be collected)

***Fungi***

(data to be collected)

***Animals***

***Beetles***

*Byctiscus populi* - Aspen Leaf Rolling Weevil BAP (PL)

***Moths***

*Archieraris notha* BAP (PL)
*Orthosia populeti* – Lead coloured drab BAP (PL)
*Boarmia roboraria* –Great Oak Beauty BAP (PL)

***Butterflies***

Apatura iris – Purple emperor
Limentis camilla – White admiral

***Diptera***

*Xylomania maculate* – Soldier Fly RDB 2
*Eustalomyia vittpes*
*Lipsothrix nervosa* – Southern yellow splinter BAP

***Mammals***

| | |
|---|---|
| *Meles meles* – Badger | LBAP |

***Bats***

| | | |
|---|---|---|
| *Pippistrellus pippistrellus* – Pipistrelle | BAP (PL) | LBAP |
| *Eptesicus serotinus* – Serotine | LBAP | |
| *Myotis daubentonii* – Daubenton | LBAP | |
| *Nyctalus noctula* – Noctule | LBAP | |
| *Plectonus auritus* – Long Eared Bat | LBAP | |

**Birds**

| | |
|---|---|
| *Picoides minor* - Lesser Spotted Woodpecker | RDB |
| *Scolopax rusticola* – Woodcock | |

**Amphibians**

*Triturus cristatus* - Great crested newt

***Reptiles***

Snakes

| | |
|---|---|
| *Natrix natrix* – Grass snake | LBAP |
| *Viprea beros* – Adder | LBAP |

**<u>Authority</u>:**

| | |
|---|---|
| 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 |

## 2.7 Ideal Long-Term Management Objectives

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

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 a long history of woodland cover in a favourable condition.**

During the implementation of the Ruislip Woods Long Term Management Plan (LTMP) recourses have been used to concentrate on the coppicing programme as a priority. The inspection of 'non coppice was undertaken during the period 1999-2003 in Copse, Mad Bess and Park woods. Through discussion and inspection with members of RWMAG concentration has been placed on widening paths and rides and removing invasive species such as holly and yew, as opposed to thinning works. This has been carried out on a rather limited scale during the 2003 –2008 period. A similar approach will be taken in the next five years with more detailed inspections being undertaken. A 2009 survey of yew and holly invasion in the Woods has shown a substantial increase in these species in recent years. Therefore, much work will need to be carried out to prevent further spreading. In general, in non-coppiced areas the approach is non-intervention.

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

During the early years of the LTMP LBH direct staff carried out coppicing. Because of Compulsory Competitive Tendering new methods needed to be found to keep pace with the schedule of required coppicing. Contract labour was used and markets needed to be found. During the early 1990's a pulp mill was identified as requiring hard wood pulp. The contractors came to cut the coppice and 'harvest' the pulp leaving the lop and top. This proved unacceptable to local people and a 'clear up' operation ensued ensuring a tidier look. This process was continued for a number of years until the requirement for hard wood pulp diminished. Charcoal makers have carried out a limited amount of coppicing, but the time taken to burn hornbeam has proven to be unviable. In the period 1999-2002 a limited amount of coppicing took place, burning the brush wood, whilst stacking the cord wood on site. It was proposed in the last 5 year plan that 5.8 hectares per year should be coppiced. In 2003 and 2004 contractors continued to carry out all coppicing works. Due to lack of contractors willing to do this work it was decided in 2005 that staff and volunteers should do all the coppicing. This has proved successful and all coppicing has been carried out in this way since. The target of 5.8 hectares has probably not been reached due to weather conditions and time constraints. So the aim for the next 10 years should be to complete 5.8 hectares annually with the understanding that this will not always be achievable.

In the 1980s, it was common practice to leave wavers in the coppice sites. This was a precautionary measure as it was not known whether the coppice stools would regenerate successfully. It has since been observed that about 99% of the coppiced hornbeams have successfully re-grown, including both old coppice up to 80 years old, and new coppice, up to 30 years old.

Due to concerns over oak sudden death and lack of regeneration of oaks in coppiced compartments, none have been felled since 2005. Instead, one or two oaks have been felled per year on Poor's Field and Grub Ground 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, or from other areas in the Borough. 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.

Brushwood material resulting from coppicing has in the past been burned, with the chord wood being stacked in piles on site. It is recommended that some of this brushwood be used for bean poles and sold to allotment holders (hazel is the only viable wood for this as hornbeam rots too quickly) Some could also be turned into chippings to be sold in sacks to the public. In addition, some of the chord wood should be used for fuel wood to be sold to the general public to provide a source of income for the Council.

Where birch trees are to be felled in coppice compartments and where there is a lack of dead standing wood, it would be beneficial to ring bark several trees to provide habitat for woodpeckers, bats, beetles etc.

***Charcoal burner in Copse Wood 2007***

Charcoal making was re-introduced in 2006 and carried out on a very small scale. Ways of increasing production and generating an income from sales should be sought.

**Maintenance of grass-heathland in a favourable condition.**

Priority management has been placed on continued grazing and removing invading trees and scrub and some of the established secondary woodland areas. Loss of grazing can result in the rapid loss in the species- richness of a grassland. In Ruislip Woods we have been fortunate to have obtained cattle continuously since 1997. In 2002 – 2006, Poor's Field was grazed by a herd of Belgian Blues. In 2007 a farmer from Harrow School Farm provided English Long Horns.

This has remained the same since. Stocking density has been kept at 12 -15 as this number seems to have the desired effect of helping to halt succession. Unfortunately, whilst the cows have halted succession in some areas, they have failed to make an impact in others. In addition, most of the typical acid grassland flowers such as harebell Campanula rotundifolia and tormentil have been eaten. Consequently, the invertebrates that rely on these plants may also have declined. Therefore, the number of cows should be reduced and strip grazing to be introduced in 2011.

***English Long Horns on Poor's Field 2007***

Areas of scrub on Poor's, Grub Ground and the Pylon Ride have been mown yearly in the months of October and November. This should continue until a more stable grass/heathland state is achieved. In 2009, a forage harvester was used for the first time. Forage harvesting should be continued on a yearly basis and the results monitored. Poor's Field should only require forage harvesting until it has reached a favourable acid grassland condition. Grazing should then be the only management required.

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

Therefore, the continuance of cattle grazing is regarded as essential for the future conservation of Poor's Field. In the absence of grazing on the other grassland sites, mowing is the only alternative.

Whilst much of the remaining scrub on the grasslands should be removed, some areas of scattered scrub are an important part of the woodland habitat mosaic and provide important nesting sites and food source for many animals. It should therefore be managed by a number of different approaches depending on what species it is being managed for. Thick scrub is desirable for nesting birds, whereas less dense, low scrub will benefit reptiles.

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

Ruislip Woods have a rich and varied range of streams and open water habitats. Ponds and streams in the woods have been located and mapped. 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 two ponds, Grub Ground pond and Post Pond, contain some water all year round.

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 one of the most important parts of this Plan, therefore, to establish a systematic survey and monitoring scheme for the ponds and a method of according priorities to each site.

***Ruislip Woods Ponds***

In the first year, all the mapped ponds will be surveyed twice a year, once in winter when ponds are full and once in summer in dry conditions. Ponds will 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.

***Stream in Mad Bess Wood***

Ditches and streams in the woods are a vital water source for wildlife. In the past, ditches and streams were cleared of silt regularly. This resulted in water leaving the woods rapidly and dry ditches for most of the year.
Management during 2003 – 2009 has been restricted to silt clearance only at entrances to culverts or where silting up causes flooding of paths. This has the benefit of keeping some small pools of water in the Woods during dry periods.

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 unavoidable.

**Maintenance of the current diversity of habitats in the Ruislip Local Nature Reserve and Tarleton's lake in a favourable condition.**
Ruislip LNR and Tarleton's Lake are currently managed by the Friends of Ruislip Local Nature Reserve and London Borough of Hillingdon respectively. Successful management has occurred through volunteer labour. Close liaison with the group exists through the Community Woodland Officer and RWMAG.

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

- Lowland birch-sessile oak woodland
- Pedunculate oak-hornbeam woodland
- Acidic sessile oak-hornbeam woodland
- Acidic sessile oak-beech woodland

Through the coppicing and inspection regime (LTMP p.23-32) and specific compartment prescriptions, set out in the LTMP (Copse Wood p.43-51, Mad Bess Wood p.56-64, Park Wood p.68-76), conservation of as wide a diversity of habitats has been achieved. Work will continue to enhance habitats as more information is gained through extended survey work.

**Maintenance and enhancement of habitats for key species present on the site.**
Through survey and monitoring work ensure that key species habitats are maintained and enhanced. An initial bat species survey was undertaken during 1996, through the Community Woodland Officer and local interest groups more detailed work is required. The badger setts present in the site are relatively unknown and remain undisturbed. Ride side management works have been carried out in Park Wood and on Grub Ground to enhance the spread of Cow Wheat. Management of ponds in the Woods, specifically to encourage an increase in the population of great crested newts should be a priority as they have received no management during 2002 –2009.

**Conservation of native local and rare species of plants, bryophytes, fungi (including lichens) and animals and encouragement of the spread of their populations.**
Through close liaison with local groups and RWMAG work has been geared to encourage the conservation of native local and rare species. One such practice has been to leave some stumps of felled trees at a height of 3 or 4 feet, rather than cutting at ground level. Another has been to widen paths around wet areas rather than to fill them in. Further work is required to collate data held by various groups to ensure centrally held records are up to date to inform works and further revisions of this plan.

**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 saproxilic fungi and invertebrates

Table 1 shows the approximate numbers of species of invertebrates and fungi recorded from Birmingham and the Black Country ("B&BC"). A total of over 1100 species believed to be associated with dead wood have so far been recorded.

**Table 1.** **Approx. Numbers of Invertebrate & Fungus Species associated with Dead Wood**[1]

| Group | Total Species Count | | Dead Wood Associated | | % Dead Wood Associated | |
|---|---|---|---|---|---|---|
| | UK | B&BC | UK | B&BC | UK | B&BC |
| Beetles (Coleoptera) | 4114 | 514 | 754 | 62 | 18.3 | 12.1 |
| Flies (Diptera) | 6668 | 1082 | 737 | 154 | 11.1 | 14.2 |
| Bees, Wasps, Ants etc (Hymenoptera) | 6549 | 264 | 178 | 12 | 2.7 | 4.5 |
| Butterflies & Moths (Lepidoptera) | 2768 | 900 | 46 | 6 | 1.7 | 0.7 |
| Other Insects | 1973 | 317 | 33 | 6 | 1.7 | 1.9 |
| Non-Insects | 1724 | 420 | 25 | 4 | 1.5 | 1.0 |
| **Invertebrates Total *** | **23796** | **3497** | **1773** | **244** | **7.5** | **7.0** |
| | | | | | | |
| Toadstools etc. (Agaricales) | 1633 | 821 | 204 | 140 | 12.5 | 17.1 |
| Bracket fungi (Aphyllophorales) | 702 | 216 | 519 | 194 | 73.9 | 89.8 |
| Jelly fungi (Tremellales S.L.) | 105 | 21 | 75 | 5 | 71.4 | 23.8 |
| Stomach fungi (Gasteromycetes) | 116 | 27 | 8 | 5 | 6.9 | 18.5 |
| Ascomycetes | 5100 | 904 | 1680 | 284 | 32.9 | 31.4 |
| Slime moulds (Myxomycetes) | 300 | 158 | 267 | 111 | 89.0 | 70.3 |
| Lichens | 1355 | 141 | 223 | 71 | 16.5 | 50.4 |
| Rusts & Smuts | 360 | 111 | 0 | 0 | 0.0 | 0.0 |
| Coelomycetes | 643 | 259 | 40 | 16 | 6.2 | 6.2 |
| Hyphomycetes | 1113 | 196 | 200 | 55 | 18.0 | 28.1 |
| Others | 3573 | 32 | 0 | 0 | 0.0 | 0.0 |
| **Fungi Total **** | **15000** | **2886** | **3216** | **881** | **21.4** | **30.5** |
| **Invertebrates + Fungi** | **38796** | **6383** | **4989** | **1125** | **12.9** | **17.6** |

* Includes a few species also associated with live timber and species associated with sap runs.
** Includes species recorded from the whole of Warwickshire

[1] http://www.wildlifetrust.org.uk/urbanwt/ecorecord/bap/html/deadwda.htm
Date accessed: 26/11/09

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. Making safe trees will be undertaken where they are close to statutory paths and rides, in the vicinity of car parks and against neighbouring properties.

**Preservation of historically important earthworks and ancient boundary ditches and banks.**
Ruislip Woods has an extensive network of historically important earthworks and wood banks. Work has concentrated mainly on stabilising any trees that are a risk to the feature through toppling and stubbing of hornbeams on the earthbanks on a 20 year rotation. Particular care needs to be taken that these ancient banks are not damaged by access. Non-statutory paths encroaching on wood banks should be encouraged to grow over to prevent both walkers and cyclists eroding them.

**Ensure the Ruislip Woods NNR is not compromised by changes to adjoining land or property.**
Efforts should be made to work closely with neighboring farmers, land owners and residents to ensure the Woods are not compromised by development changes around it. This includes developments to the Lido. Patrols of boundary land should be carried out on a regular basis.

**Maintain and improve the condition of the bridle paths for public access.**
Horse riding is a fairly popular activity in the Woods with several stables in close proximity to it. Given the nature of riding and the fragility of the woodland floor, horseriding has the potential to cause significant damage and, prior to management action and controls being introduced, it did cause widespread damage to some areas of bridle path and other non-bridle paths. During the period 2003 – 2009, management took the twin approach of prohibiting or restricting horseriding in certain areas with fencing, combined with providing sections of all year round surfaced horserides.

Much of the bridle path system in the Woods has been upgraded over the last 5 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 by 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. 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. Therefore it is essential to provide an information sheet with cycling guidelines including a map.

**Maintain and improve the condition of the footpaths for public access.**

***Boardwalk in Copse Wood, installed in 2007***

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 and could become even scarcer if summers are to become drier due to climate change.

The solution to the problem of wet paths has been to install boardwalks and bridges in the worst affected areas. From 2003 – 2008 A total of 21 boardwalks and bridges have been 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.

Three new easy access routes have been created. The White, Red and Blue Routes were designed with public transport in mind. All routes start and finish near to a bus stop. Leaflets for these self – guided walks are available to download on the Hillingdon website. Two additional easy access paths not created during the last 5 year plan will now be produced during the next 5 years.

**Ride management for wildlife**

Many 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. Scalloping creates a more natural look and provides microbitats for many species. Scallops or bays also provide shelter for butterflies from the wind.

**Control of invasive species**

*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. A survey was carried out in 2006, which identified the problem as being as yet relatively small in these Woods. In 2007 some Spanish Bluebells were removed by digging out from Park Wood. In 2008 this action was repeated. It is recommended that this action be carried out every year wherever garden bluebells occur.

Garden Archangel ( *Galeobdolan luteum spp argentatum* )

This species is becoming a problem in the same areas as the Spanish Bluebells but is much more virulent. Whereas, the Spanish Bluebells can be pulled or dug out by hand, the Archangel cannot, as there is so much of it. This invasive has increased significantly over the period of the management plan. In future this will have to be sprayed.

Himalayan Balsam ( *Impatiens glandulifera* )
This species is a problem in parts of Copse Wood and the Northern Finger. Control by hand pulling and cutting in the Northern Finger has been a successful means of control where it has decreased significantly. It has been less so in Copse Wood as it covers a much larger area and cannot all be reached. Balsam bashing continued in mid June 2008 in Copse Wood. In hindsight, this was too early in the year and should ideally be done later in the year, perhaps August just before the seeds appear. Pulling twice a year would have the optimum effect.

Japanese Knotweed ( *Fallopia Japonica* )
There are a few small patches of this plant in Bayhurst Wood, one of which is in Tarletons Lake Reserve and the other adjacent to the field near the large pond. Another small area is close to St. Vincents entrance to the Woods and one very small patch All three patches are relatively small and should be sprayed.

Laurel ( *Prunus lauracerasus rotundifolia* )
The main areas where this occurs are in Copse Wood near to the Battle of Britain House site. In 2005 a large area of laurel was cut and burned. Some of the stumps were treated with herbicide, some were not. Treated stumps did not re-grow; the others did and in 2008 were winched out. Future prescription for laurel should ideally be herbicide treatment.

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. Much of the holly grows next to residential properties and is therefore likely to be non-native. The most effective way of controlling it is to winch out the roots.

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.

**Encourage the educational use of the Woods by the widest possible range of people**
This is one of the most important objectives of the Plan as the schoolchildren of today will be the future stakeholders of the Woods. Encouraging learning and a greater appreciation of the intrinsic value of the Woods will only benefit its future.

The Classroom in the Woods programme of curriculum based environmental activities has successfully evolved since 2003, growing from a few classes to twenty on average per year taking part. In addition, slide shows and walks and talks for other groups have helped raise the profile and importance of the Woods.



***Mini beast activities capture the imagination of children***

**Manage the Woods in the most sustainable way**
Sustainability is a global issue, but locally we can do our bit by managing the Woods sustainably**.** Fortunately, this is something that we have been doing extremely well in the Nature Reserve over the last five years. Most importantly, we have almost eliminated the need to use outside contract staff to carry out works in the Woods. This has been achieved by employing another Woodland Ranger so that staff can carry out the coppicing and by purchasing a tractor to carry out all mowing. These were jobs previously done by contractors.

In addition, all boardwalks, benches and bridges have been installed by staff and volunteers using Ruislip Woods' oak. Charcoal production has been re-introduced using coppiced hornbeam. All hedge laying is now being carried out by staff and volunteers using hazel stakes and whips from coppiced sites.

Sales from charcoal production and logs could provide a potential income for the Woods, so its growth should be continued.

## 2.8 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.

**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.

**Proximity of Golf Courses**
A water course runs through golf courses to the NNR with the possibility of chemical/fuel spills and chemical spay drift.

**Proximity of Farmland**
Spray drift etc.

**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.

**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 that one dog. This has several impacts on the Woods and users of the woods. The increase in resulting dog faeces can alter the soil structure by adding more nutrients thus encouraging nutrient rich plants such as nettles. Increased dog activity will also disturb wildlife and cause stress to the cows. An information leaflet on dog walking in the Woods giving guidelines on proper use of this public space would help alleviate some of the problems.

**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. This is particularly evident when extracting wood.

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

## 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.

In writing this plan it has become apparent that there is a need to create a baseline habitat map, so that an ideal state map can be developed to guide management and future funding bids.

### 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'sField), 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 maintain and improve condition of streams and maintain current diversity of open water habitats | 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 | Active management through the Friends of Ruislip Local Nature Reserve following agreed management plan |
| Tarleton's Lake | Maintain current diversity of habitats | Staff to manage |
| 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 | Non intervention, prevention of damage |
| Research | Continue to find out more about site species and impact of management activities | Non intervention, monitoring |
| Education | Encourage the learning of the natural environment and take an interest in nature conservation. To contribute to a borough that encourages life long learning | Active management through encouragement of schools/colleges/universities through a structured programme that takes site features into account |
| 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 | To fulfill the | Active management through volunteer |

| | | |
|---|---|---|
| involvement | requirements of London Borough of Hillingdon | 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 |

## 3.2 Work Plan 2010 - 2015

| Objective | 20010 | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|---|
| **Maintenance of non-coppice areas in favourable condition** | Remove invasives from Park Wood | Remove invasives from Copse Wood | Remove invasives from Mad Bess Wood | Remove invasives from Bayhurst Wood | Remove invasives from Park Wood |
| **Maintenance of Coppiced woodland in favourable condition** | Coppice areas marked 1 on maps | Coppice areas marked 2 on maps | Coppice areas marked 3 on maps | Coppice areas marked 4 on maps | Coppice areas marked 5 on maps |
| **Maintenance of grassland in favourable condition** | Forage harvest and graze Poor's Field | Forage harvest and graze Poor's Field | Forest harvest and graze Poor's Field | Forage harvest and graze Poor's Field | Forage harvest and graze Poor's Field |
| **Maintenance of streams and ponds in favourable condition** | Carry out survey of ponds in Mad Bess Wood | Carry out work required on Mad Bess ponds | Carry out survey of ponds in Park Wood and work required | Carry out work required on Park Wood ponds | Carry out survey of Copse Wood ponds and work required |
| **Maintenance of paths and bridlepaths for wildlife and public access** | Bridlepath widening in Bayhurst Wood | Bridlepath widening in Mad Bess Wood | Bridlepath widening in Copse Wood | Bridlepath widening in Park Wood<br><br>Create 1 Easy Access Walk | Create 1 Easy Access Walk |
| **Encourage environmental education to school groups** | Up to 20 classses | Up to 20 classes | Up to 20 classes | Up to 20 classes | Up to 20 classes |
| **Promote the Woods to variety of audiences** | Lead at least 5 walks and present at least 5 slide shows | Lead at least 5 walks and present at least 5 slide shows | Lead at least 5 walks and present at least 5 slide shows | Lead at least 5 walks and present at least 5 slide shows | Lead at least 5 walks and present at least 5 slide shows |
| **Carry out safety checks on all statutory paths** | Carry out checks weekly | Carry out checks weekly | Carry out checks weekly | Carry out checks weekly | Carry out checks weekly |
| **Carry out safety checks on all bridlepaths** | Carry out checks weekly | Carry out checks weekly | Carry out checks weekly | Carry out checks weekly | Carry out checks weekly |
| **Widen and create scallops on selected major footpaths** | R70, R71, R73 R124, R125, R126, R11 | R76, R77, R78, R83, R84,R85, R98, R99, R100 | R65, R66, R69, R70, R74 | U86 | U86 |

# 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. This area is excluded from consideration and treated separately.

#### Tenure

Entirely under the control of the London Borough of Hillingdon, as defined here excluding compartments A – D.

Entirely within the Ruislip Woods National Nature Reserve.

#### Map Coverage

See maps accompanying this report.

#### Size

63.23 hectares (156.24 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 excluded 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. In particular, the path separating J and I is often particularly boggy, and the 'fire break' running from R to Ducks Hill Road at V is marsh in parts. 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 a 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….. this indicates those which are statutory rights of way.

The bridleway enters the wood at Ducks Hill Road where it meets the privately owned wood and exits at Poor's Field as shown on Map ….

**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.

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:

- Description
- Regeneration
- Long term objective
- Work received
- Work required
- Subsidiary objectives

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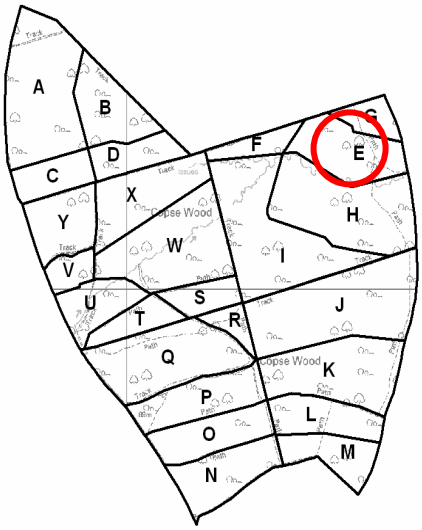
EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# COPSE WOOD

## Compartment E

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Original entry in RWLTMP

**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 p.39).

**Regeneration**: A few young oaks but these are sparse.

**Objective**: Maintenance as open birch-oak-bracken heathland.

**Work received 2003-2009**: Himalayan Balsam has been pulled yearly in this area in July and August. Paths have been mowed twice a year.

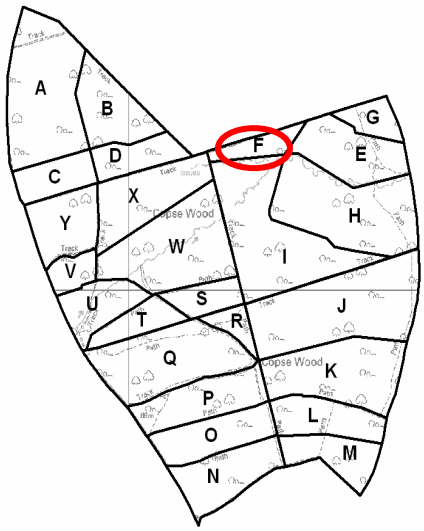
**Work required**: More time should be allocated to removing Himalayan Balsam as it is widespread in this area and is spreading rapidly.

**Subsidiary**: Very popular with residents of Northwood due to the easy access from there. Retention of the scenic value of the stream, its margins and bluebell areas.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# COPSE WOOD

## Compartment F




## Original entry in RWLTMP

**Description:** Dense birch-oak-bramble thicket area which has been long-neglected, with hawthorn and hazel near the stream. Good development of honeysuckle overgrowing other shrubs and also much Wood Sorrell (Oxalis acetosella) near the stream.

**Regeneration**: None noted; shade from brambles too dense.

**Objective**: Mixed deciduous woodland.

**Work received 2003-2009**: Light thinning, mainly by removing holly where it is becoming common. An area of holly was removed by cutting down and winching out by the roots. The Sandy Gallup was widened in 2007 and is chain harrowed weekly when weather conditions allow.

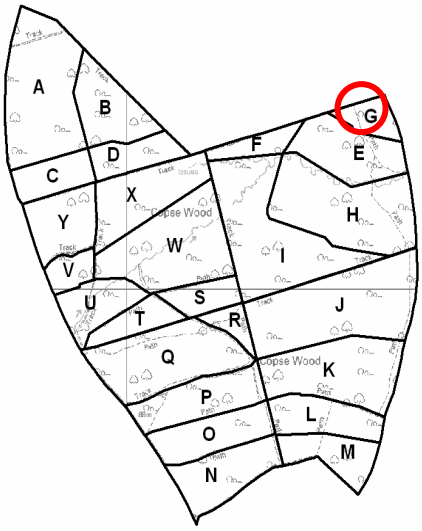
**Work required**: Due to its varied nature and botanical interest care is required when thinning. The hornbeam in the north-west part could be singled or coppiced and more light could also be admitted to the stream margins to encourage the growth of flowers. This action was recommended in both the NVC 11 survey carried out by Land Use Consultants in 2006 and the original Long Term Management Plan in 1981/82.

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

EVALUATION OF MANAGEMENT REQUIREMENTS 1997

# COPSE WOOD

## Compartment G




Original entry in RWLTMP

**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.

**Regeneration**: The birches are mixed in age, and re-establishing, but there are also old dead standing trees. There is little other regeneration although a few oak seedlings were noted.

**Objective**: Birch dominant mixed deciduous woodland.

**Work received 2003-2009**: Path along golf course has been cut back yearly. No other work received.

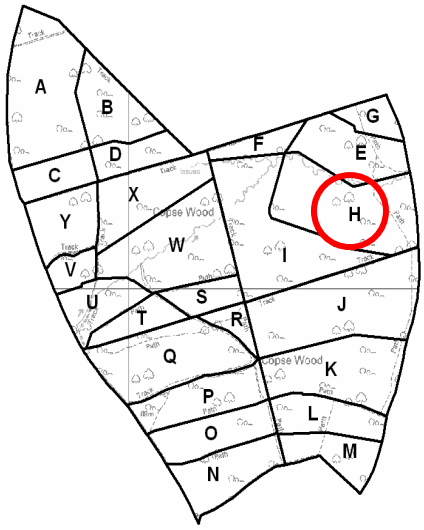
**Work required**: Probably best left to develop on its own but periodic light thinning of the trees other than the birches is recommended if these develop to such an extent that the growth of the birches is depressed. Himalayan Balsam is a problem in this area so should be pulled yearly at least.

**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. A layered boundary hedge would restrict access from these areas and provide extra nesting/roosting sites for birds.

EVALUATION OF MANAGEMENT REQUIREMENTS 1997

# COPSE WOOD

## Compartment H




## Original entry in RWLTMP

**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. Rowan was reported by Crooks C1970).

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

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

**Work received**: **2003-2009**: No work received.

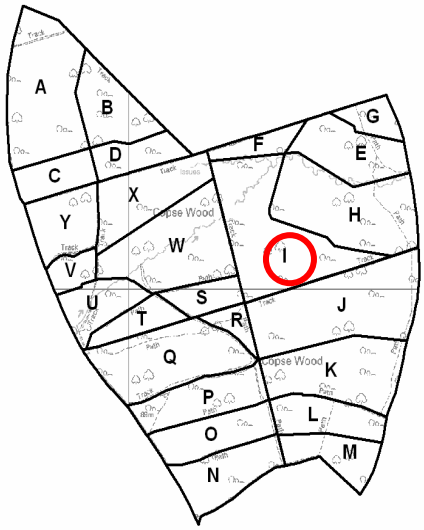
**Work required**: Light thinning around the stream. Path widening along R70.

**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 1009

# COPSE WOOD

## Compartment I




## Original entry in RWLTMP

**Description**: Long-neglected oak-hornbeam coppice with many very old stools and a good number of standard oaks. Some hornbeam trees are present in the northern part. The ground is devoid of vegetation through most of the unit but brambles occur in places and bracken has invaded in others (especially in the south).

**Regeneration**: Some regeneration of oak has taken place where stools have died. Regenerating holly was noted by Crooks (1970) and is a conspicuous feature.

**Objective**: Oak-hornbeam coppice.

**Work received 2003-2009**: Areas 14 and 16 were coppiced in 2006.

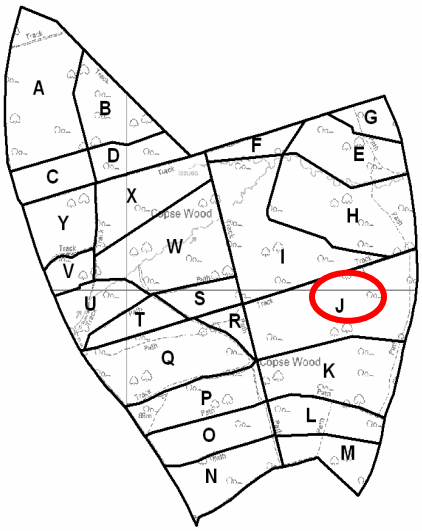
**Work required**: Some opening up of small areas around the stream should be carried out. Path widening to be carried out on R70.

**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 2009

# COPSE WOOD

## Compartment J




Original entry in RWLTMP

Compartment J (excl. 1971 clearings)

**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 2003-2009**: Statutory footpath R70 was widened in 2005 by creating scallops along its length. Widen further in 2010.

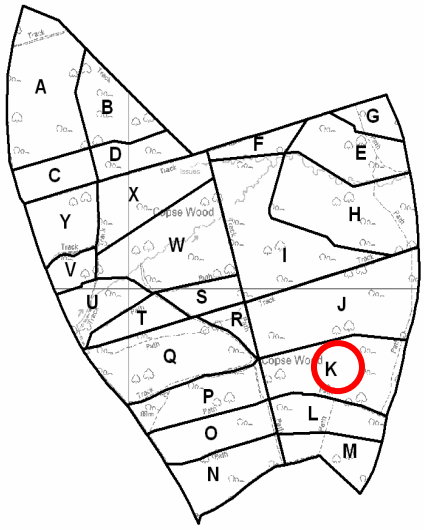
**Work required**: Coppice areas marked in orange. (See appendix 2 map 6). Continue to scallop and widen R70 on rotational basis.

**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 1997

# COPSE WOOD

## Compartment K




Original entry in RWLTMP

Compartment K (excl. 1971 clearings)

**Description**: Oak-hornbeam coppice, mostly badly neglected, apart from one area coppiced in 1951/52 (Fig. 6). Some bramble in parts but most with little ground vegetation. Many stools rotten and some have fallen to create clearings where regeneration is occurring. The northern section of one of the 1971 clearings is to the east end of this unit (see p.46). In July 1953 the largest shoots on the 1951/52 coppiced areas were l.5m (5 ft), with about 50 birch seedlings per square ft, and with rose-bay willow herb and Holcus grasses and brambles spreading (Mitchell, 1954: 19); Crooks (1970: 32) refers to this as giving then a "weak twiggy re-growth" which he attributed "perhaps to insufficient thinning"; the area was very dense and twiggy in 1981 with many dead branches; no wavers appear to have been left in 1951/52. Observations on the state of this area almost 30 years after treatment contributed to our recommendations as to the coppicing method to be tried in the first instance. This twiggy area is now very rich in mosses.

**Regeneration**: Regeneration of hornbeam occurs where some stools have died and there are also some young hollies.

**Objective:** Oak-hornbeam coppice.

**Work received 2003-2009**: Areas 15 and 20 coppiced.

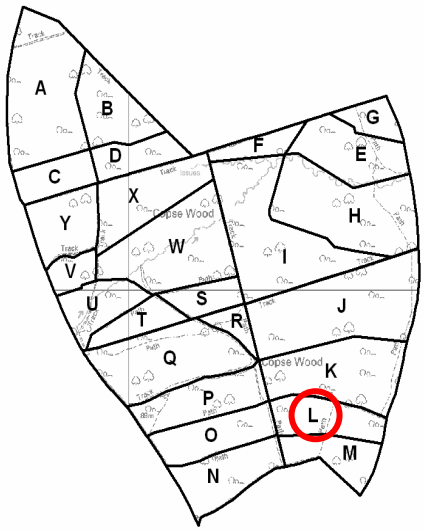
**Work required**: Coppice areas marked in orange. (See appendix 2, map 6).

**Subsidiary**: None.

EVALUATION OF MANAGEMENT REQUIREMENTS 1997

# COPSE WOOD

## Compartment L




Original entry in RWLTMP

Compartment L (excl. 1969 and 1971 clearings)

**Description**: Oak-hornbeam coppice, long-neglected apart from the 1969 and 1971 cleared areas. Many stools rotten. Ground vegetation sparse to absent.

**Regeneration**: several young oaks in area 4. Possibly 15-20 year old.

**Objective**: Oak-hornbeam coppice.

**Work received 2003 – 2009**: Area 4 coppiced. Hedge laid on border with Poor's Field in 2008/9.

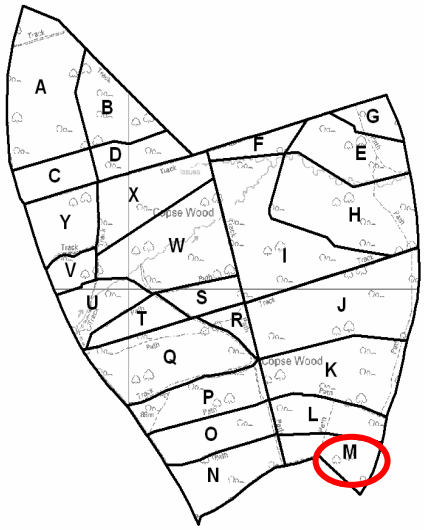
**Work required**: Coppice area marked in orange. (See appendix 2, map 6).

**Subsidiary:** None.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# COPSE WOOD

## Compartment M




Original entry in RWLTMP

Compartment M (excl. 1969 clearing)

**Description**: Oak-hornbeam coppice, long-neglected, apart from the 1969 clearing. Ground vegetation sparse to absent.

**Regeneration**: Some oak, holly and hornbeam regenerating particularly where stools have died.

**Objective**: Oak-hornbeam coppice

**Work received 2003-2009**: Area 4 coppiced and hedge laid on border with Poor's Field 2008/9.

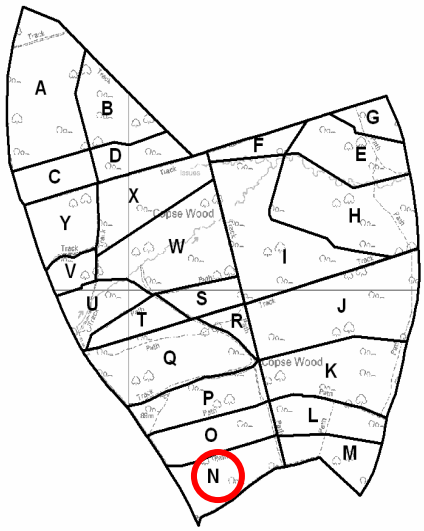
**Work required**: Coppice area marked in orange. (See appendix 2, map 6).

**Subsidiary**: Path along the southern boundary particularly muddy.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# COPSE WOOD

## Compartment N




## Original entry in RWLTMP

**Description:** Mainly birch with bracken below, also oaks especially in the north-east adjacent to 0. 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**: More open birch- bracken area

**Work received 2003-2009**: Laurel was removed by grubbing out. A small area on the southern tip was scraped in 2008. A small area of bracken was pulled in summers 06 and 07.

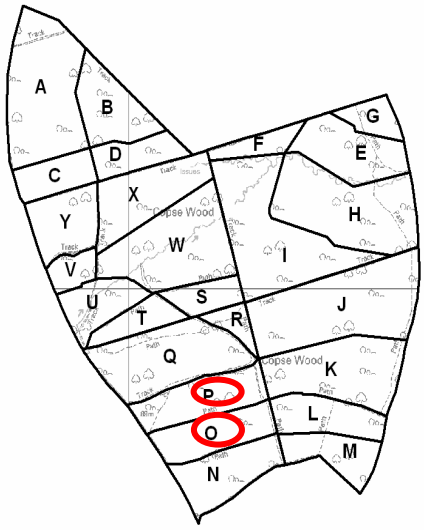
**Work required**: To restore this area to more open heathy habitat by selective thinning of oaks and birch. Bracken should be pulled twice yearly. More scrapes should be created.

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

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# COPSE WOOD

## Compartment O+P




Original entry in RWLTMP

**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 0 (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 0 and also in P), willow (by the bomb crater in 0), 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**: 0aks, and birches regenerating, also sweet chestnuts, hawthorns, and more rarely holly. Most of the oaks are less than 20 cm diam.

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

**Work received 2003-2009**: Some sycamore and Laurel cut and grubbed out. Some areas had bracken pulled. Survey of reptiles carried out. Slow worms and grass snakes were found to be common in this area. Common and pygmy shrews and common wood mouse.
Path running between area P-Q was scalloped by Capel Manor students.
R71 and path segmenting areas P and O were mowed once yearly.
Fairly large area of bracken was pulled in area P.

**Work required**: Remnants of a more open, heath area can still be found here, for example there is still a few gorse bushes hanging on and one small area of ling. It is therefore an ideal area for creation of acid grass/heathland. It has also been recommended as an appropriate area for adder introduction by LEHART.

In order to open the area up and make suitable habitat for adder introduction 50% of the birch and oak should be taken out. Bracken should be pulled twice yearly and cuttings raked and used for habitat piles. A few small areas of bracken would benefit woodcock so should be left. One acre per year, starting in area nearest Battle of Britain House would be recommended. A screen of trees and shrubs should be left on R71 to prevent the public and their dogs from disturbing the wildlife. All cut timber should be cut left for tidy habitat piles.

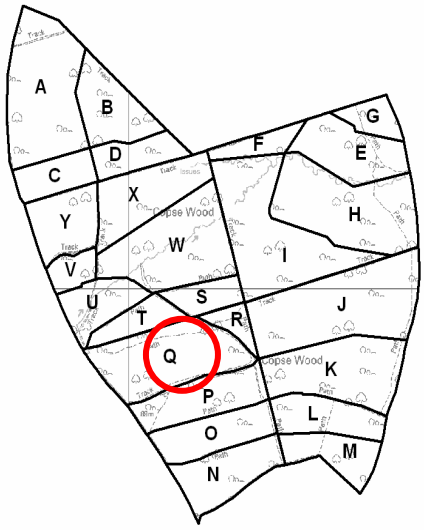
Small scrapes should be made in other sections to encourage heather growth.

**Subsidiary:** Remove rubbish from the bomb crater in 0 taking care not to damage its banks, which are of interest for mosses, and retaining the willow by it. Encourage scrub or have the hedge improved along the boundary with Duck's Hill Road to reduce the future dumping of rubbish here but the boundary should not be allowed to be too high so that vistas from the road into the open parts of the woodland are retained (especially attractive in the autumn). Keep the margins of the P/Q and 0/P paths clear of scrub and grasses so that the old ridges and furrows (see p.39) are visible; surface improvement should be kept to the existing width so as not to encroach onto these margins. All remaining wet areas should be kept and no attempt to drain them made because of the interesting plants that grow near or in them -- this includes the damp areas by the main P/Q path which has a very rich flora.

EVALUATION OF MANAGEMENT
REQUIREMENTS 1997

# COPSE WOOD

## Compartment Q




## Original entry in RWLTMP

**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. The "Fire-break" track at the Q/R boundary is especially moist and important for flowers preferring such habitats.

**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 carried out 2003-2009**: Sycamore was cut in this area.

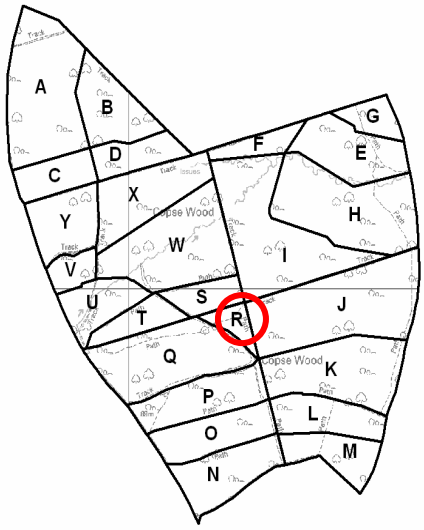
**Work required**: Removal of conifers and holly where it is a problem.

**Subsidiary**: Some of the larger hawthorns should be kept for their ornithological importance.

EVALUATION OF MANAGEMENT
REQUIREMENTS 1997

# COPSE WOOD

## Compartment R




Original entry in RWLTMP

**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. There is a massive coppiced oak in the south-west corner near Q.

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

**Objective:** Mixed deciduous woodland.

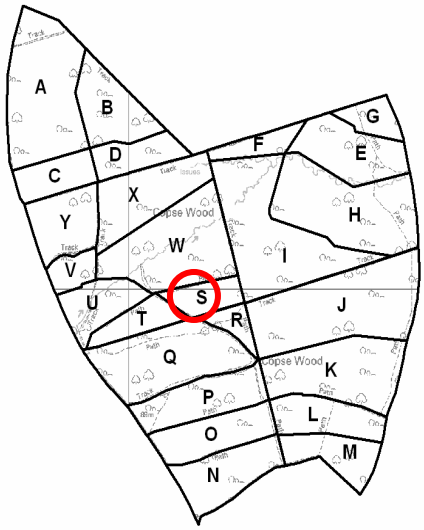
**Work received 2003-2009**: None received.

**Work required**: Light thinning by removal of yew and holly. Create scallops along R73.

EVALUATION OF MANAGEMENT REQUIREMENTS 1997

# COPSE WOOD

## Compartment S




## Original entry in RWLTMP

**Description**: Long-neglected oak-hornbeam coppice, some invading birch, little ground cover except brambles in parts. Also some hazel in the east, sallows 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).

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

**Objective**: Oak-hornbeam coppice.

**Work received 2003-2009**: R69 was scalloped 2005 and mown every year.

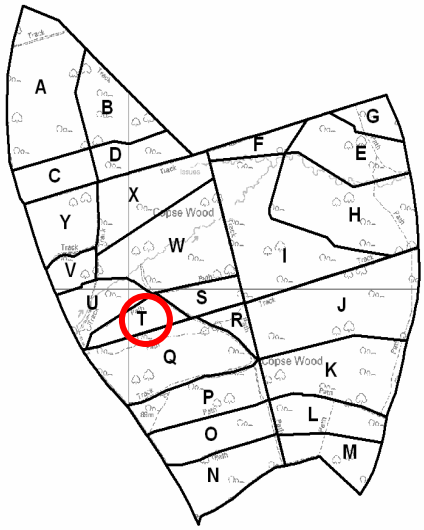
**Work required**: Create scallops along R69.

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

EVALUATION OF MANAGEMENT REQUIREMENTS 1997

# COPSE WOOD

## Compartment T




Original entry in RWLTMP

**Description:** Long-neglected 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). Much of the hornbeam in a rather poor state with dead stools and dead standing poles.

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

**Objective:** Oak-hornbeam coppice

**Work received 2003-2009**: Areas 5 and 15 coppiced in 2008/9

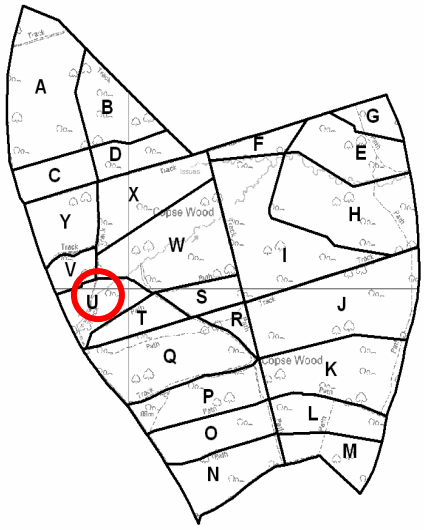
**Work required**: Continue to coppice long neglected hornbeams.

**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 1997

# COPSE WOOD

## Compartment U




Original entry in RWLTMP

**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**: Oak-hornbeam coppice except in the marginal strip which is best left to form very open mixed deciduous woodland.

**Work received 2003-2009:** Areas 10 and 17 were coppiced 2003/4. The hedge along Ducks Hill Road was laid in this section in 2005. It has been trimmed yearly.

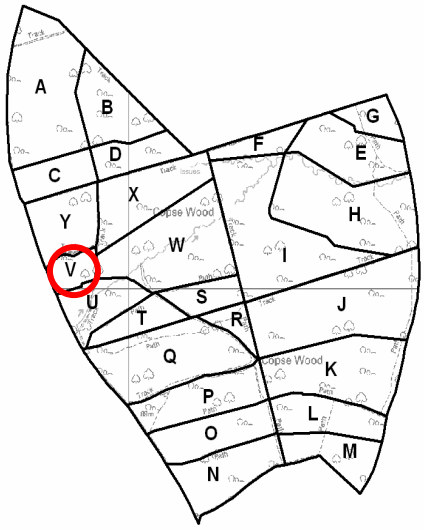
**Work required**: Continue to lay hedge along Ducks Hill Road.

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

EVALUATION OF MANAGEMENT REQUIREMENTS 1997

# COPSE WOOD

## Compartment V




## Original entry in RWLTMP

**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**: Oak-hornbeam coppice except in the marginal strip which is best left to form very open mixed deciduous woodland.

**Work received 2003-2009:** Areas 10 and 17 coppiced in 2003/4

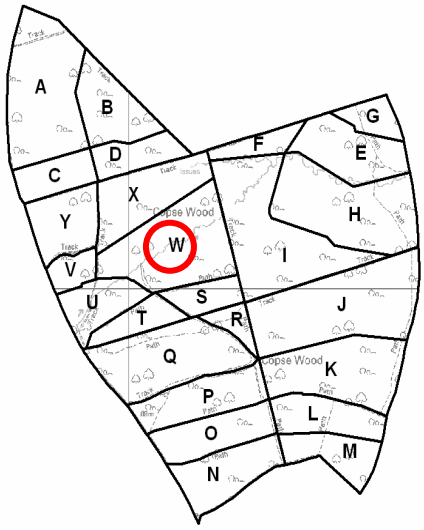
**Work required**: Continue to lay hedge along Ducks Hill Road.

**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 1997

# COPSE WOOD

## Compartment W




Original entry in RWLTMP

**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**: Manage as non-coppice.

**Work received 2003 – 2009:** None received.

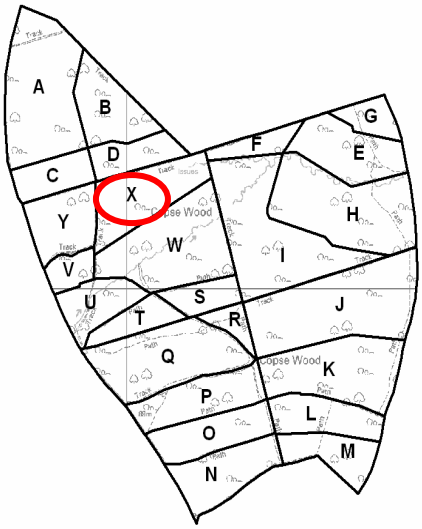
**Work required**: Thin out holly and yew. Remove invasive species.

**Subsidiary**: Work should be carried out to accentuate the topography by working blocks cutting across the stream. The open nature of the path with its grassy margins and mixed marginal flora should be kept to give the impression of diversity and retain the character of the unit. The stream margins should be opened slightly to allow the development of light-requiring flowers which require marshy situations. Care should be taken not to encourage walkers to erode the banks.

EVALUATION OF MANAGEMENT REQUIREMENTS 1997

# COPSE WOOD

## Compartment X




Original entry in RWLTMP

**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**: Oak-hornbeam coppice, except for the bracken area.

**Work received 2003-2009**: Holly was grubbed out in a small area of approximately 100msq in 2009. The bridle path section through Y/J was laid with hard surface in 2004.

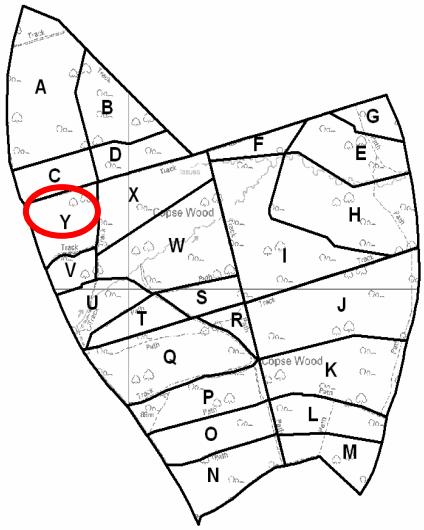
**Work required**: Thin out holly in this area where it is common.

**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 1997

# COPSE WOOD

## Compartment Y




Original entry in RWLTMP

**Description:** Oak-hornbeam coppice, with scattered birch. Little ground cover through much of the area but brambles, honeysuckle and bracken in parts. An area of about 1.5 acres in the north-west of this unit was treated in about 1972 by the reduction in the numbers of poles on each hornbeam stool. This has made this small area much easier to walk through and more attractive than some other parts of the coppiced areas but failed to overcome the problem of regeneration, the adoption of such a treatment through the woods, on the basis of the evidence here, would mean in the long term that re-planting would probably be required if its present interest was to be kept -- as a result this method was not endorsed by the Working Party as a satisfactory long-term method of management for neglected coppice. 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**: Oak-hornbeam coppice.

**Work received**: None

**Work required**: Coppice area marked in orange. (See appendix 2, map 6). Continue to lay hedge along Ducks Hill Road.

**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; sallow, 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, Epson 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.

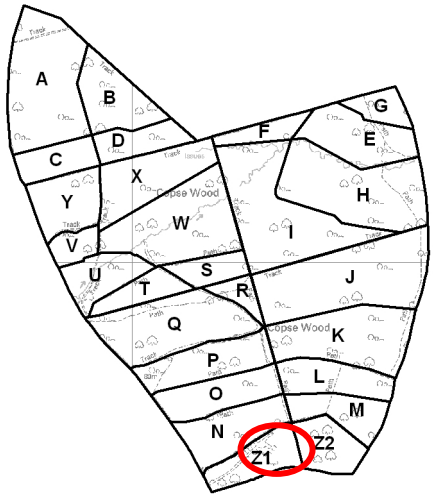
### Archaeological

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

| | |
|---|---|
| EVALUATION OF MANAGEMENT REQUIREMENTS 1997<br><br>COPSE WOOD<br><br>Compartment Z1 |  |

## 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 rhodendron 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 2003-2009**: The secondary hornbeam/oak/birch woodland that had encroached on this area was cleared in 2005 and has been kept clear since to allow area to develop into grassland.

**Work required**: Eliminate all laurels (these are the source of invasion into Copse Wood). Rhododendrons appear not to be spreading be seed and can be left for future consideration.
Remove all planted tree, particularly the evergreens (Cypresses).
Prune oaks along southern boundary to reinstate the view described above.
Remove scrub from former lawn to maintain open grassy area.
Old entrance: remove derelict brick structure. 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

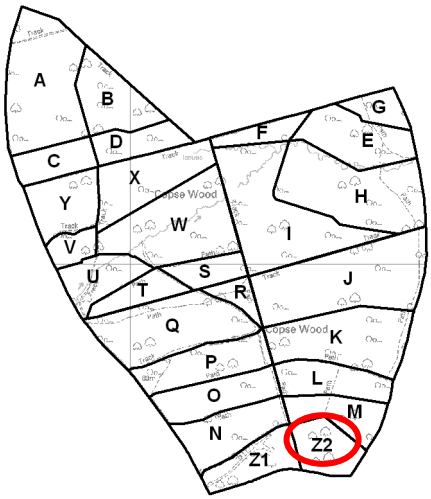
a crucial area of developing secondary woodland for which the complete history is known, from ancient woodland, through clearance (except for many of the oaks) to the commencement of its development as secondary woodland 25 years ago. Data from here will be most valuable in the continuing debate about 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 1997

# 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 2003-2009**: Some laurel has been removed from this area.

**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.

# 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 steam 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 teaching 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 Steam 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 two gates 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 *Ionotus 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 collybites), 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.

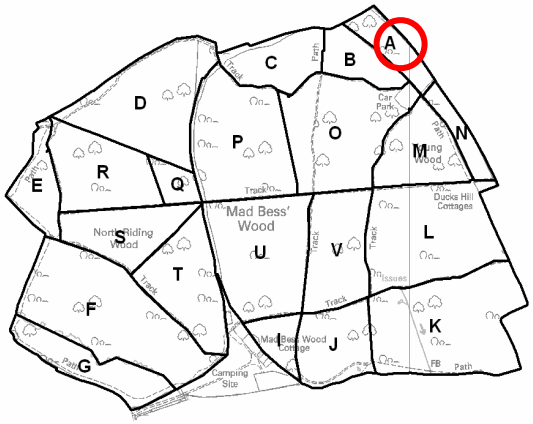
6. Other plants which are rare or local in the area are betony (Betonica officinalis) in the central section, creeping St Johns wort (Hypericum humifusum) in P, cut-leaved dead nettle (lamium hybridum) on the eastern side, and the wood sedge (Carex sylvatica) in several places.

## 5.3 DESCRIPTION OF COMPARTMENTS

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment A




Original entry in RWLTMP

**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 sallow, 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 2003 – 2009**: Alders were coppiced to the northern ride, hornbeams on the bank were stubbed and invasive species were removed in 2000.

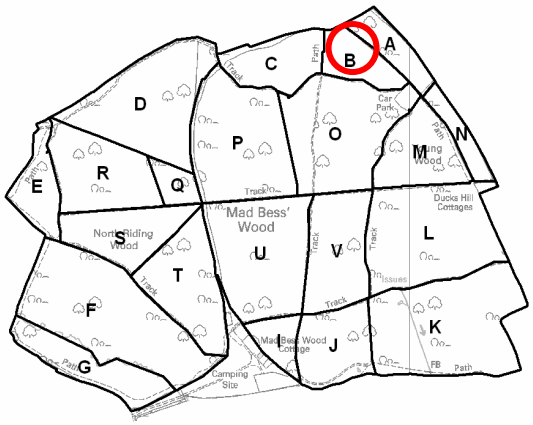
**Work required**: Coppice alternate alders every 10 -15 years but retain existing mature trees and also allow four other poles to develop into full-grown trees. Other trees should be discouraged by cutting out all seedlings and young trees.

**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 2001

# MAD BESS WOOD

## Compartment B




## Original entry in RWLTMP

**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:** Mixed deciduous woodland of birch-oak-sweet chestnut.

**Work received 2003 - 2009**: Sweet chestnut was coppiced in 2000 as were hornbeams. Oaks were thinned.

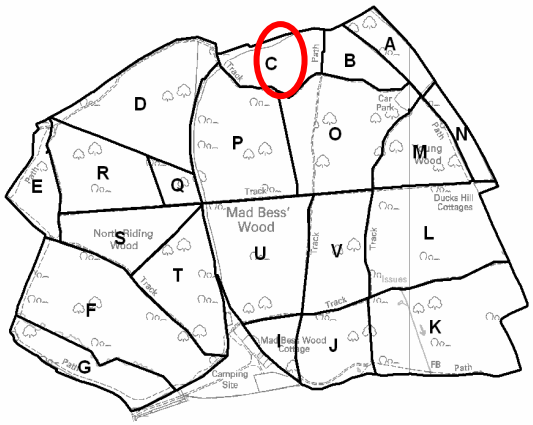
**Work required:** Reduce the number of stems on the formerly coppiced chestnuts. Light thinning will eventually be required as a more open canopy allows further regeneration. The hornbeam area should be coppiced and treated with C.

**Subsidiary:** The hornbeams on the boundary bank with A were stubbed in 1981 and are shooting well

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment C




## Original entry in RWLTMP

**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, sallow, 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, sallow and hornbeam appear.

**Objective**: Oak-hornbeam coppice.

**Work received 2003-2009**: Some trees coppiced near bridle path to allow path to dry.

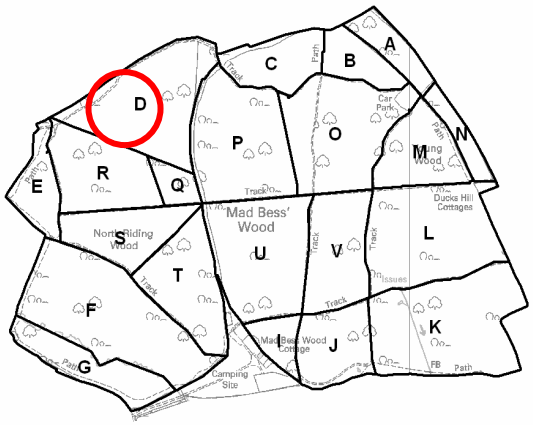
**Work required**: Coppice area marked in orange. (See appendix 2, map 7).

**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 2001

# MAD BESS WOOD

## Compartment D




Original entry in RWLTMP

**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. One two acre block and a second crossing the Q/D boundary, was coppiced in 1981 at the recommendation of the Working Party.

**Regeneration:** Little except in the northern margin.

**Objective**: Oak-hornbeam coppice.

**Work received 2003 -2009**: Bridlepath running through this section was widened in 2006.

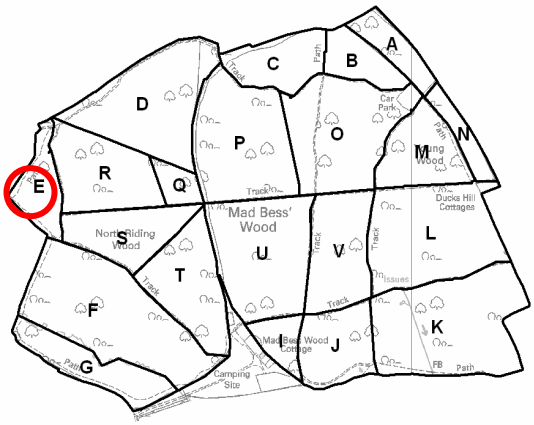
**Work required**: Coppice area marked in orange. (See appendix 2, map 7).

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.

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment E




Original entry in RWLTMP

**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**: Little regeneration. A few hornbeams, yew (1 m), hollies, one beech (2.5 m), in addition to the elm suckers mentioned above. Hornbeam cut to ground level during bridleway construction in 1978-9 now 2.5 m tall.

**Objective**: Oak-hornbeam coppice.

**Work received 2003-2009**: Areas 18 and 19 coppiced in 2003/4.

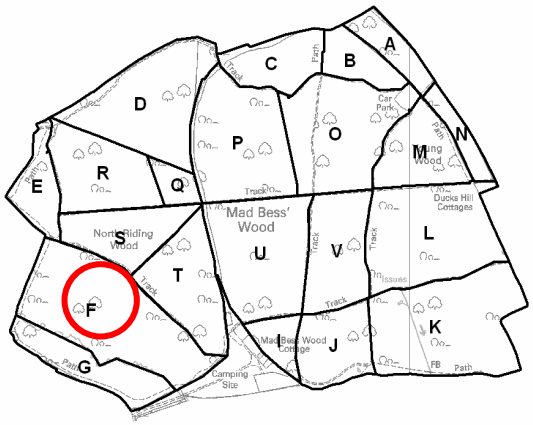
**Work required**: None required.

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

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment F




Original entry in RWLTMP

**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 2003-2009**: None received.

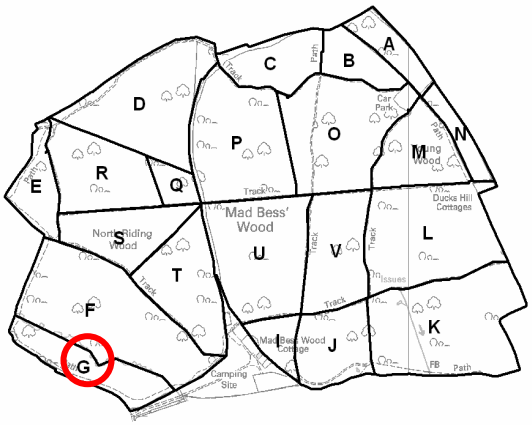
**Work required**: Coppice area marked in orange. (See appendix 2, map 7).

**Subsidiary**: Particular attention should be paid to allowing extra light to the stream margins but 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 2001

# MAD BESS WOOD

## Compartment G




## Original entry in RWLTMP

**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**: Oak-hornbeam coppice.

**Work received 2003-2009**: None received

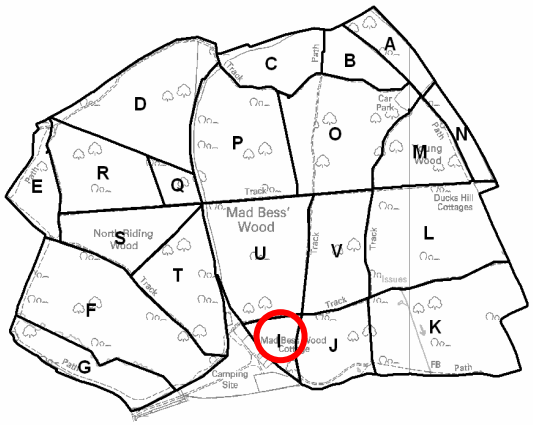
**Work required**: None required

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

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment I




## Original entry in RWLTMP

**Description**: Oak-hornbeam coppice with some birch. Also some sallow, one rowan on the eastern side and one sweet chestnut in the north-east corner. The area was coppiced in the 1950's but the resultant growth was very spindly although the trees seem healthy; most were 3-5 cm diameter and to 5-6 m tall -- access was therefore difficult. The Working Party agreed to coppice the northern part of the unit in 1981, half by cutting at ground level and half at about 0.5m, as an experiment (Figs 8-9).

**Regeneration**: Almost no regeneration formerly occurred as little light penetrated the dense hornbeam poles. Regeneration from the stools cut in 1981 was spectacular (Fig. 9, Table 2), and an attractive ground flora had developed by September
1981.

**Objective**: Oak-hornbeam coppice.

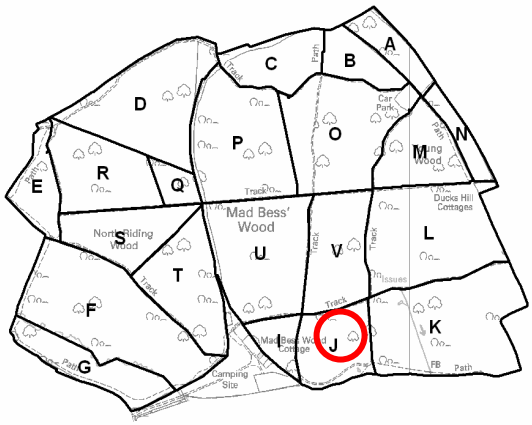
**Work received 2003 - 2009**: Areas 15 and 18 coppiced 2006/7.

**Work required**: Mow and widen Blue Route twice yearly.

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment J




Original entry in RWLTMP

**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**: Oak-hornbeam coppice.

**Work received 2003 - 2009**: None.

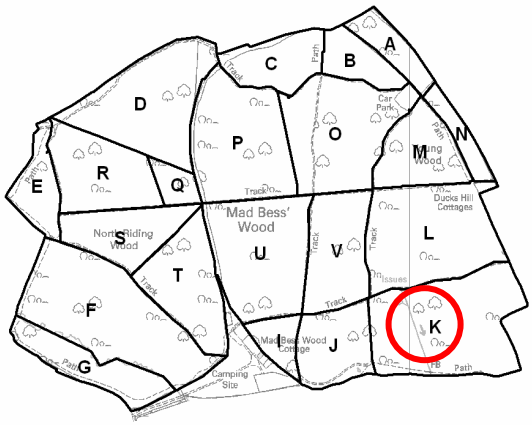
**Work required**: Area marked in orange to be coppiced. (See appendix 2, map 7). Stub trees on boundary with field.

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

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment K




Original entry in RWLTMP

**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, sallow, 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 2003 – 2009**: Half of the gorse area in the 'Pipe Ride' was coppiced in 2003.

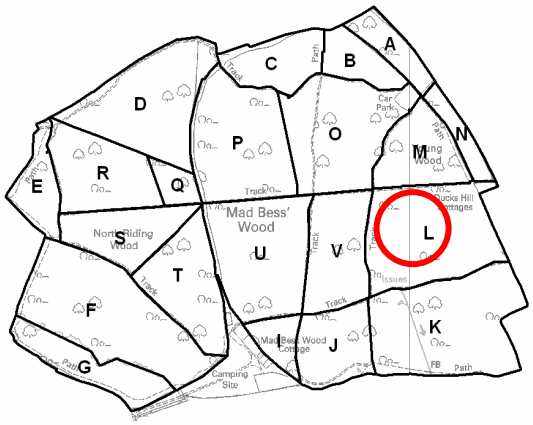
**Work required**: Eradicate all sycamore. Leave some of the regenerating (never coppiced) hornbeam trees in the north west and also leave the spruces until they die and fall naturally. The spruces should not be replaced but add variety to the area at the moment and are favoured by some birds (p.56). Clean out the small pond and retain the willows in the damp area just west of the spruces. The gorse should be kept also as it is scarce in the woods and important for birds, insects and fungi. Gorse should be coppiced on 10 year cycle.

**Subsidiary:** The path along the stream running through the 'Pipe Ride' should be strimmed every year to allow ragged robin to flourish.

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment L




Original entry in RWLTMP

**Description**: Largely oak-hornbeam coppice, but with a denser scrubby area in the northern part of the unit. The south-east corner was coppiced during the winter 1950/51 and the north-west corner coppiced in December 1952; in both weak and spindly growth has resulted (cf. p.45). One two acre plot was coppiced in 1981 on the recommendation of this Working Party. A few sweet chestnuts occur on the west side. An area of sycamore was felled in 2004 next to the road.

**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 with a section of mixed deciduous woodland in the northern part.

**Work received 2003 – 2009**: Area 1 coppiced. Trees stubbed along whole section of L.

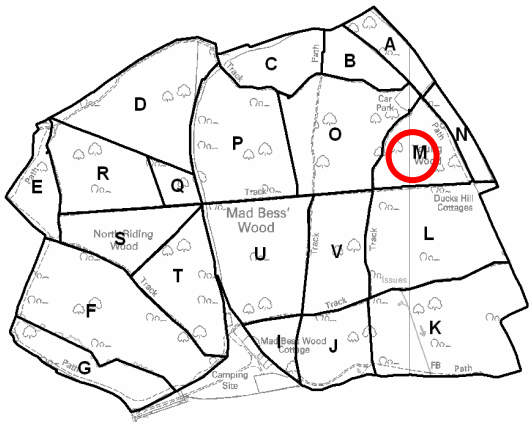
**Work required**: Coppice areas marked in orange. (See appendix 2, map 7).

**Subsidiary**: None.

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment M




Original entry in RWLTMP

**Description**: Largely oak-hornbeam coppice, but with a denser scrubby area in the northern part of the unit. The south-east corner was coppiced during the winter 1950/51 and the north-west corner coppiced in December 1952; in both weak and spindly growth has resulted (cf. p.45). One two acre plot was coppiced in 1981 on the recommendation of this Working Party. A few sweet chestnuts occur on the west side.

**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**: Retain as mixed deciduous woodland.

**Work received 2003 – 2009:** Hornbeams on earth bank were stubbed.

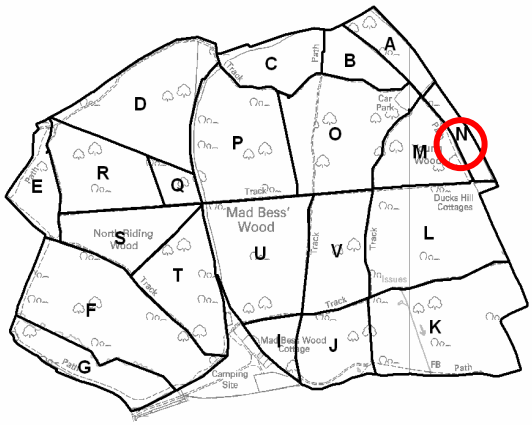
**Work required**: Widen and scallop R86 and R85.

**Subsidiary:** None.

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment N




Original entry in RWLTMP

**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. Stubbed 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 2003 – 2009:** Fencing along Ducks Hill Road repaired. Hornbeams stubbed on section of earth bank. Sycamore was cut in 2005.

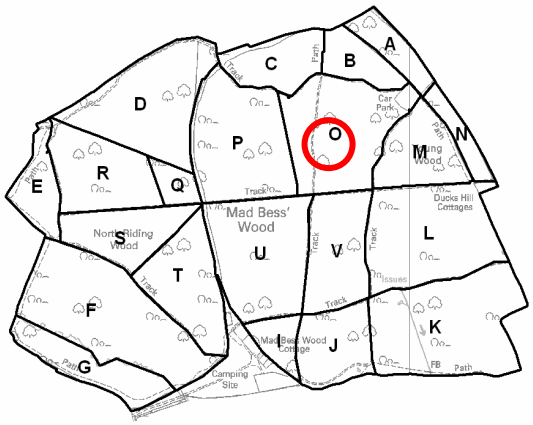
**Work required**: Periodic light thinning only will now be required since the sycamore has been cut. .

**Subsidiary**: Maintain the scrub/low growth area adjacent to Duck's Hill Road to act as a screen. Stubbed trees along the boundary bank (cf. A, M) should be retained. Keep the new (1980) fence along Duck's Hill Road in good repair to reduce rubbish dumping. If possible divert more water into the compartment to encourage the growth of alder, particularly in its northern parts.

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment O




Original entry in RWLTMP

**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 (3 m) regenerating.

**Objective:** Mixture hornbeam coppice and open mixed deciduous woodland.

**Work received 2003 – 2009:** None.

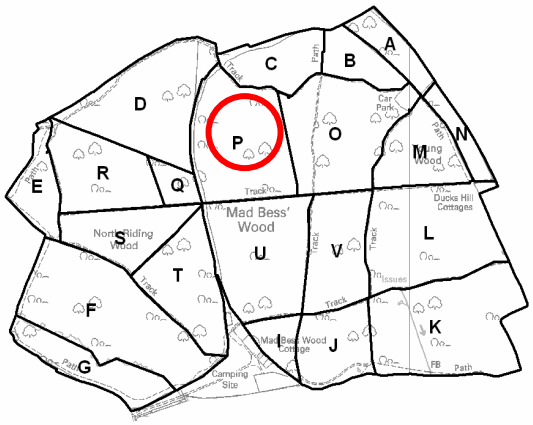
**Work required**: Coppice area marked in orange. (See appendix 2, map 7).

**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. The area around the car park should be kept fairly open and not allowed to become too dense so as to provide a pleasing lead-in into the wood for visitors, as with M.

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment P




Original entry in RWLTMP

**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 2003 – 2009**: Larch removed. Wire fences removed.

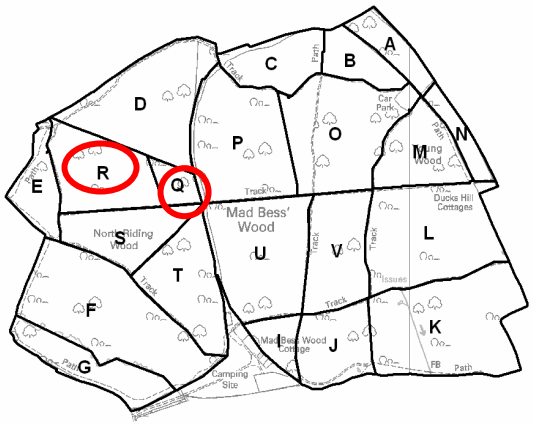
**Work required**: Coppice area marked in orange. (See appendix 2, map 7).

**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 2001

# MAD BESS WOOD

## Compartment Q & R




Original entry in RWLTMP

Compartments Q and R

**Description**: Long-neglected oak-hornbeam coppice (Figs 2-3). 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:** Oak-hornbeam coppice.

**Work received 2003 – 2009**: Area 20 coppiced.

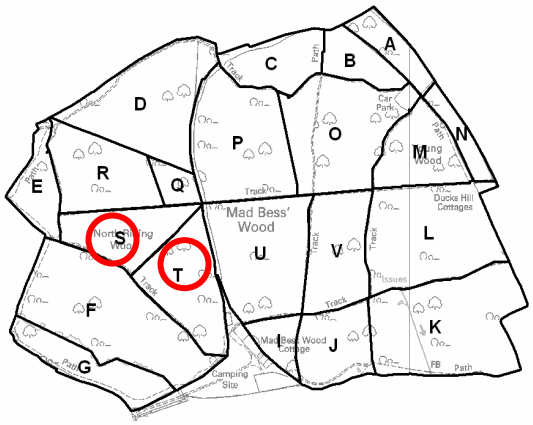
**Work required**: Coppice areas marked in orange. (See appendix 2, map 7).

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

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment S & T




Original entry in RWLTMP

**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:** Oak-hornbeam coppice.

**Work received 2003 – 2009**: None received.

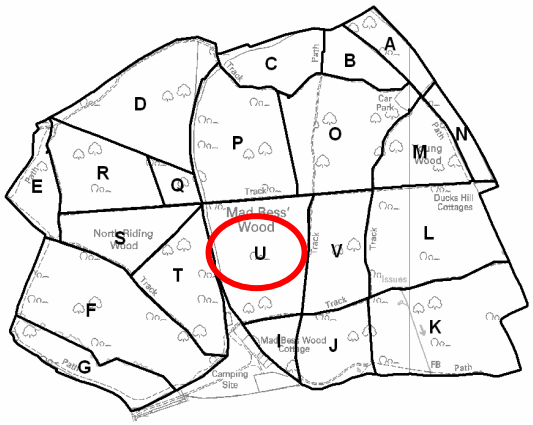
**Work required**: Coppice areas marked in orange. (See appendix 2, map 7). Stub hornbeams along boundary bank.

**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).

EVALUATION OF MANAGEMENT REQUIREMENTS 2001

# MAD BESS WOOD

## Compartment U




## Original entry in RWLTMP

**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 in the southern and eastern parts which should be kept as coppiced hornbeam.

**Work received 2003 – 2009**: No work carried out.

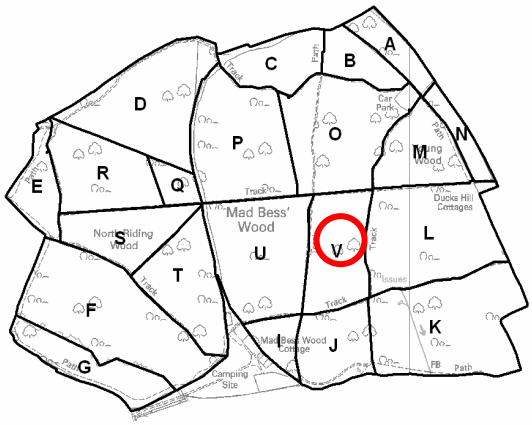
**Work required**: Coppice areas marked in orange. (See appendix 2, map 7).

**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 2001

# MAD BESS WOOD

## Compartment V




Original entry in RWLTMP

**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**: Open mixed deciduous woodland, essentially bracken-dominated, with a little coppiced hornbeam in the west and north.

**Work received 2003 – 2009**: No work carried out.

**Work required**: Coppice areas marked in orange. (See appendix 2, map 7)

**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. The old coppiced chestnuts should be singled to permit them to form normal trees. Note that the western boundary of this unit is taken as the boundary bank (cf. note-under U above). Retain the earth bank along the eastern boundary also.

# 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 sourthern 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 of 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 varying topography is partly masked by the existence of old coppice and could be made visually more apparent by sympathetic organisation of coppicing cycles

3. Views of the Lido from the ridge in the wood are particularly appealing and should be promoted by the coppicing cycles.

4. The bracken areas and those with young beech are of special appeal for the colour they provide in the winter months.

5. 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 it's natural decline. Maintenance along traditional lines will retain a habitat suitable for it's 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

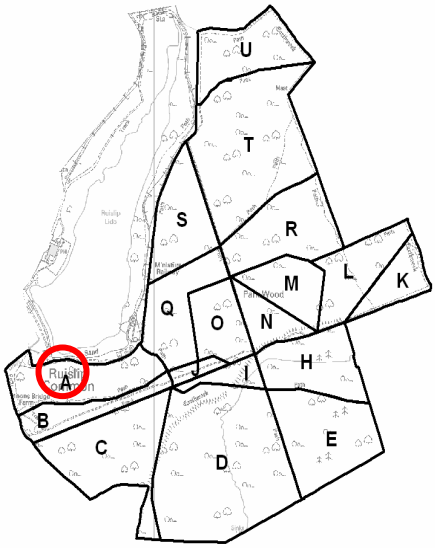
**To include:**

**Map of Compartments**
**Description**
**Regeneration**
**Objective**
**Work received**
**Work required**
**Subsidiary objectives**

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

PARK WOOD

Compartment A




**Original entry in RWLTMP**

**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 and three coppiced beech, 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. Some beech-occurs in the south-east corner (see above) which has only become established during the last few years. Few young hollies present. Where hornbeam poles have been laid along the bridle path, in well-lit situations these have put out new shoots (e.g. near the entrance from Bury Street).

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

**Work received 2003 - 2009:** Hillingdon Council has managed Murphy's Field since 2005. The field has been opened up as an educational area with a sign installed to inform the public of the wildlife to be seen there throughout the year and what projects are occurring in the field. A bridge and 2 benches were installed and the area has been mown once yearly. In 2008, 100 hornbeam saplings from the Woods were planted to be used to create hedges in the Woods.

One small area was coppiced in 2003/4.

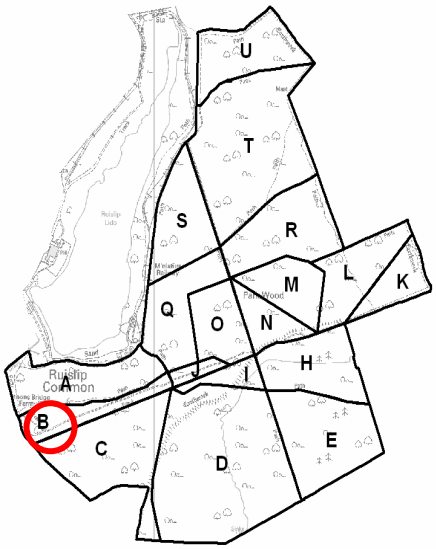
**Work required**: Coppice area marked in orange. (See appendix 2, map 7).

**Subsidiary**: None.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# PARK WOOD

## Compartment B




## Original entry in RWLTMP

**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.

**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 2003 - 2009:** One compartment coppiced in 2007/8 on Pylon Ride. Some thinning work done along the pylon ride to encourage cow wheat and more open area.

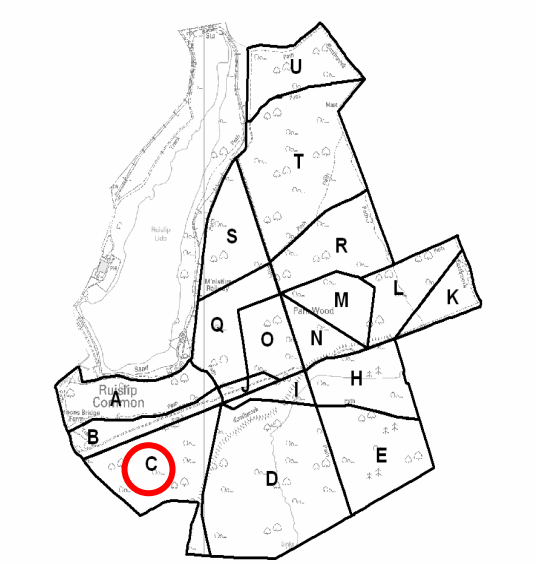
**Work required**: The regenerating beeches will also require periodic light thinning so that the most promising trees can be fostered.

**Subsidiary**: Work in the western part should be designed so as to accentuate the natural topography; the possibility of encouraging a small stream in a ditch in the valley here should be considered as it would add to its aesthetic interest.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# PARK WOOD

## Compartment C




## Original entry in RWLTMP

**Description**: Mainly oak-hornbeam coppice, that in the south-west and west with little ground cover; some stools in the north-west part are rotten and dead. Two blocks, each of two acres were coppiced on the recommendation of the Working Party, one in 1980 and one in 1981. There is also a bracken-birch-oak area on the eastern side contiguous with a similar area in D. Ivy is locally important ground cover, especially around the pond, and bluebells also occur near the latter and south and west of it. Some sycamore is present behind The Plough Inn and aspen is well developed near P1. This is the largest area for bluebells in the wood. Coppiced ash near the Broadwood Avenue entrance is also of note.

**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 2003 - 2009:** Pylon Ride has been mown and widened in places. Area 7 was coppiced in 2003/4.

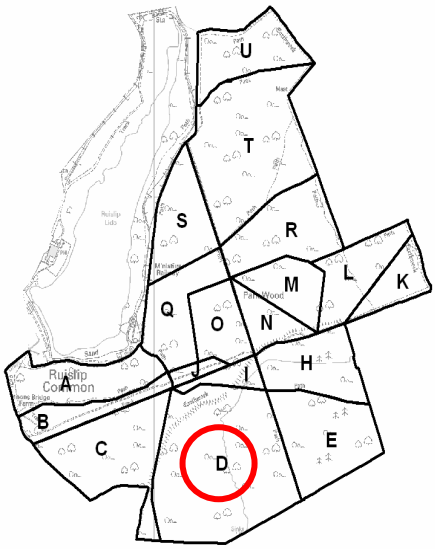
**Work required**: Coppice areas marked in orange. (See appendix 2, map 7) Remove the sycamore which has already extended from the single tree reported by Crooks (1970).

**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 2009

# PARK WOOD

## Compartment D




## Original entry in RWLTMP

**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 1580; 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 lm 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.

**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 2003 - 2009:** . Small area of alder was coppied at rear of Broadwood in 2003/4. Spanish bluebells and other non-natives have been removed from rear of Broadwood.

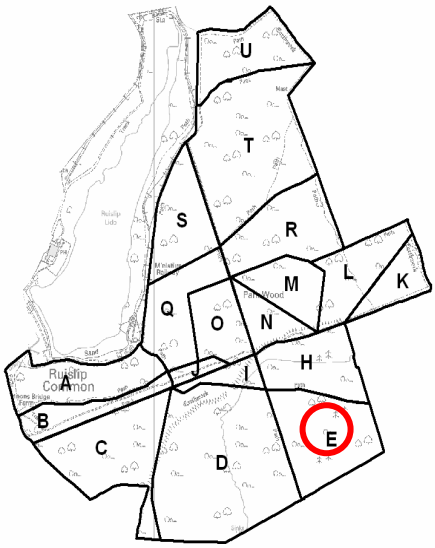
**Work required**: Widen and scallop R124, R125, R126 and R127. Install boardwalks where required.

**Subsidiary**: Rubbish deposited by residents of Broadwood Avenue, and also exotic plants introduced from gardens (e.g. bamboo) will require periodic removal. The drainage of the southern boundary path was improved by clearing the ditch in 1980. The alder area should not be drained. Notices have been given to residents cautioning them against future dumping of garden and other rubbish.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# PARK WOOD

## Compartment E




## Original entry in RWLTMP

**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. Crooks (1970) stated that a part in the south-west corner was coppiced 'relatively recently' in addition an area of about 0.5 acre adjoining the footpath on the north side of the unit was coppiced in May 1978, and two blocks, each of two acres, were treated in 1981 on the recommendation of the Working Party. A small area of bracken in the north-west corner links with a similar one in H.

**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 2003 - 2009:** Areas 19 and 20 have been coppiced.

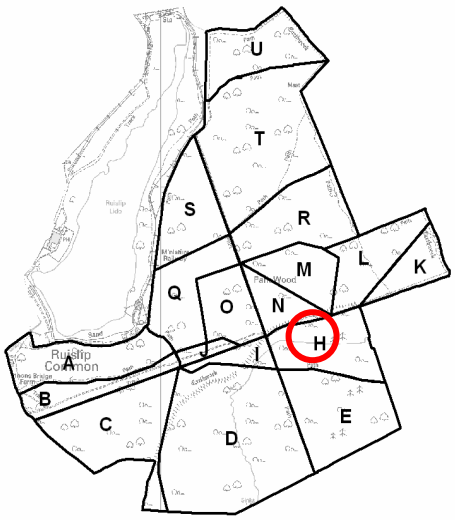
**Work required**: Coppice areas marked in orange. (See appendix 2, map 8).

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

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# PARK WOOD

## Compartment H




## Original entry in RWLTMP

**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 except small area which should be retained

**Work received 2003 - 2009:** Vegetation was cut around the pond to allow in more light.

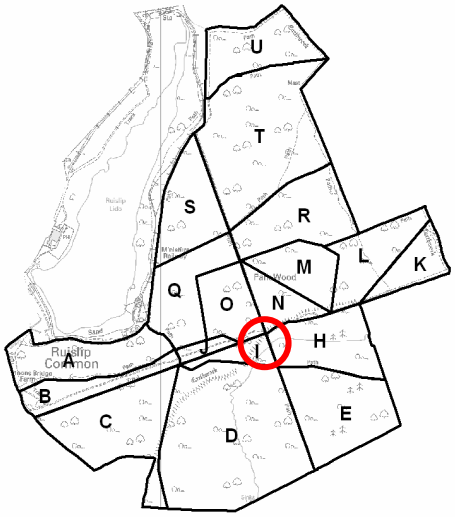
**Work required**: Some light thinning will be necessary in the north-west.

**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 2009

# PARK WOOD

## Compartment I




## Original entry in RWLTMP

**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 2003 - 2009:** Area 7 has been coppiced in 2003. Trees have been thinned along the old pylon ride.

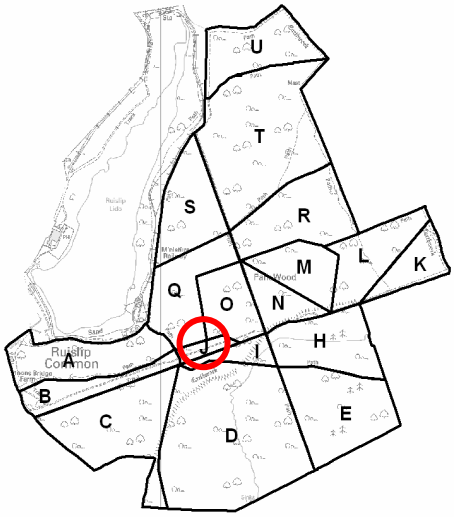
**Work required**: Mow Pylon on rotational basis yearly. Widen bridle path in places.

**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 and care taken not to damage it by vehicles or during any thinning operations; it could eventually be marked by stubbed hornbeams (see p.71).

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# PARK WOOD

## Compartment J




## Original entry in RWLTMP

**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 except in the western end near A where the development of an area of beech should be encouraged (see p.34).

**Work received 2003 - 2009:** No work carried out.

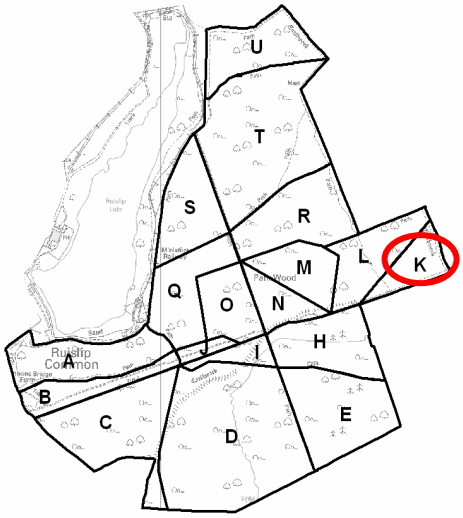
**Work required**: Light cutting should be carried out to prevent overhang of bridle path.

**Subsidiary**: Sweet chestnuts should be kept.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# PARK WOOD

## Compartment K




## Original entry in RWLTMP

**Description**: Long-neglected oak-hornbeam coppice although a small area at the south-east corner had some coppicing carried out relatively recently. Some of the hornbeam 'poles' are to 0.5m thick. 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**: Holly is the only tree regenerating well but some regrowth of hornbeam from stumps cut to make poles for the bridleway has taken place.

**Objective**: Retention as oak-hornbeam coppice.

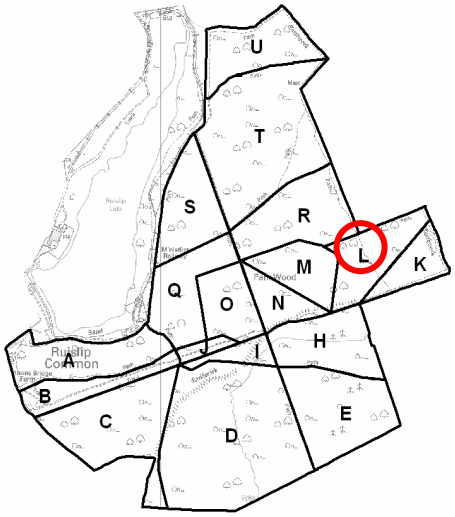
**Work Received 2003 - 2009:** The section of bridle path in this compartment was improved with a hard surface in 2004.

**Work Required**: Coppice areas marked in orange. (See appendix 2, map 8). Stub hornbeams along bridle path.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# PARK WOOD

## Compartment L




## Original entry in RWLTMP

**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, sallow willows and hazel occur. Guelder rose (Viburnum opulus) is also known from the unit.

**Regeneration**: Regeneration of birch, aspen, sallow, 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 2003 - 2009:** No work received.

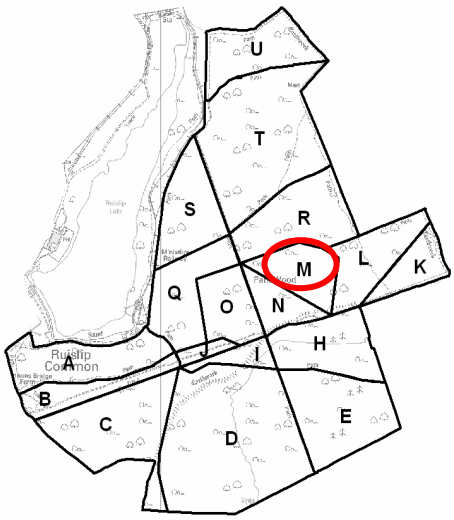
**Work required**: Improve bridlepath in this area by widening and diverting water from boggy areas.

**Subsidiary:** Encourage the aspen and sallow 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 2009

# PARK WOOD

## Compartment M




## Original entry in RWLTMP

**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 2003 - 2009:** No work carried out.

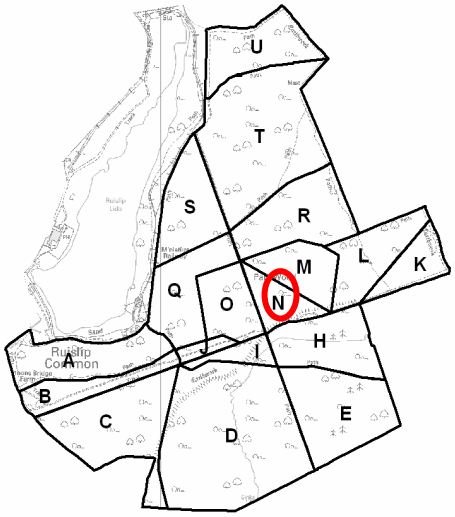
**Work required**: Coppice area marked in orange. (See appendix 2, map 8).

**Subsidiary**: None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# PARK WOOD

## Compartment N




## Original entry in RWLTMP

**Description**: Birch-oak-bracken, mainly rather open and extended northwards as a grassy area with picnic furniture into R (see p.74). 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 2003 - 2009:** Pylon Ride has been mown once yearly.

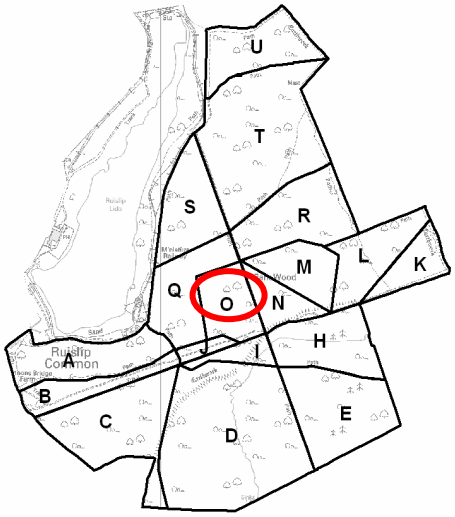
**Work required**: Coppice area marked in orange. (See appendix 2, map 8)

**Subsidiary**: None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# PARK WOOD

## Compartment O




## Original entry in RWLTMP

**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 2003 - 2009:** Some widening along R126.

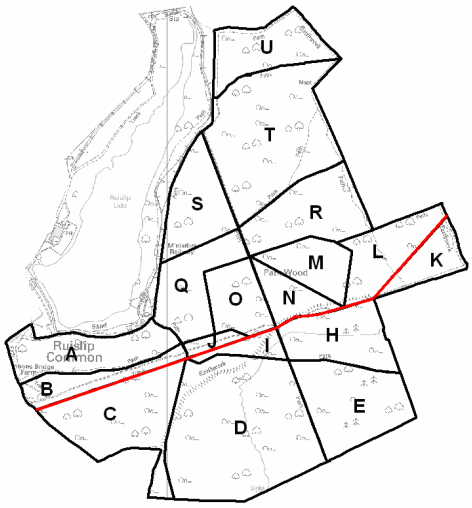
**Work required**: Periodic thinning will be necessary to retain the open structure. In such work the maiden hornbeam trees and anciently coppiced oaks should be untouched.

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

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# PARK WOOD

## Compartments P1 – P4




## Original entry in RWLTMP

**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(=Pl), 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 sallow, willows 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. P4 has been partly cleared by voluntary parties since 1977, but progress has been slow and regeneration rapid. The scrubby nature promoted by clearing encourages warblers (see p.68) and the sallows and aspen are important food plants for butterflies and moths (see p.67-68).

**Regeneration**: Regeneration is currently excessive.

**Objective**: Maintain as a scrubby regenerating area by cutting broad V-notches into the thickets. The bridleway gives a fire-engine navigable route in dry weather along its length.

**Work received 2003 - 2009:** Has been mown yearly in autumn and widened in places.

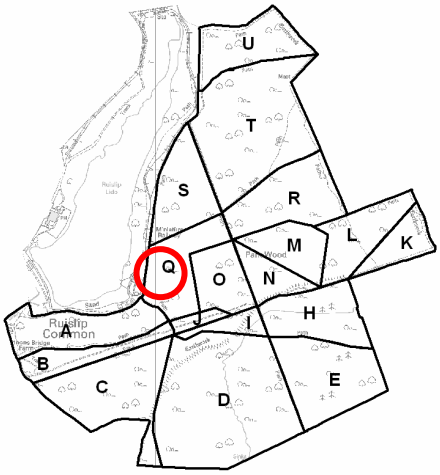
**Work required**: Continue with current management regime.

**Subsidiary**: Retention of marsh-loving plants.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# PARK WOOD

## Compartment Q




## Original entry in RWLTMP

**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. On the recommendation of the Working Party, light thinning and scrub clearance was carried out in 1980.

**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 2003 - 2009:** Some coppicing of hornbeam was carried out along the bridle path to help dry it out

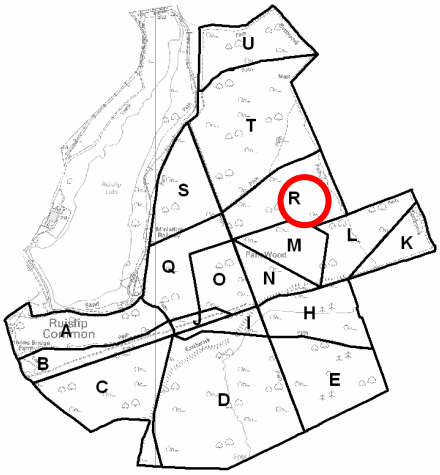
**Work required**: Periodic light thinning and some channelling work to divert water from boggy areas.

**Subsidiary:** None.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# PARK WOOD

## Compartment R




## Original entry in RWLTMP

**Description**: Oak-hornbeam coppice, very neglected, with particularly thick poles in the eastern part; most of the stools are, however, in a reasonable condition. Two blocks, each of two acres, were coppiced in 1981 on the recommendation of the Working Party. Towards the western edge the woodland is denser and includes hawthorns, birch and in places dense bramble undergrowth. A picnic area has been cut out of the section and now has a few scattered oaks with grassland (seeded) and rustic picnic benches; the-area was affected by fire in 1976 and scorched areas were still visible on the oaks in 1981.

**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 2003 - 2009:** No work received apart from bridle path upgrading. Picnic area long since disappeared

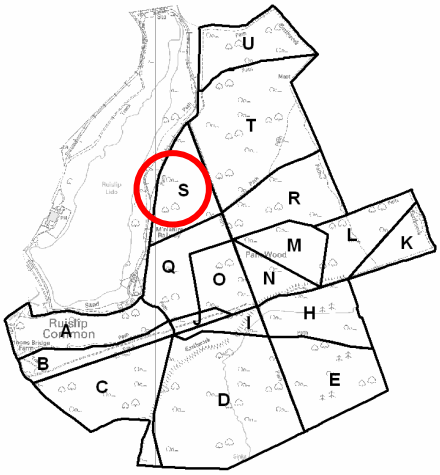
**Work required**: Coppice areas marked orange. (See appendix 2, map 8).

**Subsidiary**: None

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# PARK WOOD

## Compartment S




## Original entry in RWLTMP

**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 2003 - 2009:** Some thinning of trees along edge of Lido to help dry out the bridle path was carried out in 2007.

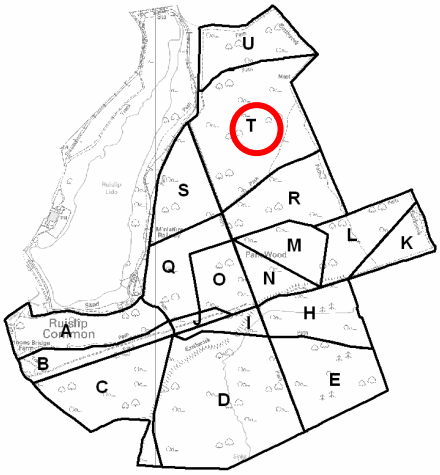
**Work required**: Continue to keep bridle path dry as possible.

**Subsidiary**: In the thinning work, particular attention should be given to opening up views of the Lido from the main footpaths.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# PARK WOOD

## Compartment T




## Original entry in RWLTMP

**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.

**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 2003 - 2009:** Areas coppiced – 17, 18, 19 and 20. Small section of the permissive bridle path was coppiced along its edges to help dry out constantly wet area.

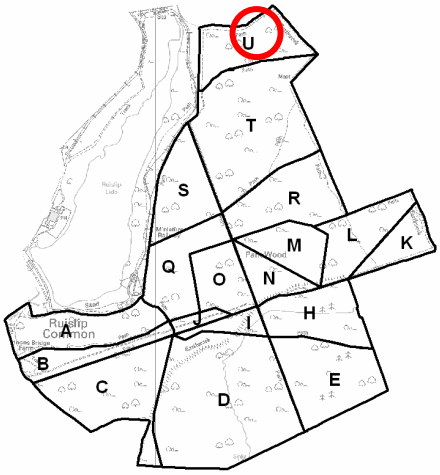
**Work required**: Coppice areas marked in orange. (See appendix 2, map 8).

**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. In the coppicing work attention should be paid to providing views of the Lido from the main footpaths.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# PARK WOOD

## Compartment U




## Original entry in RWLTMP

**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 2003 - 2009:** Areas coppiced – 17,18,19 and 20. A post and rail fence has been erected near the entrance from fore street to deter motorbikes from entering the wood. ). The Red Route was created in this compartment in 2005 adjacent to the golf course.

**Work required**: Keep White and Red Routes welll 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 find 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. There are now no toilets located in the wood.

# 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 paths.

2. Man made pond on the west side of the wood

3. Fine stands of beech trees.

## 7.3 DESCRIPTION OF COMPARTMENTS

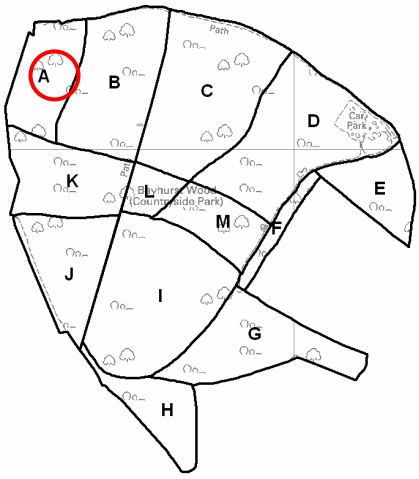
**To include:**

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

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# 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. 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.

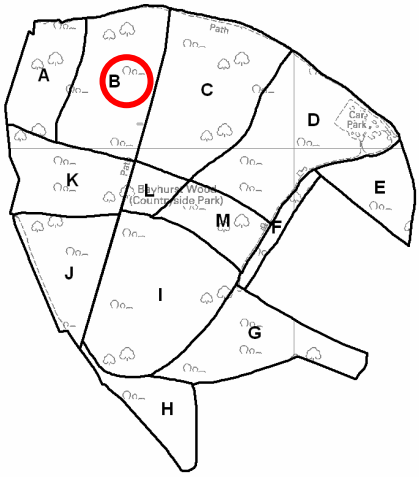
**Work received 2003 – 2009**: None received.

**Work required:** Re-start coppice cycle to increase ground flora. Thin hornbeam saplings to not less than 6m spacing.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment B




## Compartment B.

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

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

**Objective:** Maintain as mixed woodland with coppiced hornbeam.

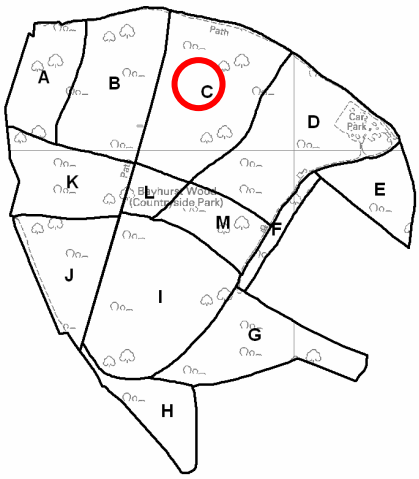
**Work received 2003 - 2009**: None.

**Work required:** restart coppice cycle. Remove invasive laurel.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment C




## Compartment C.

**Description:** Mixed woodland with well spaced coppice stools. Oak, beech (9 counted) holly (11 counted), aspen (3), cherry (2), hornbeam (coppiced and several fine standards), birch (5), hawthorn (2). Sparse ground flora of mainly bramble.

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

**Objective:** Maintain mixed woodland with coppiced hornbeam.

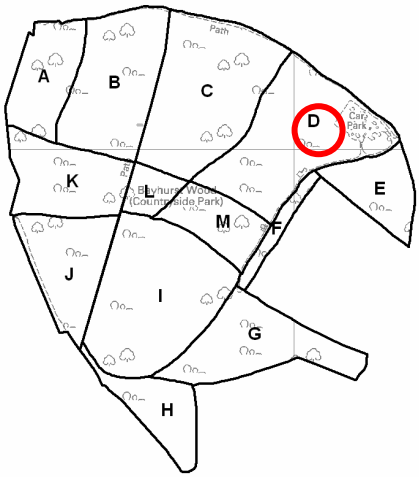
**Work received 2003 - 2009**: None.

**Work required:** Restart coppice cycle. Remove very large laurel.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment D




**Compartment D.**

**Description**: Mixed oak, beech, hornbeam, holly (a few), Wood thorn (several) birch, hazel (1), field maple (1), 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.

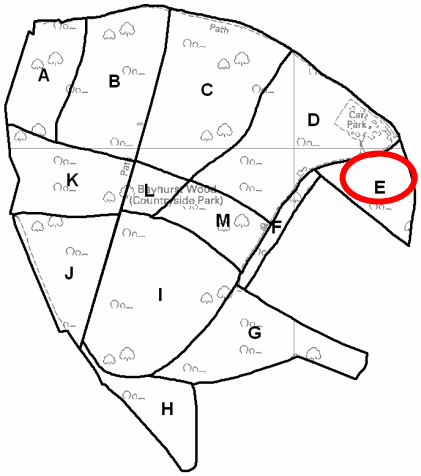
**Work received 2003 - 2009**: None.

**Work required:** Thin hornbeam saplings to not less than 6m apart. Coppice large hornbeam stools.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment E




**Compartment E.**

**Description:** Largely coppiced hornbeam, with some other trees: oak, birch (c.1), holly (several), 2 good standard hornbeams. Mainly sparse ground flora of bramble and honeysuckle, but a fine spread of bluebells on north side.

**Regeneration:?**

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

**Work received 2003 – 2009**: None.

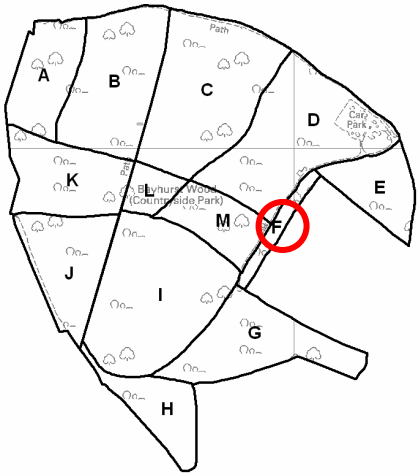
**Work required :** Coppice areas marked in orange. (See Appendix 2, map 9)

**Subsidiary:** Cease using and trampling for charcoal making the southern end of the bluebell area. Clear up debris from former "woodland museum ".

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment F




## Compartment F.

**Description:** Widely spaced coppice stools with some standard oaks and hornbeams, holly (2), birch (few). Several old, large stubbed hornbeams and 1 wild service tree along the wood boundary.

**Regeneration:** Hornbeam (many in places), a few oaks, yew (1).

**Objective:** Mixed woodland strip.

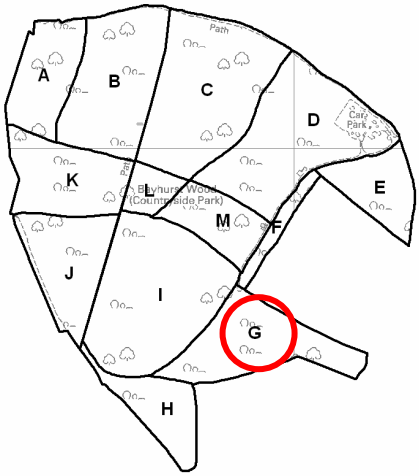
**Work received 2003: – 2009:** None.

**Work required:** Leave until next plan for consideration.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment G




**Compartment G**.

**Description**: Standard oaks, beech (some diseased), holly (several large), Yew (single c. 6m), 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".

**Regeneration:** Oaks (2), beech, hornbeam, holly.

**Objective:** Retain coppice. Leave rest for future consideration.

**Work received 2003 – 2009**: None

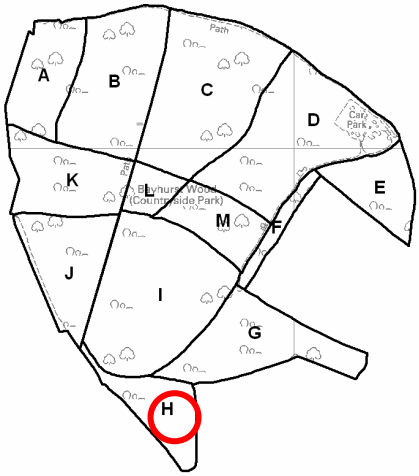
**Work required 2003 - 2009:** Coppice areas marked in orange. (See appendix 2, map 9)

**Subsidiary**: Consider altering route of path along north side of "finger" to drier area. Clear fallen standard hornbeam from across path at northern end of "finger".

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment H




**Compartment H**.

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

**Regeneration:** Beech (a few).

**Objective:** Maintain as a coppiced area.

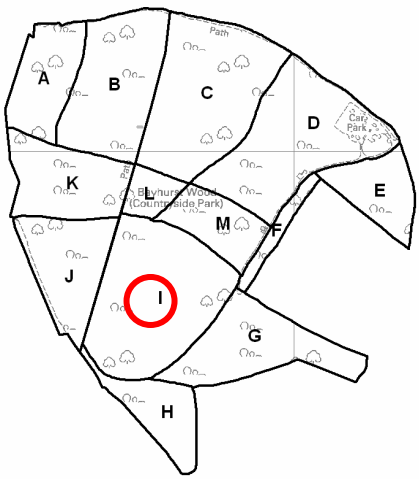
**Work received 2003 – 2009:** Area marked in green was coppiced 2004.

**Work required:** cut wavers left from last coppicing.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment I




## Compartment I.

**Description:** Mixed woodland with oaks (many tall thin), hornbeams, holly (widespread), birch (a few), beech (c.3). Several large, dead oaks in southwest corner. Coppiced hornbeams, single tall coppiced rowan and 5 coppiced sweet chestnuts.

**Regeneration:** Hornbeams, beech, chestnuts (c.1), oak (several together).

**Objective:** Retain mixed wood, and coppice.

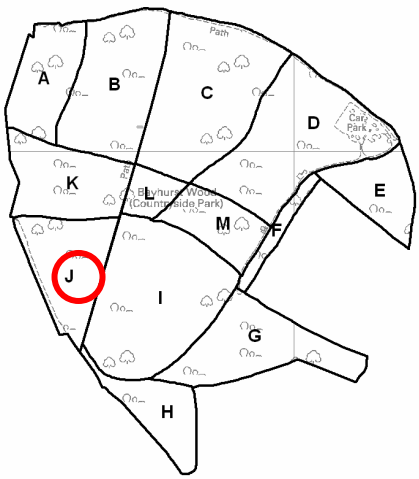
**Work received 2003 – 2009**: None

**Work required:** Coppice existing stools. Remove laurel.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment J




**Compartment J**.

**Description**: Mixed woodland with some coppice. Oaks, holly (widespread). Birch (a few old, tall), beech (c.1). Generally sparse ground flora of bramble and honeysuckle.

**Objective:** Maintain as mainly mixed woodland but maintaining existing coppiced areas.

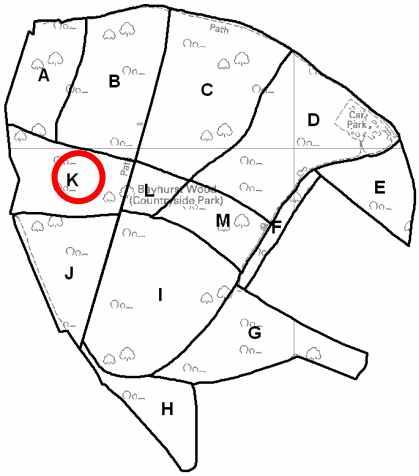
**Work received 2003 – 2009**: None

**Work required:** Coppice, particularly in areas to encourage birch regeneration.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment K




## Compartment K.

**Description:** Mainly oak-hornbeam coppice, with holly (c.10), a few standard hornbeams, some birch, [but no beech seen]. Dense brambles in southwest where some recent coppicing to allow light to horse-ride.

**Regeneration:** Beech, holly.

**Objective:** Maintain as coppiced woodland.

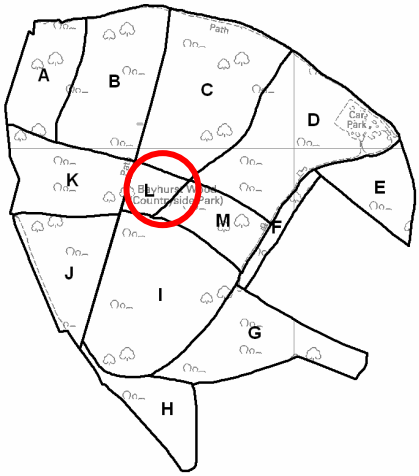
**Work received 2003 – 2009:** None

**Work required:** Restart coppicing.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment L




## Compartment L.

**Description**: Mixed woodland with no significant coppice. Oak, holly, birch, [but no beech seen]. Widespread bramble.

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

**Objective:** Maintain as mixed woodland.

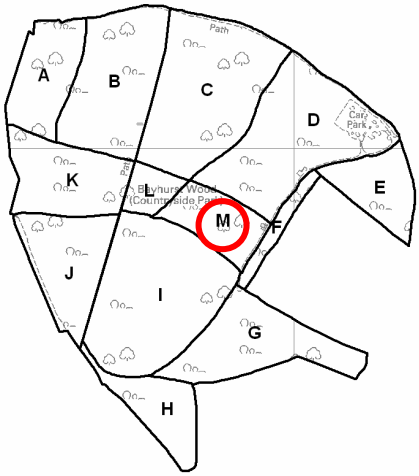
**Work received 2003 – 2009**: None

**Work required:** Leave for later consideration.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment M




## Compartment M.

**Description:** Mixed woodland with some coppice. Oak, beech (c.1 seen), holly (widely scattered), birch (a few), standard hornbeams (several).

**Regeneration:** Little, a few beech.

**Objective:** Maintain existing coppice.

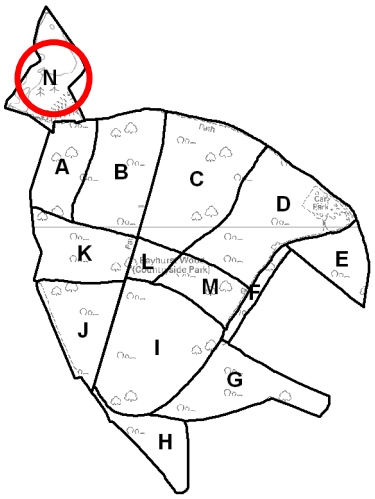
**Work received 2003 – 2009:** None

**Work required:** Coppice existing stools, leave rest for next assessment. Remove large laurel.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# BAYHURST WOOD

## Compartment N




**Compartment N** (Tarlton's Lake).

This area 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.
The following is an interim statement. for the site which will be dealt with in detail in the next five-year up-date of the management plan.

**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 Council.

**Tenure.**

Now entirely under the control of the London Borough of Hillingdon.

**Map Coverage**

See maps accompanying this report. OS Map 176; national grid reference TQ 065 895

**Size**

2.8 ha

## Physical features

The site is centred around an artificial lake created by the damming of a small stream. This now dries up in most summers.

## Vegetation and Natural History

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 is an extensive Badger sett of long standing.

## Description of Compartment and management plan.

*To be given in the next five-year plan following a detailed survey.*

# 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 Longhorns.

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. HAREBELLS REMAIN AT RISK FROM GRAZING ON POOR'S FIELD.

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 ??)**

## 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 form 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

A car park is situated immediately outside the gate from Reservoir Road. For some years this car park has been free to use however on busy days cars are also parked on Reservoir Road necessitating the use of cones to stop parking on both sides of the 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.

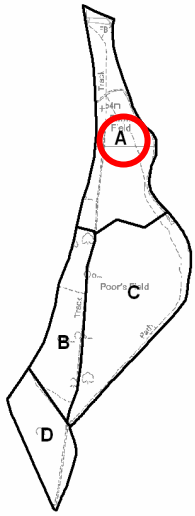
## 8.3 DESCRIPTION OF COMPARTMENTS

**To include:**

**Map of Compartments**
**Description**
**Regeneration**
**Objective**
**Work received**
**Work required**
**Subsidiary objective**
**Prescription**

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

**POOR'S FIELD**
**Compartment A**




## COMPARTMENT A

### Original entry in RWLTMP

**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.

Elimination of almost all trees and scrub, except along the eastern boundary.

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

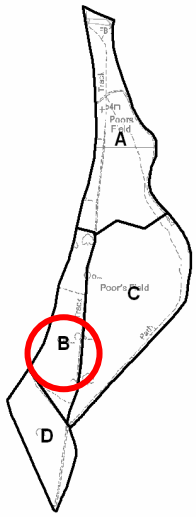
**Work received 2003 – 2009** Several apple trees were removed. The Post Pond was partially dredged in 2008 and the silt dumped on the side to dry out and removed the following summer.

**Work required:** Removal of remaining young trees, stumps to be chipped to eliminate them and facilitate mowing. Reinstate boundary hedges and mow the grassland . Removal of silt form the Post Pond may be necessary occasionally; silt should not be spread on the field as the alluvium would adversely affect the heathland plants. Several oak trees on its north bank overhang the Post Pond. Leaf fall from these contributes considerably to the build up of silt in the pond. It is recommended that these be removed. There are additional oaks on the golf course which will continue to provide a tree backdrop.

**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 2009

**POOR'S FIELD**
**Compartment B**




## COMPARTMENT B

### Original entry in RWLTMP

**Description:** Wet grassland with such plants as soft rush, devil's-bit scabious (Succisa pratensis), sedges (Carex species), eyebrights and heath 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). Heath spotted orchids have been increasing for a number of years.

### Update to the RWLTMP

This compartment has gradually become less wet. The effect of this on the wildlife has yet to be fully determined.

Some of the scrub in the north of the compartment has been recently cleared. This needs to continue to preserve this interesting habitat; in particular the several largish oaks should be gradually removed.

Purple emperor butterflies (Apatura iris) have been observed egg laying here and sallows should be encouraged for this purpose.

The boundary hedges of the old trackway along the east side (see above) should be maintained suitable for nesting birds. This area is much favoured by warblers, in particular the now less common garden warbler (Sylvia borin) and willow warbler (Phylloscopus trochilus).

In the centre is a colony of spotted orchids, which have increased considerably following temporary fencing during the flowering season. It is recommended that the fence should be completely taken down at the end of each season.

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.

**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.

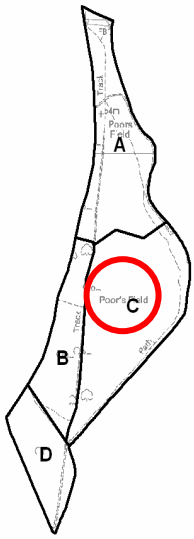
**Work received 2003-2009:** As with most of Poor's Field, this section has been mown yearly. Large section of scrub and secondary woodland was removed in 2007/8.

**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 2009

**POOR'S FIELD**
**Compartment C**




## COMPARTMENT C

### Original entry in RWLTMP

**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. Other "weed" species include tomato, pansy and corn marigold. A profuse growth of sallows occurs on the low ground along the eastern boundary.

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

### Update to the RWLTMP

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.

The northwest area on the top of the hill has developed into dense, tall birch scrub/wood since clearance of the hawthorn (Crataegus monogyna) scrub some years ago. Hawthorn scrub remains lower down the slope to the south. In its present state this remains of limited value for wildlife (and to the public). It remains a high priority for this to be opened up, with the continued gradual felling of the invading oak trees at the southern end.

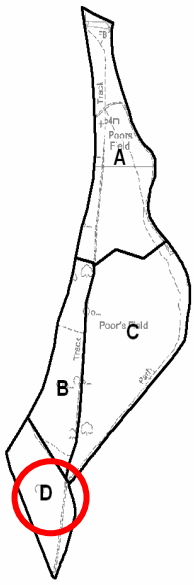
**Objective:** It is expected that colonising weeds will gradually be replaced by heath plants. Maintain as grassy heathland with small groups of birches on the higher ground, and a few sallows on the lower ground. Oak to be allowed to develop in the eastern boundary hedge and the old gnarled oak on the summit by the path to be retained.

**Work received 2003 -2009:** A patch of scrub was removed in 2008 and the whole of this section has been mown yearly.

**Work required:** Remove excessive trees; deal with re-growth, reinstate eastern boundary hedge and cut grassland as described below. Birch groups to be not closer than 20m.

EVALUATION OF MANAGEMENT
REQUIREMENTS 2009

**POOR'S FIELD**
**Compartment C**




## COMPARTMENT D

### Original entry in RWLTMP

**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 n 1980.

**Regeneration:**

### Update to the RWLTMP

This remains largely grassland with variable amounts of grazing by the cattle. This is the main area for harebells and pignut.

**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 2003-2009:** Management in this compartment has concentrated on maintaining and enhancing a small area for reptiles.

**Work required:** 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. Regrowth of trees from stumps, boundary hedges and the grassland should be treated as recommended below.

## PERSCRIPTION

## Original entry in RWLTMP

1. Heathland in the area, i.e. short vegetation comprising grasses and heather, was formerly maintained as such by grazing by rabbits, domestic animals, and the gathering of gorse and wood for fuel. As a result of the elimination of rabbits through myxmoatosis and of cattle through foot and mouth disease this area had reverted to dense and largely impenetrable scrub.

2. In the absence of grazing animals, we recommend that the heathland is maintained by mowing with a flail or similar mower at a height of 15cm. This work would be most appropriately carried out in July and, in order to foster a varied appearance of the area and avoid eliminating annuals and insects for which this is a critical time in their life cycles, we suggest that half the total area is mowed each year. Experimental work suggest that the effect of mechanical cutting in this way is to produce stability in the vegetation but that this may differ in composition from that achieved by grazing (Duffey et al., 1974). The resultant communities can nevertheless be expected to have a similar overall appearance and a similar degree of diversity of species. Heathland plants would be expected to be encouraged if the clippings could be removed when mowing is undertaken, but we recognise that this is currently not practicable and note that Duffey et al. 1974 were convinced that removal was necessary if the cutter shreds and distributes it in a finely divided form.

3. For effective mowing, removal of the cut stumps is essential. We recommend that the remaining stumps on Poor's Field are removed by chipping in 1982.

4. Attention is drawn to the possibility of using Krenite (Shell Chemicals Ltd) to control regenerating shoots from cut stumps. This natural compound, which is less lethal than table salt, is approved for control of woody species by the Nature Conservancy Council. It has to be applied in the autumn while the leaves are still green and transmitted through them into the shoots where it prevents the development of buds in the following season. Krenite is inactivated on contact with soil and does not affect herbaceous plants. A small trial was carried out in 1981 on a part of Poor's Field. It is possible that the Woodlands Management Committee may find it necessary to recommend it use in the future.

5. Boundary hedges are particularly appealing when in flower and provide nesting for birds as well as helping shield adjoining fences. We recommend that hawthorn hedges be maintained around Poor's Field. These can be re-instated by cutting existing massive hawthorns to ground level and layering the new shoots. The process will need to be repeated about every ten years or when the hedges are 2-3 m tall, whichever is the sooner.

6. In order to encourage establishment of heathland plants in the cleared areas, we suggest that heather seeds are scattered on bare ground (these may take 2-3 years to germinate), and heather litter is distributed to a depth of about 5cm in patches. This work may be most appropriately undertaken by the Ruislip and District Natural History Society in consultation with the Woodlands Officer.

7. Fires adversely affect many plant species but not bracken where growth can be particularly vigorous after fires. On both Bookham Common (Groves, 1958) and Headly Heath (Hillman & Castell, 1960) fires are considered responsible for the rapid growth of bracken at the expense of heather and other plants. For this reason, we do not advocate regular burning as a method of

maintaining heather in this area, even though it can have this effect in upland areas of England. Bracken is slowly invading the north-west side of Poor's Field from Copse Wood; frequent cutting should prevent its spread.

8. We consider that a few trees (especially those on the brow of the hill which was already wooded in the late 1930's should be kept as they are aesthetically pleasing. However, in general trees on the common should be limited in number and kept to the minimum consistent with a heathland ground flora.

## Update to the RWLTMP

## PRESCRIPTION.

1. The current programme of management seems to be working well, both from the point of view of wildlife and the public.

2. It is recommended that this be continued with grazing during spring to autumn, followed by cut and bail thereafter.

3. Clearance of scrub should be maintained.

4. It is also recommended that there should be drastic thinning of the dense stand of birch on the high ground in compartment C.

5. In addition it is recommended that the oak trees overhanging the Post Pond should be removed.

# 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).

## Scouting and Guiding Activities

The area has been used for many years by Scouts/Cubs, Guides/Brownies, for outdoor activities including fire-lighting and cooking. This appears to have proceeded without mishap or detriment to the area.

## 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 2003 - 2009**
**Work required**
**Subsidiary objective**

## DESCRIPTION OF COMPARTMENTS

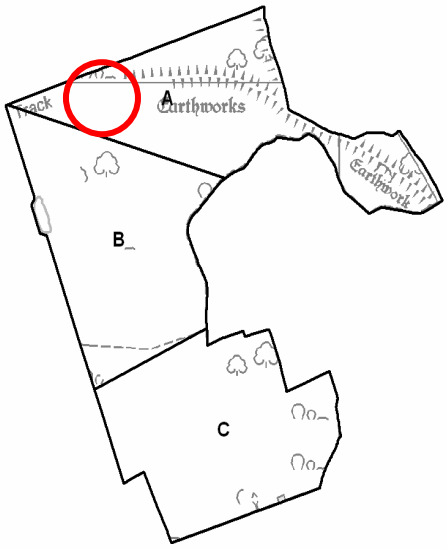
Compartment boundaries are as shown on Map.

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 2009

**Grub Ground**
**Compartment C**




**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:** Gradual reduction of secondary woodland in eastern finger. Encourage more open grassland on cyclical clearance basis.

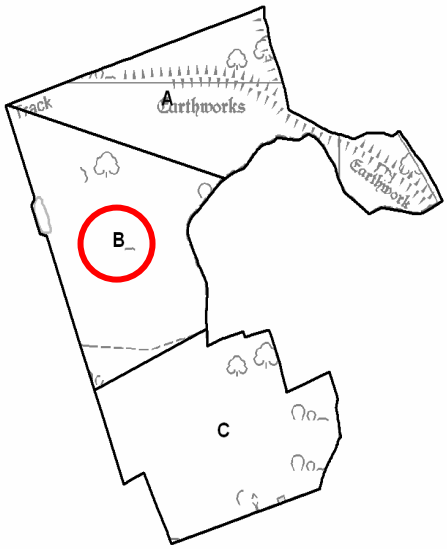
**Work required:** Objective probably best achieved by cutting wide paths (8-10m width) through scrub connecting easily accessible points to encourage walkers (see LTMP p. 91). Open areas should be cut annually to remove tree seedlings and to control Rosebay.

**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. The northern cleared area has been involved in an introduction experiment of the nationally rare Heath Fritillary butterfly. The results of this are as yet unclear. The 19th century iron railings along the northern boundary with the horse ride are of some considerable interest. Once widespread they are now rather rare through clearance (as at Highgrove House, Eastcote). It is recommended that these should be renovated where necessary and made a feature of interest.

## COMPARTMENT B

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

**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 tripatita) 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.

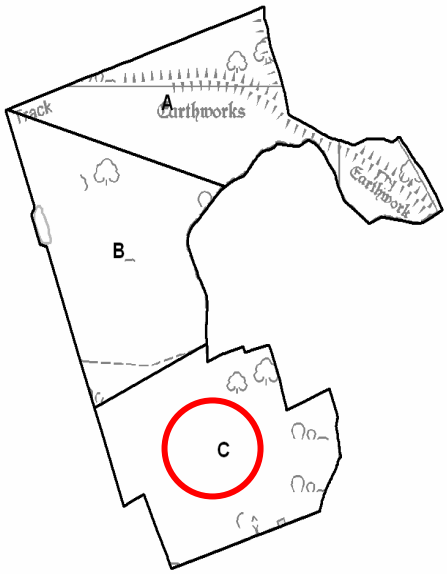
**Objective:** Increase heathy open areas, and central clearing. Reduce areas of rosebay along western side by annual cutting. Maintain a wide path on boundary between Compartments A and B (see map). Prevent development of existing scrub into secondary woodland by periodic cutting of wide paths. Maintain some sallow as food-plant of Purple Emperor butterfly.

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

## COMPARTMENT C

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

**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. petrea) remain.

**Objective:** Gradual reduction of the tall secondary woodland to re-establish typical lowland heath. Retaining a few birches would be appropriate and add to the interest and attractiveness of the area. The two old sessile oaks should also be retained.

**Work required:** Cut a wide path annually, wide paths across the compartment [note: the oaks could provide timber for construction work (e.g. boardwalks, fences).

**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 it 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).

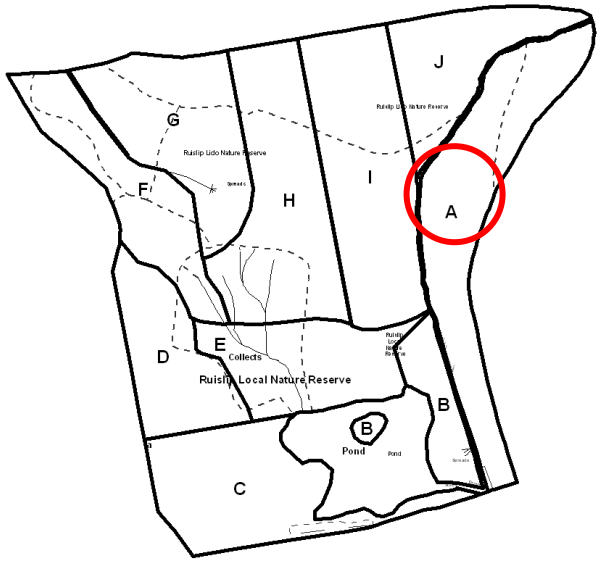
The varied soils and marshy area result in a very rich flora and fauna. The following have been recorded.

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.

## 10.3 DESCRIPTION OF COMPARTMENTS

To include:

Map of Compartments
Description
Objective
Work received 2003-2009
Work required
Subsidiary Objective

| | |
|---|---|
| EVALUATION OF MANAGEMENT REQUIREMENTS 2009<br><br>RUISLIP LOCAL NATURE RESERVE<br><br>Compartment A |  |

## Compartment A

**Description**: Secondary Woodland and Open grassland.

**Objective**: Keep the grassland free of invasive trees and control bracken.

**Work received 2003-2009:** The grassland is cut annually in the winter to protect against the invasion of hawthorn, birch, oak seedlings and rosebay willow herb (Chamaerierion angustifolium). In the summer months bracken (Pteridium aquilinum) is cut and pulled to ensure that it does not dominate this area. The stream is maintained by cutting back the vegetation along its banks. A grill put in the stream in the northern part of this compartment to collect rubbish entering the Reserve requires monthly and in the summer more regular clearance to ensure continual flow of water.

**Work required:** Continue with the annual work carried out in 2003 – 2009. Some of the wire fencing in the north west corner is in need of repair and replacement.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# RUISLIP LOCAL NATURE RESERVE

## Compartment B


## Compartment B

**Description**: Main pond and marsh area. For several years after 1990 when the island was created Little Grebe successfully bred here. Most years Mallard, Coot and Moorhen breed. The main pond also provides a haven in the winter for reasonable numbers of Teal. In Spring/Summer 2008 one of the crack willows along the western edge Lesser Spotted Woodpeckers bred successfully

**Objective:** Maintain open water and provide breeding habitat for wildfowl.

**Work received 2003-2009:** Open water is maintained by the control of invasive species along the margins - these include Reed mace (Typha latifolia) and Sea Club Rush (Scirpus maritimus). The common sallow (Salix atrocinerea) present on the island created in 1990 is cut annually, when sufficient manpower is available, to maintain breeding areas for birds. Sallow along the eastern and southern boundaries is also cut on a rotational basis. Previously planted hawthorn and blackthorn have been layered on the southern edge of the pond to create a natural screen from the horse ride. The walls of the sluice were renewed by contractors.

**Work required:** Coppice the sallows and willows on the west and south west corner of the main pond. Remove reed mace along the pond edges to maintain open water. Continue to coppice the sallow and willow on the island annually and on the margins of the main pond on a rotational basis.

**Subsidiary** Removal of silt from the pond.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# RUISLIP LOCAL NATURE RESERVE

## Compartment C


**Compartment C**.

**Description:** Chalk Grassland and edge of main pond.

**Objective:** Maintain open grassland to encourage cowslips and primrose.

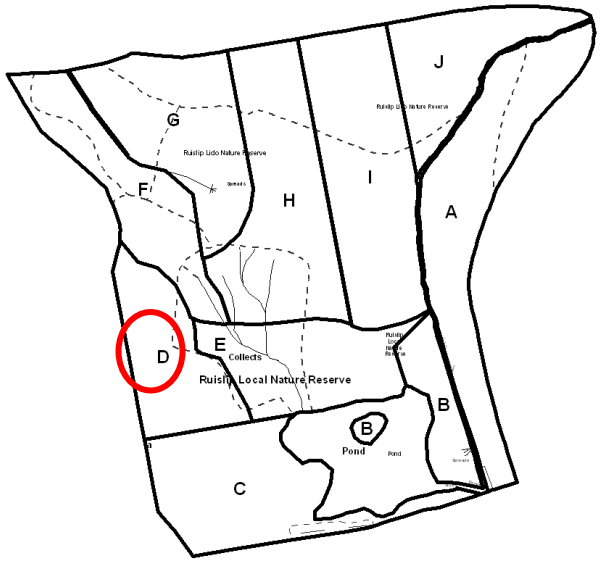
**Work received 2003-2009:** This area requires annual cutting and raking to encourage the different plants that are found in these areas. Encroachment by hawthorn, sallow, birch and dog rose must be controlled. Primrose (Primula vulgaris) and Cowslip (Primula veris) must be guaranteed adequate light.
Sallows at the west side of the main pond require coppicing on a rotational basis.
The hedge that divides the path to the western side of the chalk grassland has to be cut back every few years to prevent this habitat disappearing.
Some tree thinning takes place in this area.

**Work required;** Continue with the work carried out in previous years.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# RUISLIP LOCAL NATURE RESERVE

## Compartment D




## Compartment D

**Description:** Acid Grassland.

**Objective:** Maintain open grassland free of encroaching trees.

**Work received 2003-2009:** Annual cutting of this area halts the spread of Rose bay willow herb (Chamaerierion angustifolium). Clumps of Dog rose (Rosa canina) are stopped from spreading and oak seedlings removed. Elm (ulmus procera) regeneration is encouraged by the thinning of silver birch.

**Work required:** Continue with the annual maintenance. Some thinning of mature oak trees is required to ensure adequate light to ground plants.

**Subsidiary:** Removal in winter of dead wood from some of the Elms to help prevent infection by Dutch Elm disease. Also trial coppicing of some of the elms that are over 10 years old.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# RUISLIP LOCAL NATURE RESERVE

## Compartment E


## Compartment E

**Description:** Pond and Marsh'

**Objective:** Provide breeding areas for passerines and improve area for butterflies and dragonflies. Maintain conditions for rare deadwood feeding invertebrates of wet woodland habitats.

**Work received 2003-2009:** Coppicing of blocks of sallow is done on rotation. Some of this wood is left on the ground to provide shaded deadwood. The Crack Willow (Salix fragilis) is left unmanaged unless stems have to be cleared from paths. These trees provide breeding habitat for Lesser Spotted Woodpecker, Great Spotted Woodpecker and Green Woodpecker. A boardwalk has been created in this area which joins the west to the east (compartments D to B).

**Work required:** This area needs to be kept free of reed mace and Himalayan balsam. Sallow growth needs to be checked so that the small "Teal" pond does not become totally in shade. Any rotten planks on boardwalk need to be replaced as necessary to maintain this walkway.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# RUISLIP LOCAL NATURE RESERVE

## Compartment F


## Compartment F

**Description**: Water courses and Silt Trap.

**Objective:** Keep watercourses clear of blockages and the silt trap maintained. Control invasive species.

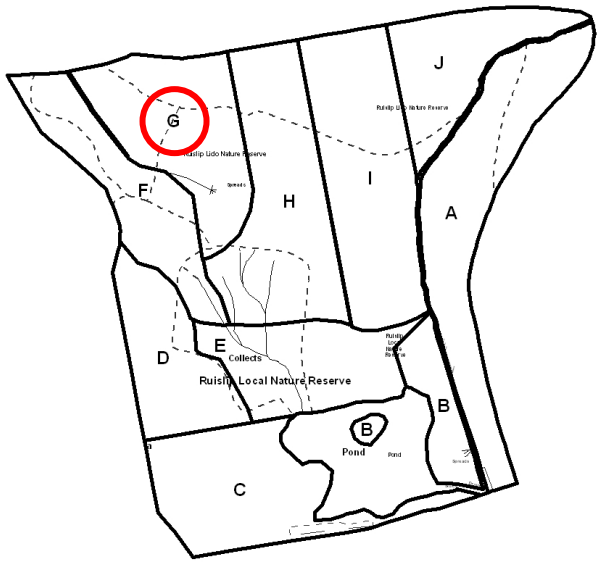
**Work received 2003-2009:** Watercourses are kept clear of vegetation. The silt trap was cleared of vegetation and silt in 2008. The water level has been raised with the intention of installing a pond dipping platform. It is unlikely that the silt trap will need digging out again for at least 5 years. Invasive species such as Himalayan Balsam (Impatiens glandulifera) have to be pulled annually before seed is set.

**Work required:** Continue with the removal of Himalayan balsam. Clear the two remaining ponds of silt and vegetation leaving the sedge around the edges only. Keep the watercourse clear of obstructions and cut channels in the bank to feed the 2 ponds. Coppice some of the mature hawthorns along the western boundary.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# RUISLIP LOCAL NATURE RESERVE

## Compartment G




## Compartment G

**Description**: A series of Ponds.

**Objective:** Keep sedge under control and provide habitat for dragonflies.

**Work received 2003-2009:** Sallow is kept controlled by coppicing. This is an important area for the dragonfly population. The hawthorns planted in the late 80's have been layered.

**Work required:** All of these ponds need to be re-dug either manually providing large number of people are present or with a mechanical digger and then the vegetation cleared on a rotational basis to prevent encroachment by reed mace and over colonisation by sedge. Layering of the hawthorn hedge to be done as necessary. Continue to coppice the sallow on a rotational basis.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# RUISLIP LOCAL NATURE RESERVE

## Compartment H


**Compartment H**

**Description**: Woodland and Open Grassland.

**Objective:** Encourage bluebells, control bramble and selective tree cutting.

**Work received 2003-2009:** The bluebell area has been kept free of bramble and bracken whilst the trees continue to grow to provide shade.

**Work required:** Continue clearing the existing area of bracken and bramble to encourage the bluebells.

**Subsidiary:** Thinning of some oak trees in this area should they prove a danger to persons on the path or the neighbouring golf course

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# RUISLIP LOCAL NATURE RESERVE

## Compartment I


## Compartment I

**Description:** Woodland, Grassland and Silt Trap.

**Objective:** Thin trees as necessary, keep grassland free of invading species and clear silt trap.

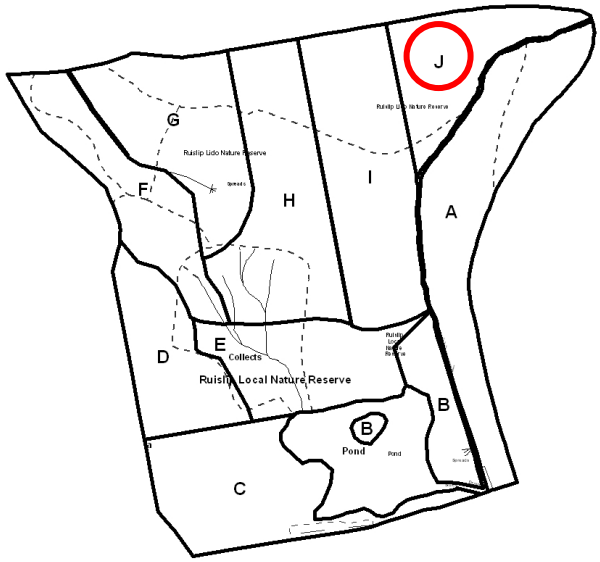
**Work received 2003-2009:** Some coppicing in the woodland area has been done in earlier years to encourage low cover for birds and mammals. The silt trap has been dug by hand to clear the build up of silt.

**Work required:** The grassland area north of the large yew needs to be protected by invasion from Birch, oak, bramble, bracken and rose bay willow herb. Coppice some of the previously coppiced woodland area. Keep the silt trap clear by digging again in 5 years time.

EVALUATION OF MANAGEMENT REQUIREMENTS 2009

# RUISLIP LOCAL NATURE RESERVE

## Compartment J




## Compartment J

**Description:** Open Grassland.

**Objective:** Encourage plant growth and control dog rose and invading trees. Keep stream clear of blockages.

**Work received 2003-2009:** This area is cut annually in the winter and the cuttings raked away into piles. Snowdrops (Galanthus nivalis) are thriving in this area due to the annual clearing.

**Work required:** Continue with the annual clearance work in this area. Some layering of the planted hedge will need to be done in future years.

# 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 required**

## Objectives:

a. Maintain the willow/sallow carr so as to achieve a wetland habitat.

b. Aid the regeneration of the elms along the western bank.

c. Manage some crack willows.

d. 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.

e. Layer the hawthorn hedge.

f. Remove wind damaged trees.

g. Control Invasive Species.

h. Undertake flora and fauna surveys of the area.

## **Work required:**

1. Some of the more mature sallows that have grown over the stream in the bottom of the valley should be coppiced over the next 3 years and the results monitored. This would allow the water when there is a heavy downfall of rain to continue to the local nature reserve and not cause flooding on the golf course. There is no suggestion of coppicing large areas of sallow as this provides useful habitat for birds, butterflies and moths.

2. To aid Elm regeneration along the west bank bordering Poor's Field 3 oaks should be removed as they have grown quite mature and are causing heavy shading in this area. In this area is a lightning damaged oak – a large trunk has come through the barb wire fence along Poor's Field and needs to be removed.

3. One of the crack willows in the centre of the finger next to the stream needs to be cut back as it is damaged and the fallen and hanging branches are causing the stream to be blocked. Another willow has fallen across the fence boundary of the local nature reserve and should be cut back also.

4. Breaches in the stream bank needed to be created along its course to allow the water to enter the whole of the Northern Finger and achieve a flooded wetland area. Any large mounds of earth created when the unauthorised work was carried out need to be dispersed so that they too do not form a damming effect.

5. The hawthorn hedge along the eastern edge should be layered again when at the appropriate age.

6. Planting of hawthorn along the west edge from saplings found in this area would provide a more natural and long lasting barrier than the barbwire fence which is there at present.

7. Himalayan Balsam removal by pulling out from June onwards to the end of the flowering season to prevent seed being formed.

## 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**

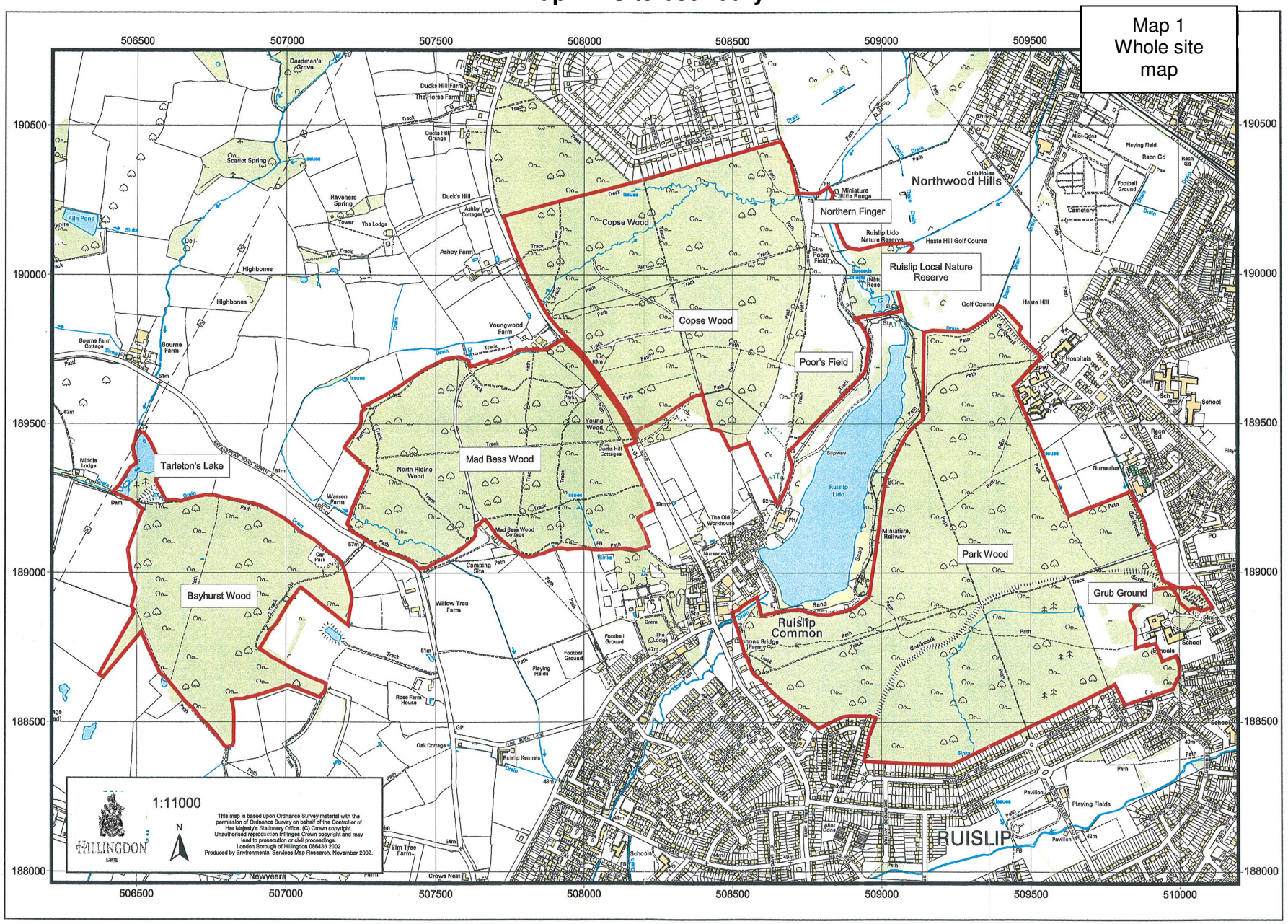
# Appendices

## Appendix 1 Estate Assets

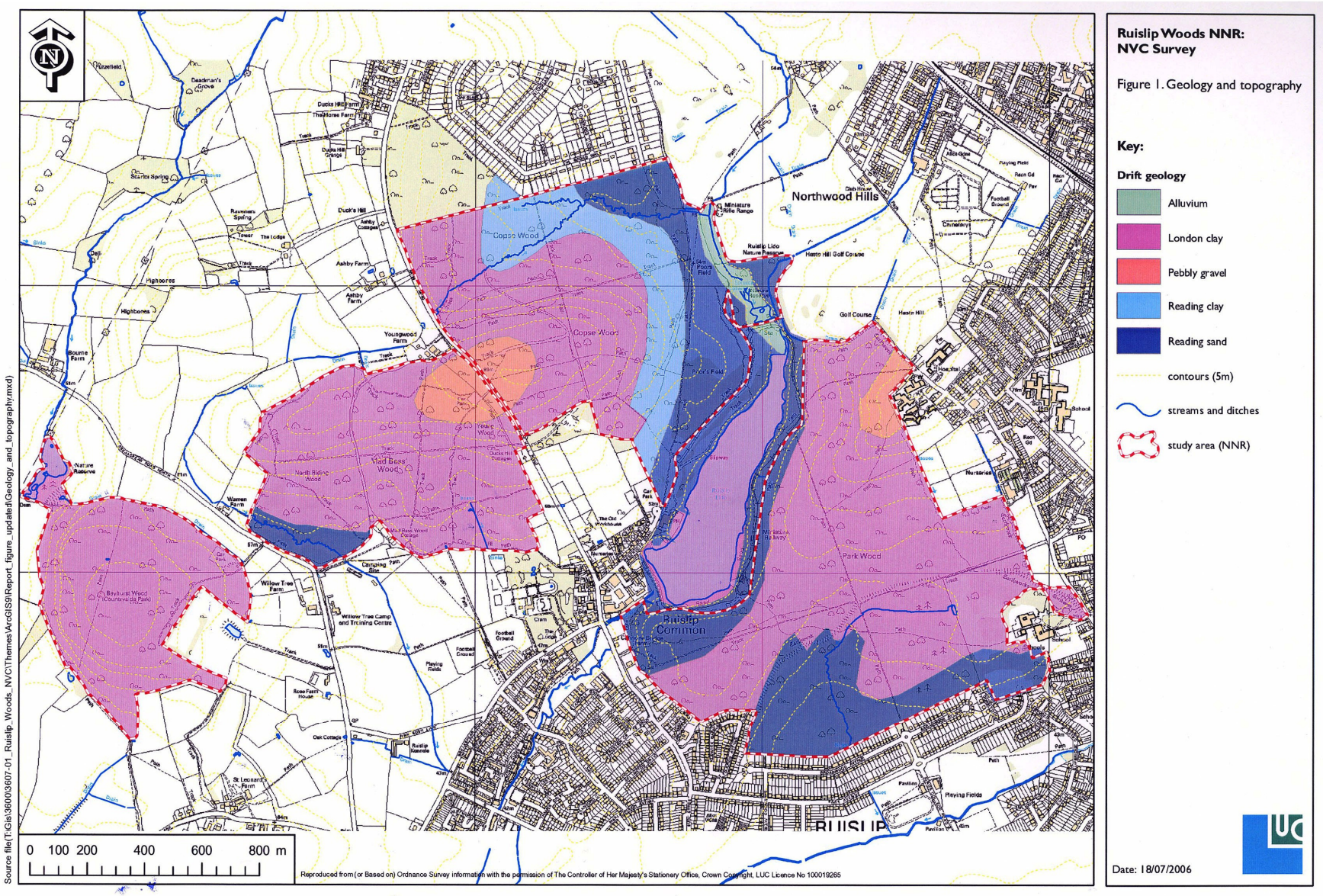
### Inventory

| 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

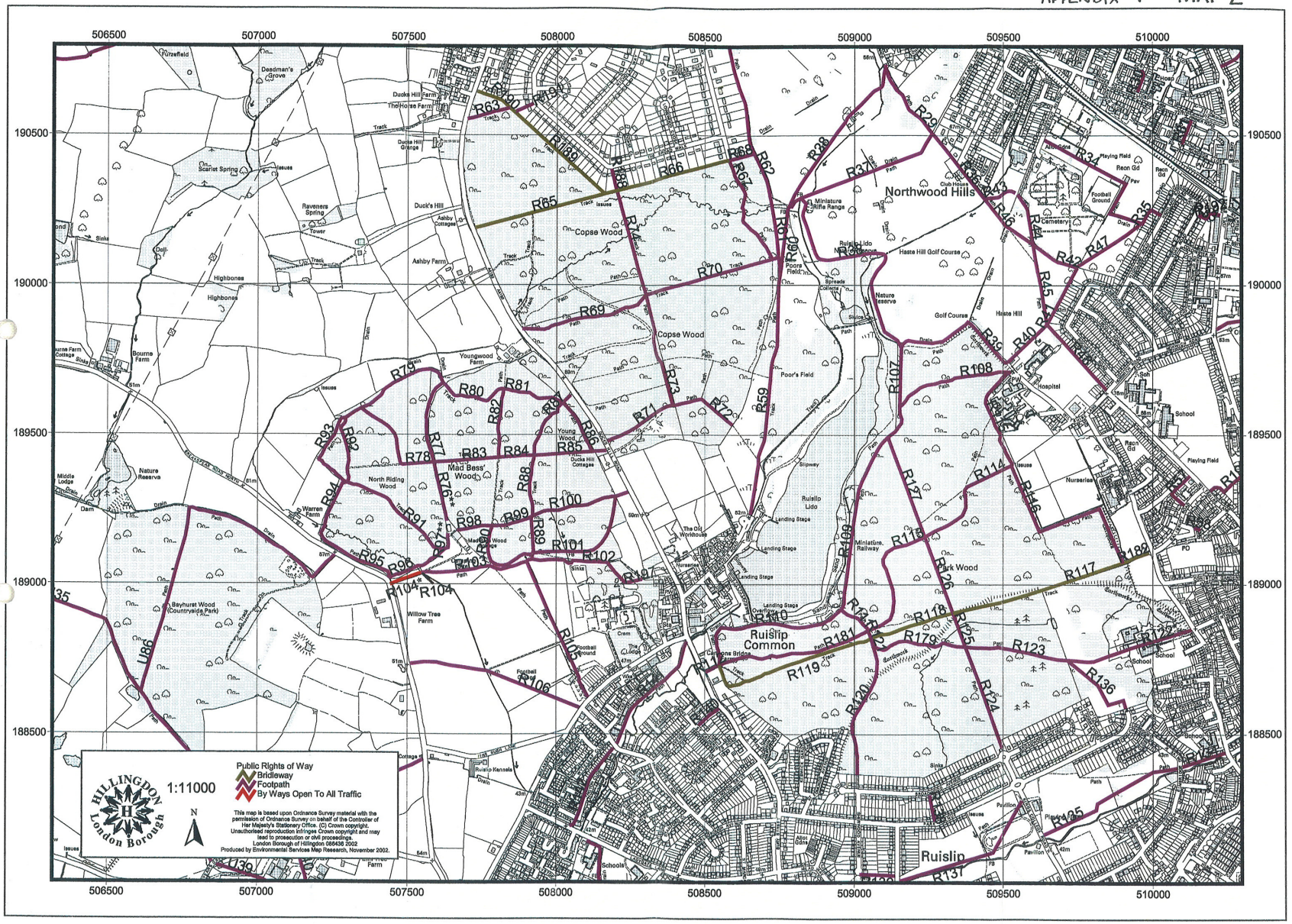


# Map 2 – Geology and topography

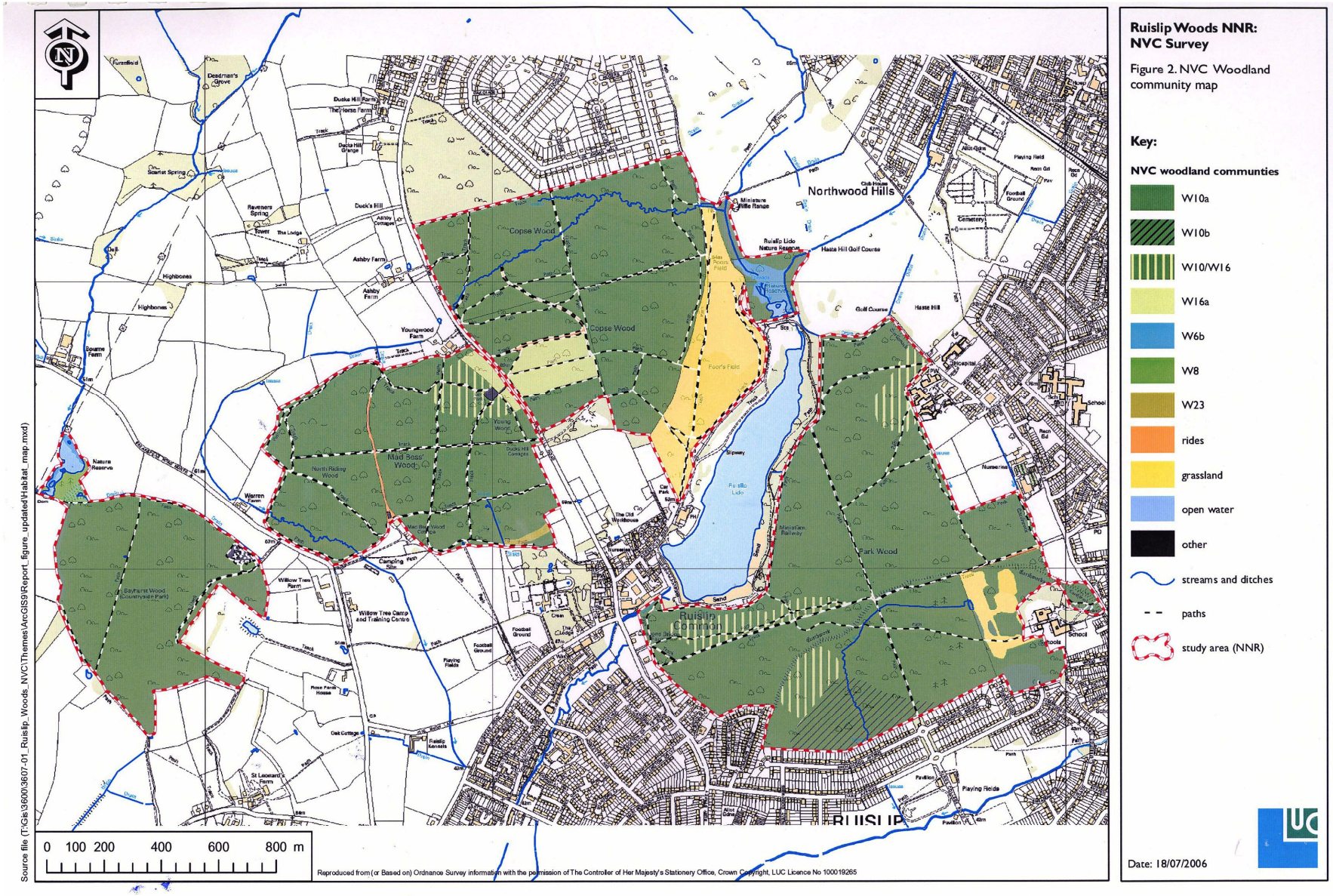


# Map 3 - Footpaths and bridlepaths

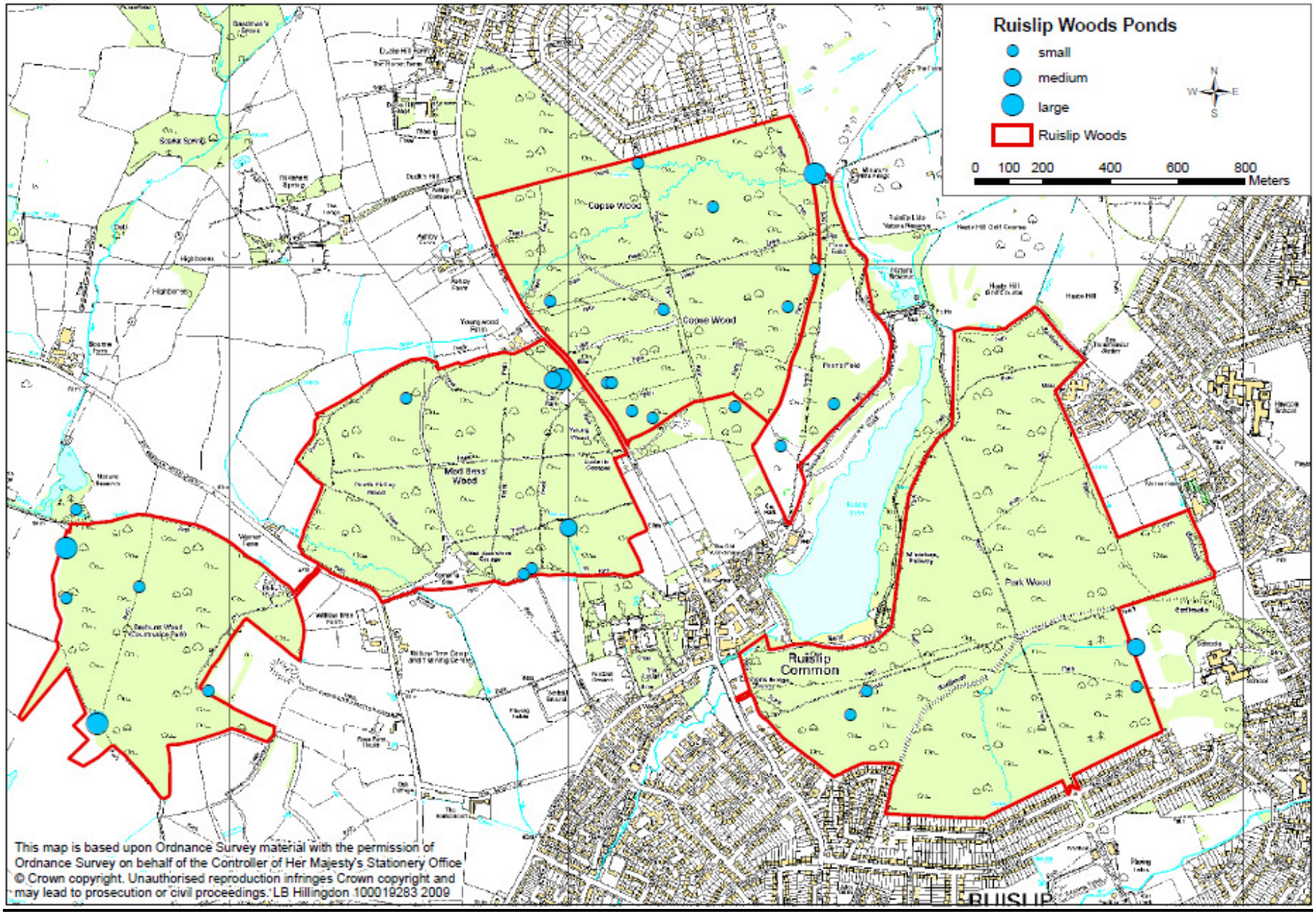
APPENDIX 1 MAP 2



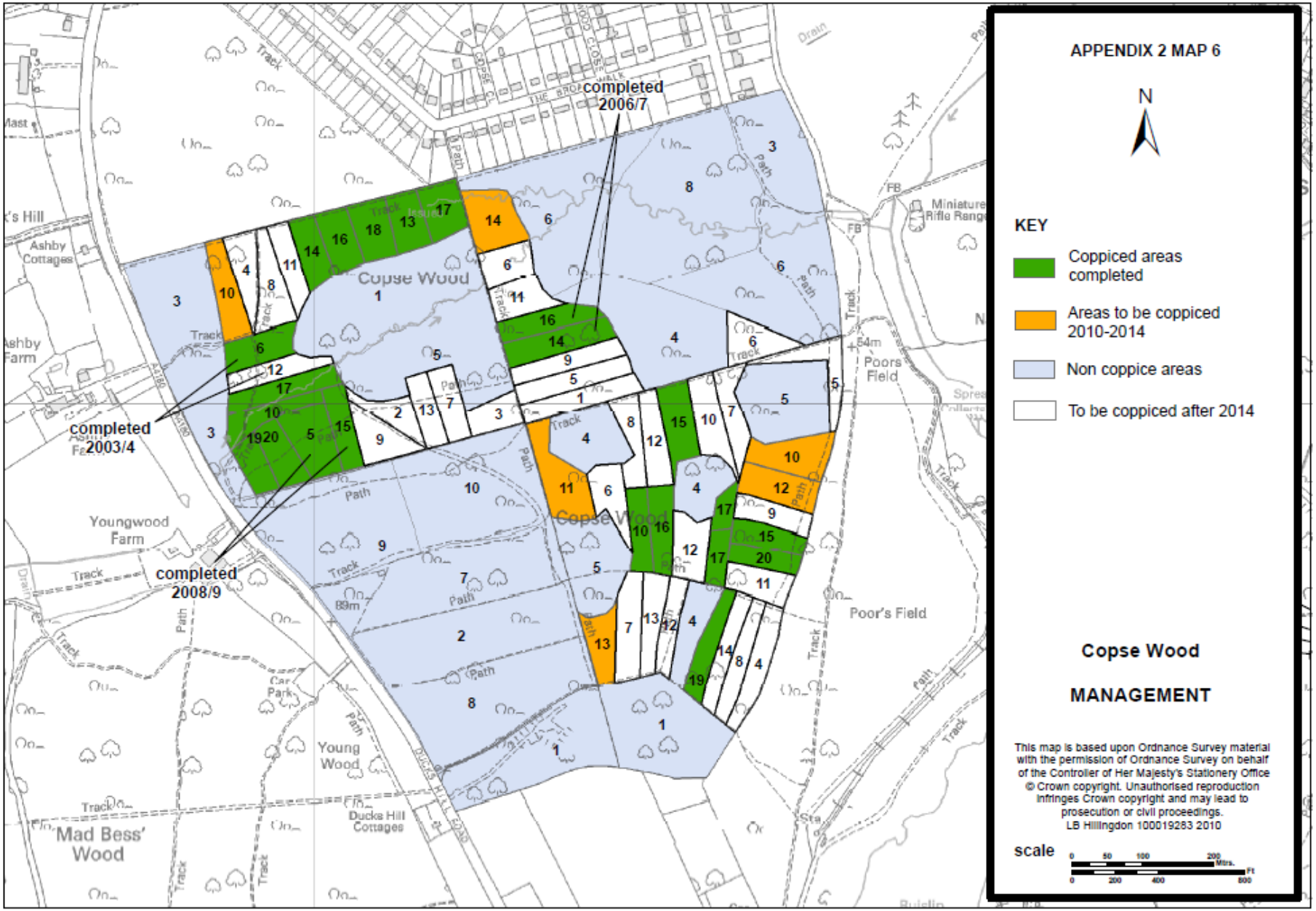
# Map 4 - NVC Woodland Community Map



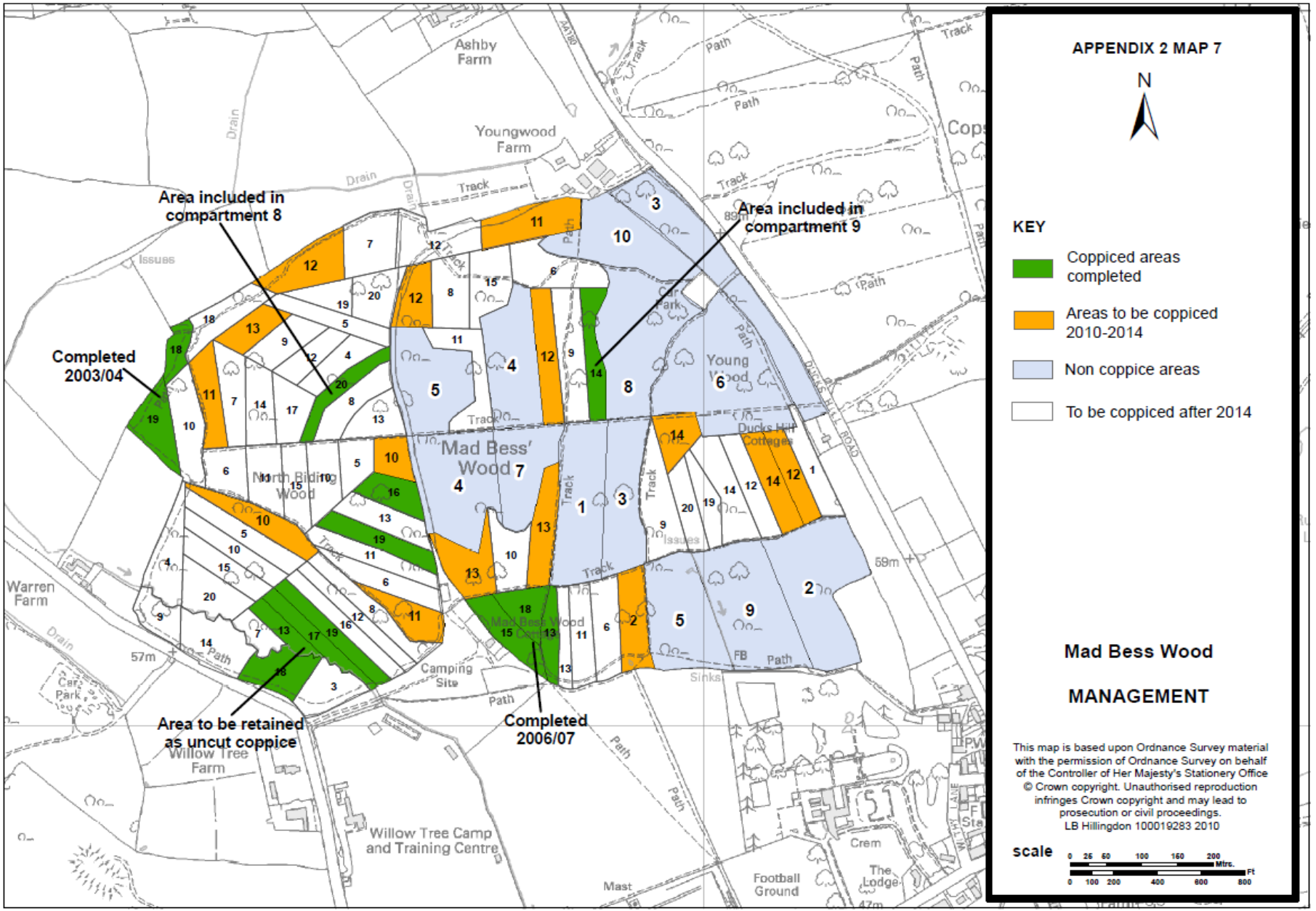
## Map 5 – Ruislip Woods ponds



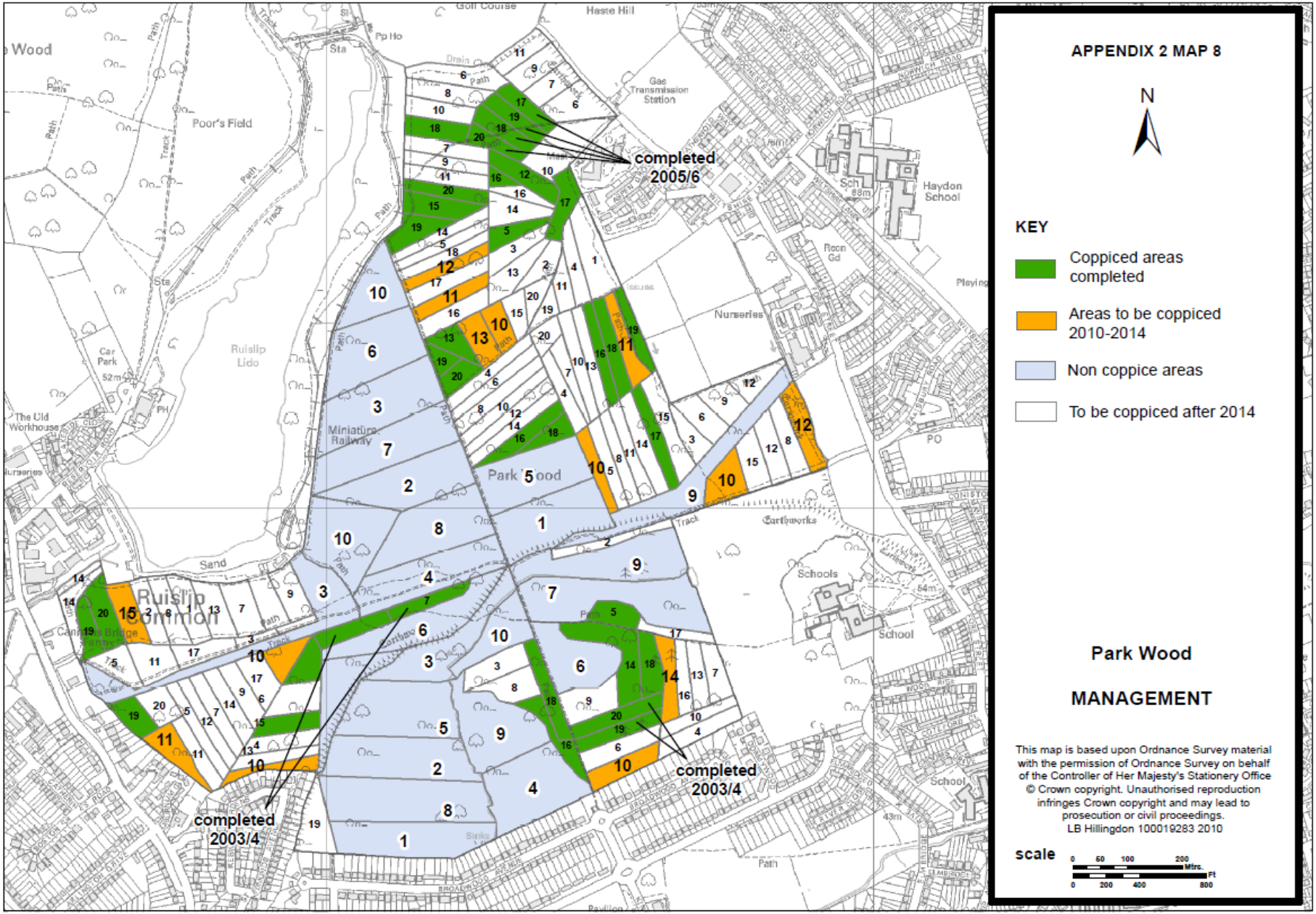
# Map 6 – Copse Wood



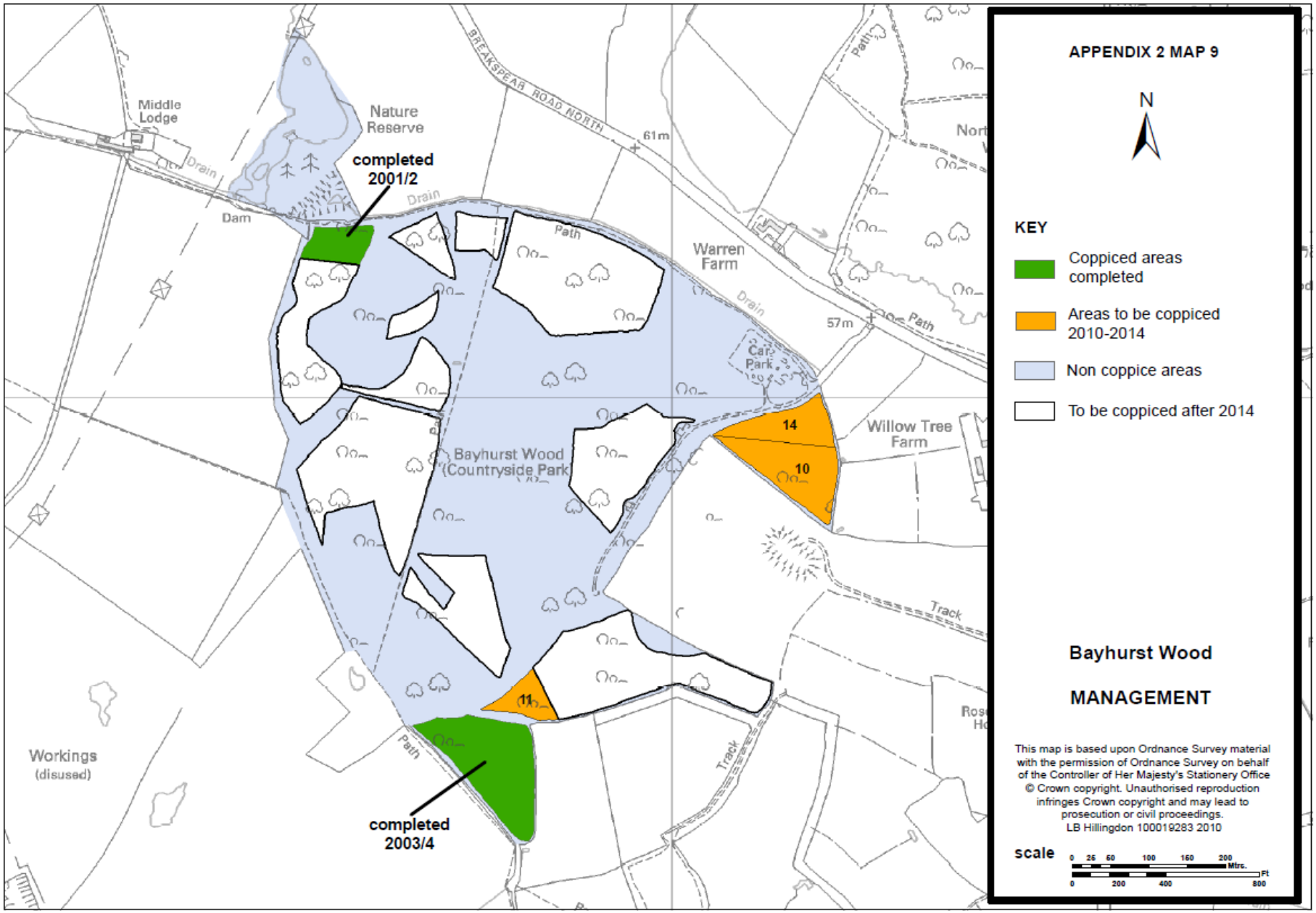
# Map 7 – Mad Bess Wood



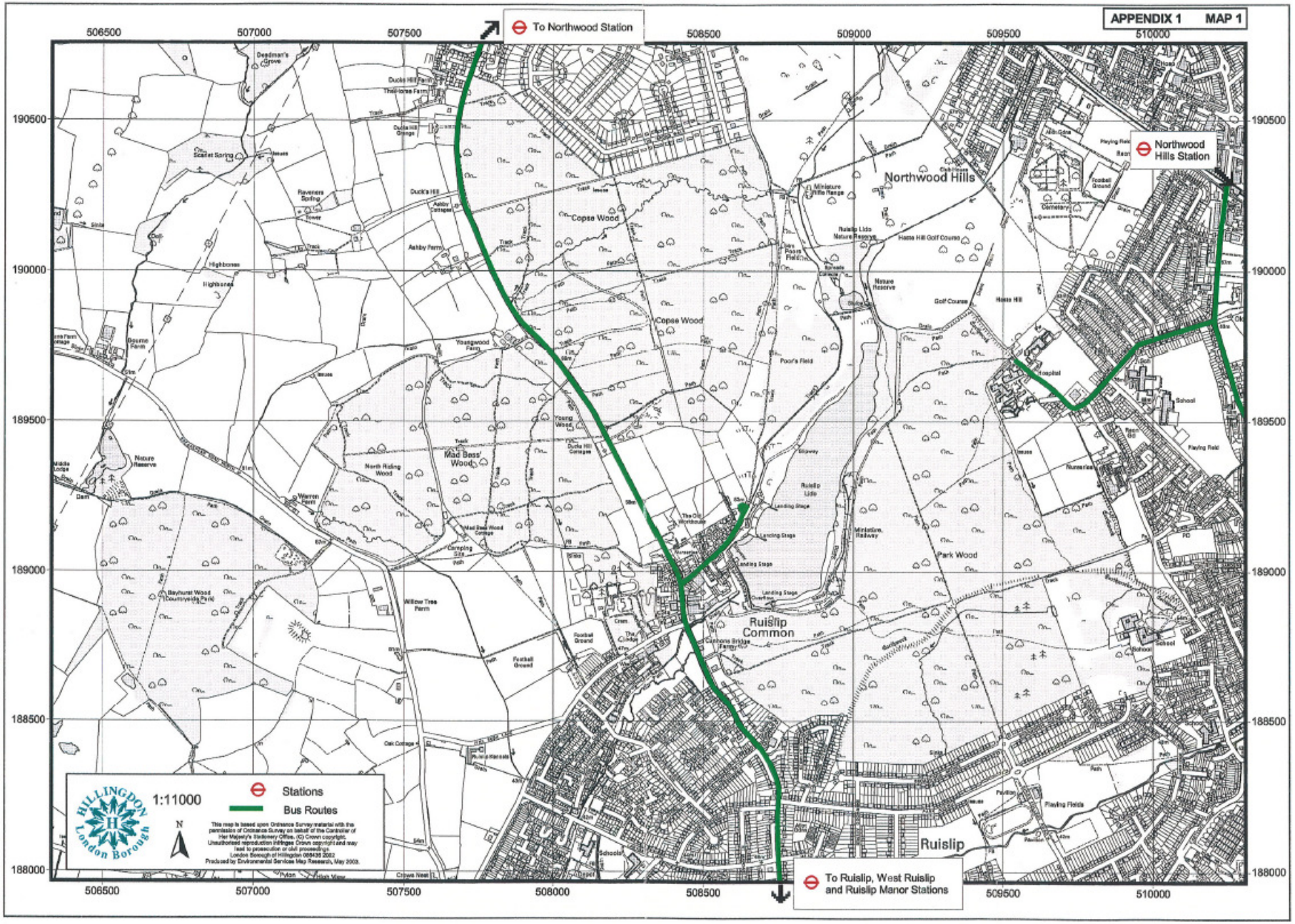
# Map 8 – Park Wood



# 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 | 1. Gather geological information for the site<br>2. Monitor vulnerable areas<br>3. Carry out management works to prevent damage occurring |
| 2. To maintain and enhance areas of grass/heathland | A3 – Active management | 4. Carry out NVC level 2 survey<br>5. Record current mosaic of habitats.<br>6. Carry out scrub clearance at a rate that will reverse succession<br>7. Carry out post clearance mowing to allow grass-heathland to develop.<br>8. Graze (Poor's Field) to a density that arrests succession<br>9. Survey and monitor effect of management<br>10. Record areas treated |
| 3. Maintenance of deciduous woodland | A2 – Limited intervention | 11. Carry out inspection to assess whether thinning/removal of invasive species is required to achieve LTMP objectives (Appendix 5)<br>12. The inspection and habitat types to be recorded. (NVC Level 2)<br>13. Carry out limited thinning works as necessary<br>14. Carry out ride maintenance for invertebrate interest and creation of permanent open space<br>15. Record areas treated and treatment received<br>16. Control non native/invasive species<br>17. Monitor effect of |

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

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| | | 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<br>36. Improve source and water retention<br>37. Manage woodland to promote native tree mix<br>38. Manage sand pit by scrub control<br>39. Management of badger area through non - intervention<br>40. Monitor effects of management works |
| 8. Conserve the current diversity of habitats including<br>a) Hornbeam coppice<br>b)oak-birch woodland<br>c)oak-hornbeam woodland d)beech woodland e)open bracken areas f)alder and aspen areas<br>g)grass-heathland<br>h)scrub<br>I)fallen and standing dead and rotting timber<br>j)open water<br>k)marsh<br>l)streams and ponds<br>m)rides and glades<br>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<br>42. Re-survey and monitor areas on a five year basis |
| 9. Key species | B1 – Non intervention | 43. Encourage the natural regeneration of Melampyrum pratense<br>44. Survey and record bat activity in the site<br>45. Ensure Meles meles remain as undisturbed as possible<br>46. Survey herpto fauna<br>47. Seek specialist advice on key invertebrates |

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

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

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

# Appendix 4

## Achievement against 1982 Long Term Management Plan recommendations

| Recommendation | Status | Further Action |
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| 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 | Temporary notices are displayed at all key work sites explaining the operation and informing of contact points. | Continue this with updated signage where applicable. |

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| displayed at the place of work (p. 21), | | |
| 6. The procedure to be followed in the treatment of coppice is **.....** (for full recommendation see p. 29), | 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.<br>Recommendation 2 – All coppicing is carried out in accordance with recommendation 2<br>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.<br>Recommendation 4 – This practice has not been carried out and has proved unnecessary.<br>Recommendation 5 – The few areas which have been returned to all wavers have been removed.<br>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. | 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<br><br>Wavers should not be left.<br><br>Lay hedges and stub trees adjacent to compartments as a single operation.<br><br>Continue to look for timber uses whilst considering the value of the cordwood as a deadwood resource. |
| 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.<br>Recommendation 2 – Density of | Continue with the broad aims of the recommendations and the learning gained : |

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| Recommendation see p. 31). | 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.<br>Recommendation 3 – The oldest trees in the compartments are left to succeed.<br>Recommendation 4 – This practice was carried out in the early years of coppicing but has now been altered as an over cautious approach.<br>Recommendation 5 – Regeneration in all compartments has been excellent. Standard hornbeam and other species are assessed on individual merit within the compartment<br>Recommendation 6 – Sessile oak have been selected where present where they predominate.<br>Recommendation 7 – Dead branches are only dealt with when they constitute a danger over a path.<br>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. | Oaks should be left for the time being. Alternatives should first be sought on the grass/heathlands<br>Continue<br>Continue<br>Continue<br>Continue<br>Continue to source oak from grass/heath areas to provide for boardwalks and bridges. |
| 8. In uncoppiced areas the procedure to be followed is ..... (for full Recommendation see p. 32), | Recommendation 1 – Individual prescriptions have guided works in all compartments<br>Recommendation 2 – The compartments have had periodic inspection and work implemented<br>Recommendation 3 – N/A<br>Recommendation 4 – Majority of work in the uncoppiced areas has revolved around opening rides and wildlife corridors as opposed to forest style thinning<br>Recommendation 5 – The | Change this regime to be less prescriptive and allow areas to be dealt with individually.<br>Continue<br>Continue |

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| | 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. |
| 14. All sycamore is eradicated and if | Sycamore has been dealt with throughout the period of the plan | Continue to eradicate sycamore where it appears. |

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| 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). | and will continue to be dealt with by felling and poisoning using appropriate chemicals as laid down by current legislation and Natural England | |
| 15. Yew trees are permitted but never closer than about 23m (75 ft) to one another (P. 34). | Yew has been dealt with as works have taken place i.e.: within coppice compartments and areas of thinning. | Carry out removal of yew in coppice and non coppice areas to ensure that they are no closer than recommended. |
| 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). | Garden escapees have been dealt with throughout the life of this plan to greater and lesser degrees. | Draw up a list using a traffic light system of species and the level acceptability |
| 17. During management work wood and timber is not left haphazard for long periods of time (p. 34). | 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. | 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 |
| 18. Lop and top cuttings and fallen branches (with leaves particularly) be cut and stacked away from major paths and tracks (p. 34). | Lop and top in coppice compartments is mostly burned. Coppiced hazel is mostly saved for fencing materials. | Continue |
| 19. Fallen trees resting against others should be removed (p. 34). | Fallen trees resting against others are only removed where they constitute a danger. | Continue this practice |
| 20. Rotting and | Fallen trees and rotting and | Contine |

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| 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). | decaying timber is left unless it is over a footpath where it will be moved to a more suitable position | |
| 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). | Litter collections are undertaken by the in house staff on a weekly basis at key locations and periodically throughout the remaining areas | Continue with litter collections and monitor levels |
| 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). | Notices have periodically been sent to the adjoining properties when issues have arisen | Continue |
| 23. Boundary stubbed hornbeams are treated every 20 years. . (see p. 35 for full Recommendation) (p, 35). | These are re-stubbed when due for coppicing | |
| 24. Bomb craters are retained as ponds after opening their margins and the removal of rubbish (p. 35). | All bomb craters have been retained as temporary ponds | Continue |
| 25. Where practicable boundaries are maintained as layered hedges (p. 38). | Laying of hedges has continued where practicable and linked to adjacent works | Continue |
| 26. The heathland on Poor's Field is maintained by mowing with a flail or similar mower at a height of l5cm; we suggest that half the total area is mowed each year (P. 82). | 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. | Introduce strip grazing and contine to mow/forage harvest in autumn, leaving small areas of scrub and long grass on a rotational basis |

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| 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 |
| 36. The major part of | All coppicing work is undertaken | Continue with this practice |

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| the coppicing work is undertaken in the autumn and winter (p. 101) | in the Autumn and winter. | |
| 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). | 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. | Continue to review how the resulting timber from our operations is used and the relative merits of conversion sale or deadwood resource.<br><br>Continue to use some of the coppiced hornbeam to produce charcoal |
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# Appendix 5

## Achievements against SMART targets from 2003 - 2009

| Smart target | Recommendations | Status | Further action |
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| **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. |

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| | 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 | | |

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| | 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.<br>Tareleton's Lake has received minimum management due to presence of the badgers.<br>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.<br><br>Pond survey was completed in 2007 | |

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| | 2. Re-survey in year 5 or 6 | | |
| *Key species* | 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. |

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| 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 |

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| | 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 |

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| | 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** *Quercus robur – Pteridium aquilinum – Rubus fruticosus* woodland, typical sub-community | 36.5 | 50.0 | 63.7 | 89.5 | **239.7** |
| **W10b** *Quercus robur – Pteridium aquilinum – Rubus fruticosus* woodland, *Anemone nemorosa* sub-community | - | - | - | 7.7 | **7.7** |
| **W10/W16** Transitional woodland community | - | 3.4 | - | 10.7 | **14.1** |
| **W16** *Quercus spp. – Betula spp. – Deschampsia flexuosa* woodland, *Quercus robur* sub-community | - | 1.2 | 4.6 | - | **5.8** |
| **W6b** *Alnus glutinosa – Urtica dioica* woodland: *Salix fragilis* sub-community | 0.4 | - | 1.7 | - | **2.1** |
| **W8** *Fraxinus excelsior – Acer campestre-Mercurialis perennis* woodland | 1.2 | - | - | - | **1.2** |
| **W23** *Ulex europaeus – Rubus fruticosus* 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 | • Extent of exposure/landform<br>• Integrity of exposure/landform<br>• Visibility, e.g. vegetation cover, obscuring trees |
| Biological habitats | • Extent<br>• Distribution<br>• Habitat structure<br>• Physical characteristics, e.g. sward height<br>• Floristic composition, e.g. presence or absence of positive/negative indicator species |
| Species | • Population size<br>• Species distribution<br>• Habitat factors |
| Archaeological/historical features | • Fabric condition<br>• Sward structure<br>• Scrub cover<br>• Other structures, e.g. no fence posts |
| Buildings | • Fabric condition<br>• Status of tenure |
| Public access | • Visitor levels, trends and/or types<br>• Numbers of events/type of events<br>• Accessibility for various users |
| Education, Research Demonstration | • Number of events/users<br>• Accessibility |
| Estate assets | • Fabric condition<br>• 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**<br>**Attribute:** Extent<br>**Target:** MG4 present over 60-75% of whole site area (approx. 26-33ha) (see Map xx)<br><br>**Attribute:** Sward structure<br>**Target:** Sward height <10cm in summer, no more than 5% bare ground or 25% litter cover<br><br>**Attribute:** Sward composition<br>**Target:** 40-90% herbs in sward prior to hay cut<br><br>**Feature 2: MG8 grassland**<br>**Attribute:** Extent<br>**Target:** MG8 present over 5-15% of whole site area (approx 2-7 ha) (see Map xx)<br><br>**Attribute:** Sward structure<br>**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<br><br>**Feature 3: Snakeshead fritillary**<br>**Attribute:** Extent<br>**Target:** Sub-populations present in at least 5 meadows<br><br>**Attribute:** Population size<br>**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.

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### 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.

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**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.